DCE 5632
ORGANISATION CHANGE AND DEVELOPMENT MODULE
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MODUL PEMBELAJARAN: DCE 5632 ORGANIZATION CHANGE AND DEVELOPMENT

Modul disediakan dalam bentuk bahan pengajaran dan pembelajaran kenderia di bawah program Pendidikan Jarak Jauh, Universiti Putra Malaysia. Sebarang pertanyaan dan cadangan untuk memperbaiki gaya penyampaian dan isi kandungan modul ini bolehlah dikemukakan kepada penulis dengan menggunakan alamat Pusat Pendidikan Luar.

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Pusat Pendidikan Luar
Universiti Putra Malaysia
43400 UPM Serdang

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Reka Bentuk Kadas dan Cetak oleh
UPM HOLDINGS SDN. BHD.
Blok F2, Bangunan MTDC-UPM
Universiti Putra Malaysia
43400 UPM Serdang
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# ORGANISATION CHANGE AND DEVELOPMENT

## 1.0 COURSE INTRODUCTION

The course will provide students with better understanding on the concept models and theoretical framework of organisation development which are applicable to organisation which intend to pursue change for better performance. In addition to the conceptual framework students will be exposed to experiential learning approach by doing and using the techniques in a simulated organisation situation.

## 2.0 COURSE OBJECTIVES

- To provide an integrated and comprehensive views of the field of Organisation Development with emphasis on:
  - newest approaches, concepts and techniques.
  - most of the current state of the art OD techniques and whatever empirical findings exist on the result.

- To present OD from an experiential learning approach, namely:
  - reading and understanding the concepts.
  - practising and experimenting by doing and using the techniques in a simulated organisational situation.

- To provide an understanding on the trend of change management practices that look beyond OD practices and focus on performance.
3.0 INSTRUCTOR'S PROFILE

Encik Omar Ismail is a Director/Principal Consultant of Thomas International Centre, Malaysia. He started his career with Kassim Chan Management Consultants Sdn Bhd (member of Deloitte Touche Tohmatsu) in 1979 as Consultant. In the initial years, as part of his training program, he was assigned to numerous assignments covering varied fields such as marketing, management, organisation development, financial management, project evaluation and operations audit.

Beginning in 1984, Encik Omar was assigned to the HR Consulting Group and began to specialise and undertake assignments relating to Organisational Development and Human Resources Management. The nature of work that he was involved includes designing and refining organisational structure, job evaluation, preparing job descriptions, executive hiring, performance evaluation, etc.

Since 1990, the Firm's HR Consulting Group has been restructured to provide even more specialisation among its consultants. Encik Omar is now in-charge of competencies and he has undertaken many assignments with regard to it. Currently, his major assignment is in the area of organisational development and change management for performance.

He graduated in 1978 with MBA and MS from Ohio State University. He was also trained as Certified User of Thomas DiSC management tools. Currently he is also a Trainer for Thomas DiSC Certified Users Programme. To date he has trained more than 250 Thomas Certified Users.

At present he is appointed as Adjunct Associate Professor at Universiti Pertanian Malaysia on a contract basis.

His clients include amongst others billion dollar corporations (local and multinational) in telecommunication and utilities, financial services, manufacturing, property development industries, etc. In addition he is also providing services to statutory authorities and government departments.

Part I

ANTICIPATING CHANGE

1.0 Organisational Development
- What is Organisation Development
- A Definition of Organisation Development
- Why Organisation Development
- The Evolution of Organisation Development
- The Organisation Culture
- The Socialisation Process
- The Psychological Contract
- An Overview of the Fields of Study

2.0 Organisation Renewal and Planned Change
- Organisation Renewal - Adapting to Change
- The Systems Approach: A Dynamic Model of Change

- The Organisation as a Sociotechnical System
- High-Performance System
- The Contingency Approach
- Future Shock And Change
- Organisation Transformation and Development
- OD - The Planned Change Process
- A Model for Organisation Change

3.0 Organisation Renewal: Changing the Corporate Culture
- The Corporate Culture
- Cultural Resistance to Change
- Power Tools For Change
- The Goals and Values of OD
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<tr>
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<tr>
<td></td>
<td>- External and Internal Consultants Roles</td>
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<td></td>
<td>- The External and Internal Consulting Team</td>
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<tr>
<td></td>
<td>- Types of Consultants</td>
</tr>
<tr>
<td></td>
<td>- The Readiness of the Organisation for OD</td>
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<td>- The Intervention Process</td>
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<td>- The Initial Intervention, Perception and Assessment</td>
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<td>- Creating a Climate For Change</td>
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<td>- The Formalisation of Operating Ground Rules</td>
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<td>- Red Flags in the Consultant - Client Relationship</td>
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<td>5.0</td>
<td>The OD Consultant: Diagnostic Process</td>
</tr>
<tr>
<td></td>
<td>- What is Diagnosis?</td>
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<td>- The Process</td>
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<td>- Diagnostic Models</td>
</tr>
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<td>- The Data Collection Process</td>
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<td>- The Implementation of the Program</td>
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<td>- The Analysis of Data</td>
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<th>Part III</th>
<th>DEVELOPING HIGH PERFORMANCE</th>
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<tbody>
<tr>
<td>6.0</td>
<td>Overcoming Resistance to Change</td>
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<tr>
<td></td>
<td>- The Life Cycle of Resistance to Change</td>
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<td></td>
<td>- Managing Change Forces</td>
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<td></td>
<td>- A Change Model</td>
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<td></td>
<td>- The Driving Forces Towards Acceptance of a Change Program</td>
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<td></td>
<td>- The Restraining Forces Blocking Implementation of Change Programs</td>
</tr>
<tr>
<td></td>
<td>- Consultant Strategies to Lessen Resistance</td>
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<tr>
<td>7.0</td>
<td>Process Consulting Skills</td>
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<tr>
<td></td>
<td>- Process Consultation</td>
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<td>- Group Process</td>
</tr>
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<td></td>
<td>- The Types of Process Intervention</td>
</tr>
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<td></td>
<td>- The Result of Process-Consultation</td>
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<td>8.0</td>
<td>OD Intervention Strategies</td>
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<td></td>
<td>- Basic Approaches</td>
</tr>
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<td></td>
<td>- The Integration of Change Strategies</td>
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<td></td>
<td>- Stream Analysis</td>
</tr>
<tr>
<td></td>
<td>- Selecting an OD Intervention</td>
</tr>
<tr>
<td></td>
<td>- The Major OD Intervention Techniques - An Overview</td>
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</tbody>
</table>
Part IV MOTIVATING HIGH PERFORMANCE

10.0 Team Development Intervention
- The Team Approach
- The Need for Team Development Approach
- Cohesiveness
- The Team Development Process
- Outdoor Experiential Laboratory Training
- Role Negotiation
- Role Analysis

11.0 Intergroup Development Intervention
- Collaboration and Conflict
- Intergroup Operating Problems
- Cooperation Versus Competition
- Managing Conflict

12.0 Goal Setting
- Goal Setting Theory
- A Model for Goal Setting
- Management by Objectives

Part V CHANGING FOR SUCCESS

13.0 Total Quality Management: Quality and Productivity Intervention
- A Definition of Total Quality Management (TQM)
- Self-Managed Work Team
- Job Design
### Part V  FOCUSING ON THE FUTURE

#### 16.0 Organisation Development : The Challenge and the Future
- Monitor and Stabilise Action Programs
- Termination of the Consultant-Client Relationship
- Emerging Issues and Values
- Future Trends in Organisation Development
- The Future of OD
- Role Negotiation
- Role Analysis

### 5.0 COURSE REQUIREMENTS ARE AS FOLLOWS:
- Attend face to face meetings
- Read the module and complete all the activities in the module
- Complete all written assignments/projects

### 6.0 COURSE EVALUATION

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Component</th>
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<tbody>
<tr>
<td>60%</td>
<td>Written Assignments/Projects</td>
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<tr>
<td>40%</td>
<td>Examination</td>
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### 7.0 Course Schedule for Distance Learning

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<tr>
<th>MEETING NO.</th>
<th>TOPICS / ACTIVITIES</th>
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<tbody>
<tr>
<td>1</td>
<td>1.0 Anticipating Need For Change</td>
</tr>
<tr>
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<td>• Organisational Development</td>
</tr>
<tr>
<td></td>
<td>• Organisational Renewal and Planned Change</td>
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<tr>
<td></td>
<td>• Organisational Renewal: Changing the Corporate Culture</td>
</tr>
<tr>
<td></td>
<td>2.0 Developing The Consultant - Client Relationship</td>
</tr>
<tr>
<td></td>
<td>• The OD Consultant: Role and Style</td>
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<tr>
<td></td>
<td>• The OD Consultant: Diagnostic Process</td>
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<tr>
<td></td>
<td>3.0 The Diagnostic Phase</td>
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<tr>
<td></td>
<td>• Overcoming Resistance To Change</td>
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<tr>
<td></td>
<td>• Process Consulting Skills</td>
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<td>• OD Intervention Strategies</td>
</tr>
<tr>
<td></td>
<td>• Employee Involvement and Empowerment: Interpersonal Intervention</td>
</tr>
<tr>
<td>2</td>
<td>4.0 Action Plans, Strategies and Techniques</td>
</tr>
<tr>
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<td>• Team Development Intervention</td>
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<td>• Intergroup Development Intervention</td>
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<td>• Goal Setting</td>
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<td>3</td>
<td>5.0 Self Renewal Monitoring and Stabilising</td>
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<td>• Total Quality Management</td>
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<td>• High Performing Systems: Systemwide Intervention</td>
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<td>• Organisation Transformation: Strategy Intervention</td>
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<td>4</td>
<td>6.0 Continuous Improvement Process</td>
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<td>• Organisation Development: The Challenge and The Future</td>
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<td>4.0 Final Examination</td>
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## COURSE ASSIGNMENT, DUE DATES AND MARKINGS SCHEME

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<tr>
<th>Assignment No.</th>
<th>Nature of Assignment</th>
<th>Due Date</th>
<th>Marks</th>
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<tbody>
<tr>
<td>1</td>
<td>Prepare Comprehension Write-up for Class Presentation</td>
<td>Meeting No.2</td>
<td>10</td>
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<tr>
<td>2</td>
<td>Comments and Critiques of Research Articles on OD fields from 1993 upwards</td>
<td>Meeting No. 2</td>
<td>10</td>
</tr>
<tr>
<td>3</td>
<td>Prepare Main Term Papers</td>
<td>Meeting No.3 &amp; 4</td>
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**Breakdown** | **Total**
--- | ---
40 | 60

## COURSE EXAMINATION DATE

<table>
<thead>
<tr>
<th>Examination</th>
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<td>Final</td>
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<tr>
<td>Assignment No. 1</td>
<td>Class Presentation (Group Work)</td>
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<tr>
<td>------------------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td></td>
<td>Prepare a Presentation Materials not exceeding 5 pages for distribution.</td>
</tr>
<tr>
<td></td>
<td>To hasten presentation use transparencies.</td>
</tr>
<tr>
<td></td>
<td>Where possible use graphics to consolidate all materials within one chapter.</td>
</tr>
<tr>
<td>Marks</td>
<td>10 points</td>
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<table>
<thead>
<tr>
<th>Assignment No. 2</th>
<th>Research Articles (Individual Work)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Select Research Articles Within the field of OD and change management.</td>
</tr>
<tr>
<td></td>
<td>The article selected must be from 1995 onwards and not below.</td>
</tr>
<tr>
<td></td>
<td>(Based on past students experience, INTAN seems to have wide varieties of research journals in most management fields of study).</td>
</tr>
<tr>
<td></td>
<td>Review and comments on the articles in term of its application locally.</td>
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<tr>
<td>Marks</td>
<td>10 points</td>
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<table>
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<tr>
<th>Assignment No. 3</th>
<th>Main Term Paper (Individual Work)</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Review and understand your organisation issues and problems within the framework of OD and change management.</td>
</tr>
<tr>
<td></td>
<td>Identify the concepts and techniques of OD and change management which would be appropriate to resolve the issues and problems of your organisation.</td>
</tr>
<tr>
<td>Points</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Format for Main Term Paper</th>
<th>Points</th>
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<tbody>
<tr>
<td>Table of Content</td>
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<tr>
<td>Issues and Problems of the Organisation</td>
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</tr>
<tr>
<td>Conceptual Framework Relevant to the Problem</td>
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</tr>
<tr>
<td>Relevant Data and Analysis of Data</td>
<td>20</td>
</tr>
<tr>
<td>Interpretation of Data</td>
<td>10</td>
</tr>
<tr>
<td>Proposed Solutions or Recommendations with time frame</td>
<td>10</td>
</tr>
<tr>
<td>Conclusion</td>
<td>10</td>
</tr>
</tbody>
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- List all References either from Research Papers, Journals or Books

| Total                         | 100    |
### 10.0 GUIDELINES FOR MARKING

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Examination Marking Guidelines</th>
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<tbody>
<tr>
<td>Class Presentation (Group Work)</td>
<td>• Understand the issues and address how to deliberate the issues within OD’s and change management framework.</td>
</tr>
<tr>
<td>- No materials for presentation</td>
<td>• What are the theoretical concepts applicable to the issues.</td>
</tr>
<tr>
<td>- No presentation</td>
<td>• What are your proposal or suggestions to resolve the issues.</td>
</tr>
<tr>
<td>- (-) 5%</td>
<td>• Definition of terms, concepts, etc.</td>
</tr>
<tr>
<td>Research Articles (Individual Work)</td>
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<tr>
<td>- Late Submission</td>
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</tr>
<tr>
<td>- Irrelevant Articles /Articles below 1992</td>
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<tr>
<td>- (-) 5%</td>
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<tr>
<td>Main Term Paper</td>
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<tr>
<td>- Late Submission</td>
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<tr>
<td>- (-) 5%</td>
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### 11.0 HOW TO CONTACT

Encik Omar Ismail  
2380133/9213367

Kindly leave messages with your name (including student's ID) and telephone no. to contact.
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<td>ORGANISATIONAL RENEWAL AND PLANNED CHANGE</td>
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<tr>
<td>3.0</td>
<td>ORGANISATION RENEWAL AND CHANGING THE CORPORATE CULTURE</td>
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<tr>
<td>4.0</td>
<td>THE OD CONSULTANT : ROLE AND STYLE</td>
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<tr>
<td>5.0</td>
<td>THE OD CONSULTANT : DIAGNOSTIC PROCESS</td>
<td>5</td>
</tr>
<tr>
<td>6.0</td>
<td>OVERCOMING RESISTANCE TO CHANGE</td>
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<td>7.0</td>
<td>PROCESS CONSULTING SKILLS</td>
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<td>8.0</td>
<td>OD INTERVENTIONS STRATEGIES</td>
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<td>9.0</td>
<td>EMPLOYEE INVOLVEMENT AND EMPOWERMENT : INTERPERSONAL INTERVENTIONS</td>
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<td>10.0</td>
<td>TEAM DEVELOPMENT INTERVENTIONS</td>
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<td>11.0</td>
<td>INTERGROUP DEVELOPMENT INTERVENTIONS</td>
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<td>12.0</td>
<td>GOAL-SETTING</td>
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<td>13.0</td>
<td>TOTAL QUALITY MANAGEMENT : QUALITY AND PRODUCTIVITY INTERVENTIONS</td>
<td>13</td>
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<td>14.0</td>
<td>HIGH PERFORMING SYSTEMS : SYSTEMWIDE INTERVENTIONS</td>
<td>14</td>
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<td>15.0</td>
<td>ORGANISATION TRANSFORMATION : STRATEGY INTERVENTION</td>
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<tr>
<td>16.0</td>
<td>ORGANISATION DEVELOPMENT : THE CHALLENGE AND THE FUTURE</td>
<td>16</td>
</tr>
</tbody>
</table>
1.0 ORGANISATION DEVELOPMENT

1.1 OBJECTIVES

Read the objectives of the topic on page 1.

1.2 KEY CONCEPTS

After reading this topic you should be able to understand the following concepts:

- What is organisational development (OD)
- The characteristics of OD
- Why use OD
- The emergence of OD
- The evolution of OD
- Organisational Culture
- The Experiential Learning Process
- The OD Model

1.3 EXERCISES

Please answer the review questions on Page 18.
2.0 ORGANISATIONAL RENEWAL AND PLANNED CHANGE

2.1 OBJECTIVES
Read the objectives of the topic on page 29.

2.2 KEY CONCEPTS
After reading this topic you should be able to understand the following concepts:
- Organisational renewal - adapting to change
- Three different systems for managing change
- Organisation Transformation and Development - two major approaches to change

2.3 EXERCISES
- Please answer the review questions on Page 49.
- What are the trends of Organisational transformation and development in Malaysia.
3.0 ORGANISATION RENEWAL - CHANGING THE CORPORATE CULTURE

3.1 OBJECTIVES
Read the objectives of the topic on page 65.

3.2 KEY CONCEPTS
After reading this topic you should be able to understand the following concepts:

- The Corporate Culture
- Key Factors - Assessing the Corporate Culture
- The Goals and Values of OD

3.3 EXERCISES
- Please answer the review questions on Page 78.
- Please read and prepare the exercise on OD Skills Simulation 3.1.

3.4 ADDITIONAL READING
- Read Part 1-4
4.0 THE OD CONSULTANT: ROLE AND STYLE

4.1 OBJECTIVES
Read the objectives of the topic on page 89.

4.2 KEY CONCEPTS
After reading this topic, you should be able to understand the following concepts:

- Types of Change Agents or Consultants (used in a turbulent environment)
- Readiness of the Organisation of OD - Important questions to ask
- The Intervention Process - refers to members of an organisation together to effect change
- The Initial Intervention, Perception and Assessment
- Creating a Climate for Change
- The formalisation of Consultant / Client Operating ground rules
- Red flags in the consultant / client relationship

4.3 EXERCISES
- Please answer the review questions on Page 109.
- Read and analyse Case 4 - The Grayson Chemical Company - page 114
5.0 THE OD CONSULTANT DIAGNOSTIC PROCESS

5.1 OBJECTIVES

Read the objectives of the topic on page 122.

5.2 KEY CONCEPTS

- What is Organisational Diagnosis?
- Diagnostic Proces
- Diagnostic Models
- The Data Collection Process
- The Implementation of the Program
- Evaluating the effectiveness of Data Collection
- Red Flags in the Diagnosis

5.3 EXERCISES

Please answer the review questions on page 140.
6.0 OVERCOMING RESISTANCE TO CHANGE

6.1 OBJECTIVES

Read the objectives of the topic on page 154.

6.2 KEY CONCEPTS

After reading this topic you should be able to understand the following concepts:

- The Life Cycle of resistance to change
- Managing Change forces
- A Change Model
- Driving forces toward acceptance of a change program
- Sources of resistance
- Consultant strategic to overcome resistance to change

6.3 EXERCISES

- Please answer the review questions on Page 166.
- Please read and prepare the exercise on OD simulation skills 6.1 and 6.2.
7.3. EXERCISES

Please answer the review questions on Page 185.

- Evaluate the strengths and limitations of process consultation within Malaysia companies.
- Read and analyse Case 7: The OD Letters - page 199.
### 8.0 OD INTERVENTION STRATEGIES

#### 8.1 OBJECTIVES
- Read the objectives of the topic on page 204.

#### 8.2 KEY CONCEPTS
After reading this topic you should be able to understand the following concepts:

- Three basic approaches to organisation change
- Integration of change strategies
- Stream analysis is a method useful in planning behavioural, structural, and technical change
- Selecting an OD intervention
- Overview of major OD intervention techniques

#### 8.3 EXERCISES
- Please answer the review questions on Page 215.
- Read and analyse Case 8: The Forum Bank.
9.0 EMPLOYEE INVOLVEMENT AND EMPOWERMENT: INTERPERSONAL INTERVENTIONS

9.1 OBJECTIVES
Read the objectives of the topic on page 226.

9.2 KEY CONCEPTS
After reading this topic you should be able to understand the following concepts:
- Employee involvement
- Laboratory Learning
- Johari Window
- Transactional analysis
- Career life planning
- Stress management and burnout

9.3 EXERCISES
Please answer the review questions on Page 241.
10.1 OBJECTIVES

Read the objectives of the topic on page 263.

10.2 KEY CONCEPTS

An analogy of team development in work organisations.
Need for team development techniques.
Cohesiveness.
Team development process.
Outdoor experiential laboratory training.
Role negotiation as a team development method.
Role analysis as a team development method.

10.3 EXERCISES

Please answer the review questions on Page 280.

Read and analyse Case 10: Steele Enterprise.
11.0 INTERGROUP DEVELOPMENT INTERVENTIONS

11.1 OBJECTIVES

Read the objectives of the topic on page 295.

11.2 KEY CONCEPTS

After reading this topic you should be able to understand the following concepts:

- Collaboration and competition
- Problems that occur between groups
- Cooperation versus competition
- Organisational conflict may be managed by learning to identify five basic styles of managing conflict
- Several OD intergroup techniques to deal with problem between groups

11.3 EXERCISES

- Please answer the review questions on Page 307.
- Read and analyse Case11: Exley Chemical Company.
12.0 GOAL SETTING

12.1 OBJECTIVES

Read the objectives of the topic on page 322.

12.2 KEY CONCEPTS

After reading this topic you should be able to understand the following concepts:

- Goal-setting theory
- Management by objectives (MBO)

12.3 EXERCISES

- Please answer the review questions on Page 332.
- Read and analyse Case 12: Western Utilities Company.
13.0 TOTAL QUALITY MANAGEMENT: QUALITY AND PRODUCTIVITY INTERVENTIONS

### 13.1 OBJECTIVES
- Read the objectives of the topic on page 343.

### 13.2 KEY CONCEPTS
After reading this topic you should be able to understand the following concepts:

- **Total Quality Management (TQM)**
- **Self-managed work teams**
- **Job design involves changing the nature of jobs to improve worker’s satisfaction and productivity**

### 13.3 EXERCISES
- Please answer the review questions on Page 357.
- Read and analyse Case 13: Wengart Aircraft.
14.0 HIGH PERFORMING SYSTEMS: SYSTEMSWIDE INTERVENTIONS

14.1 OBJECTIVES
Read the objectives of the topic on page 374.

14.2 KEY CONCEPTS
After reading this topic you should be able to understand the following concepts:
- OD Intervention
- TQM
- Re-engineering
- High Performing Systems
- The Grid OD Program
- Survey Research and Feedback
- Likert's System 4 Management
- The Third Wave Organisation

14.3 EXERCISES
- Please answer the review questions on Page 388.
- Read and analyse Case 14: Tucker Knox Corporation.
15.0 ORGANISATION TRANSFORMATION - STRATEGY INTERVENTIONS

15.1 OBJECTIVES

- Read the objectives of the topic on page 405.

15.2 KEY CONCEPTS

After reading this topic you should be able to understand the following concepts:

- Organisation Transformation (drastic, abrupt change to total structures, management processes, and corporate cultures)
- Strategies of Change
- The Corporate Culture
- Cultural Strength
- The Strategy - Culture Matrix
- Strategic Change Management
- Changing The Culture

15.3 EXERCISES

- Please answer the review questions on Page 419.
- Read and analyse Case 15: The Space Electronics Corporation.

15.4 ADDITIONAL READING

## 16.0 ORGANISATION DEVELOPMENT: THE CHALLENGE AND THE FUTURE

### 16.1 OBJECTIVES

Read the objectives of the topic on page 431.

### 16.2 KEY CONCEPTS

After reading this topic you should be able to understand the following concepts:

- Monitor and Stabilise Action Programs
- Termination of the Consultant - Client Relationship
- Emerging Issues and Values
- Future Trends in Organisation Development
- Future of OD

### 16.3 EXERCISES

- Please answer the review questions on Page 444.
- Read and analyse Case16: The Bob Knowlton Case.
have not always been clear that my ultimate client was the same person, or his or her boss, or a specific organizational unit such as the top management group, or the total system. It seems to me that other OD consultants are likewise somewhat perplexed about the identity of the ultimate client. As I read works about living systems and reflect on OD practice, I conclude that my ultimate client is the behavior in organizations represented by interactions, by relationships and interfaces. Those interactions represent the basic reality of organizational life and therefore my consultation should concentrate on them. Furthermore, I should pay special attention to nonroutine events of organizational life, since these occurrences generate energy among members to return the system to a steady state, to achieve homeostasis and equilibrium. It is this use of energy and its direction that will tell me more about how the organization really operates than the energy that the members of the organization expend to maintain normal, daily operations. Just as Kurt Lewin observed that the best way to diagnose an organization is to attempt to change it, we may also state that it is easier to understand an organization when it is disturbed by atypical events than when it is operating as usual.

It is not my contention that one should entirely ignore everyday routine, the organizational structure with its boxes and lines, individuals, work units, the president and the board of directors. It is more a matter of emphasis for me to focus especially on the in-between. I also believe that relationships and interfaces in organizations will grow even more important in the future because of the changing nature of authority, insofar as authority becomes more of a function of expertise and knowledge rather than position, and of the increasing degrees of complexity in managing organizations. It is virtually impossible for a single individual to know a considerable amount, much less everything, about running an organization or even a part of it. This is especially true of high-technology organizations, public or private. Thus, mutual dependency is more the rule than the exception.

Because OD practitioners are knowledgeable about interpersonal process and are skillful in dealing with relationships, there will be plenty of opportunity for constructive work, changing cultures and applying OD in new ways. We simply must become clearer about the true subject (in my term, client) of that work.

Understanding Organizations: The Process of Diagnosis

Without a framework for understanding, the data an OD practitioner collects about a client organization may remain nothing more than an array of personal comments of the who-said-what-about-whom variety. For the information to become useful, it must be treated in organizational terms. Since OD represents a systematic approach to change, and the data for diagnosis are largely in systems language, the categories for diagnosis are system labels.

This chapter covers selected models of and theories about organizations that are useful in the diagnostic phase of OD consultation because they help to organize and systematize the potentially confusing masses of data. Among the models and theories from which the OD practitioner may choose, some are merely descriptive while others emphasize dimensions for diagnosis, thereby providing direction for change. The purpose of this chapter is to provide the practitioner with some criteria and bases for making choices.

The models and theories I have chosen to consider in this chapter are all behavior-oriented. Although some other frameworks emphasize technological, financial, or informational aspects of organizations, behavior-oriented models are more valuable for OD practice because the role of the OD practitioner is to understand what people do or do not do in organizations. Word processing and office technology, for example, are of interest to OD practitioners, but only in terms of the changes people will have to make, not for the electronic wizardry involved (Lodahl and Williams, 1978).
The various models we shall explore are all based on the open-system notion of input-throughput-output and all recognize that an organization exists in an environmental context and is a sociotechnical system. All recognize the same fundamentals—an open system that exists in an environment and consists of people and technology.

We shall first examine four models that are largely descriptive: a model of simplicity with structure, two models of complexity with structure, and a develop-your-own model.

Organizational Models

Weisbord's Six-Box Model

A model is useful when it helps us visualize reality, and Weisbord's (1976, 1978) model meets this criterion very well. Weisbord depics his model as a radar screen, with "blips" that tell us about organizational highlights and issues good and bad. Just as air traffic controllers use their radar, we too must focus primarily on the screen as a whole, not on individual blips (see Fig. 6.1).

Every organization is situated within an environment and, as the arrows in the figure indicate, is influenced by and influences various elements of that environment. In Weisbord's model, the organization is represented by six boxes: purpose, structure, rewards, helpful mechanisms, relationships, and leadership. Weisbord believes that, for each box, the client organization should be diagnosed in terms of both its formal and its informal systems. A key aspect of any organizational diagnosis is the gap between the formal dimensions of an organization, such as the organization chart (the structure box), and its informal policies, such as how authority is actually exercised. The larger this gap is, the more likely it is that the organization is functioning ineffectively.

Weisbord provides key diagnostic questions for each of the six boxes. For the purposes box, the two most important factors are goal clarity, the extent to which organization members are clear about the organization's mission and purpose, and goal agreements, people's support of the organization's purpose. For structure, the primary question is whether there is an adequate fit between the purpose and the internal structure that is supposed to serve that purpose. With respect to relationships, Weisbord contends that three types are most important: between individuals, between units or departments that perform different tasks, and between the people and the nature and requirements of their jobs. He also states that the OD consultant should "diagnose first for required interdependence, then for quality of relations, and finally for modes of conflict management" (Weisbord, 1976: 440).
In assessing blips for the rewards box, the consultant should diagnose the similarities and differences between the organization's formal rewards (the compensation package, incentive systems, and the like) and organization members' perceived rewards or punishments.

Weisbord makes the leadership box central because he believes that a primary job of the leader is to watch for blips among the other boxes and to maintain balance among them. To help the OD consultant in diagnosing the leadership box, Weisbord refers to an important book published some years ago by Solnick (1967), citing the four most important leadership tasks. According to Solnick, the consultant should determine the extent to which organizations' leaders are (1) defining purposes, (2) embodying purposes in programs, (3) defending the organization's integrity, and (4) maintaining order with respect to internal conflict.

For the last box, helpful mechanisms, Weisbord refers analogously to "the cement that binds an organization together to make it more than a collection of individuals with separate needs" (Weisbord, 1976: 443). Thus, helpful mechanisms are the processes that every organization must attend to in order to survive: planning, control, budgeting, and other information systems that help organization members accomplish their respective jobs and meet organizational objectives. The OD consultant's task is to determine which mechanisms (of which aspects of them) help members accomplish organizational purposes and which seem to hinder more than they help. When a helpful mechanism becomes red tape, it probably is no longer helpful.

Table 6.1 gives a summary of the six-box model and the diagnostic questions to be asked.

In summary, Weisbord's model is particularly useful when the consultant does not have as much time as would be desirable for diagnosis, when a relatively uncomplicated organizational map is needed for quick service, or when the client is unaccustomed to thinking in systems terms. In the latter case, the model helps the client to visualize his or her organization as a systemic whole without the use of strange terminology. I have also found Weisbord's model useful in supervising and guiding students in their initial OD consultations.
The Nadler-Tushman Congruence Model

For a more sophisticated client and when more time is available, a more complex model of organizations might be useful for OD diagnosis. In such instances, the Nadler and Tushman (1977) congruence model might serve the purpose.

Nadler and Tushman make the same assumptions as Weick—that an organization is an open system and therefore is influenced by its environment (inputs) and also shapes its environment to some extent by outputs. An organization thus is the transformation entity between inputs and outputs. Figure 6.2 represents the Nadler-Tushman congruence model.

Inputs. Nadler and Tushman view inputs to the system as relatively fixed: the four they cite are the environment, the resources available to the organization, the organization's history, and strategies that are developed and evolve over time. These inputs help define how people in the organization behave, and they serve as constraints on behavior as well as opportunities for action.

As we know from the works of Burns and Stalker (1961), and Lawrence and Lorsch (1967), the extent to which an organization's environment is relatively stable or dynamic significantly affects internal operations, structure, and policy. For many organizations a very important aspect of environment is the parent system and its directives. For many organizations are subsidiaries or divisional profit centers of larger corporations, colleges within a university, or hospitals within a larger health care delivery system. These subordinate organizations may operate relatively autonomously with respect to the outside world (having their own purchasing operations, for example) but because of corporate policy may be fairly restricted in how much money they can spend. Thus, for many organizations we must think of their environments in at least two categories: the parent system and the rest of the outside world—government regulations, competitors, and the marketplace in general.

According to the Nadler-Tushman model, resources include capital (money, property, equipment, and so on), raw materials, technologies, people, and various intangibles, such as company name, which may have a high value in the company's market.

An organization's history is also input to the system. The history determines, for example, patterns of employee behavior,
policy, the types of people the organization attracts and recruits, and even how decisions get made in a crisis.

Although strategy is categorized as an input in the model, Nadler and Tushman set it apart. Strategy is the process of determining how the organization's resources are best used within the environment for optimal organizational functioning. It is the act of identifying opportunities in the environment and determining whether the organization's resources are adequate for capitalizing on these opportunities. History plays a subtle but influential role in this strategic process.

Some organizations are very strategic; that is, they plan. Other organizations simply react to changes in their environments or act opportunistically rather than according to a long-range plan that determines which opportunities will be seized and which will be allowed to pass. As Nadler and Tushman point out, however, organizations have strategies whether they are deliberate and formal or unintentional and informal.

**Outputs.** We shall move to the right-hand side of the model to consider outputs before covering the transformation process. Thus we shall examine the organization’s environment from the standpoint of how it influences the system and how the organization operates internally.

For diagnostic purposes, Nadler and Tushman present four key categories of outputs: system functioning, group behavior, intergroup relations, and individual behavior and effect. With respect to the effectiveness of the system's functioning as a whole, the following three questions should elicit the necessary information:

1. How well is the organization attaining its desired goals of production, service, return on investment, and so on?
2. How well is the organization utilizing its resources?
3. How well is the organization coping with changes in its environment over time?

The remaining three outputs are more directly behavioral: how well groups or units within the organization are performing; how effectively these units communicate with one another, resolve differences, and collaborate when necessary; and how individuals behave. For this last output, individual behavior, we are interested in such matters as turnover, absenteeism, and, of course, individual job performance.

**The Transformation Process.** The components of the transformation process and their interactions are what we normally think of when we consider an organization—the people, the various tasks and jobs, the organization’s managerial structure (the organization chart), and all the relationships of individuals, groups, and subsystems. As Fig. 6.2 shows, four interactive major components compose the transformation process that changes inputs into outputs.

The **task component** consists of the jobs to be done and the inherent characteristics of the work itself. The primary task dimensions are the extent and nature of the required interdependence between and among task performers, the level of skill needed, and the kinds of information required to perform the tasks adequately.

The **individual component** consists of all the differences and similarities among employees, particularly demographic data, skill and professional levels, and personality-attitudinal variables.

**Organizational arrangements** include the managerial and operational structure of the organization, work flow and design, the reward system, management information systems, and the like. These arrangements are the formal mechanisms used by management to direct and control behavior and to organize and accomplish the work to be done.

The fourth component, **informal organization**, is the social structure within the organization, including the grapevine, the organization’s internal politics, and the informal authority-information structure (whom you see for what).

**Congruence: The Concept of Fit.** As Nadler and Tushman point out, a mere listing and description of these system inputs, outputs, and components is insufficient for modeling an organization. An organization is dynamic, never static, and the model must represent this reality, as the arrows in Fig. 6.2 do. Nadler and Tushman go beyond depicting relationships, however. Their term, **fit**, is a measure of the congruence between pairs of inputs and especially between the components of the transformation process. They contend that inconsistent fits
resource utilization, and overall systems performance. Considering the component fits, or lack thereof, in light of system outputs helps identify critical problems of the organization. As these problems are addressed and changes are made, the system is then monitored through the feedback loop for purposes of evaluation.

In summary, the dimensions of the Nadler-Tushman model are quite comprehensive and have face validity. Moreover, their notion of congruence suggests certain cause-effect linkages. For example, little or no congruence between, say, strategy and structure in their model produces poor organizational performance. Also, a mismatch between what's going on in the organization's environment and strategy—for example, no plan for dealing with a recent change in government regulations—would imply a causal relationship to performance. Many other congruences or lacks thereof could be mentioned. The number of possibilities is large. Nadler and Tushman, however, do not provide ideas or, say, a formula for determining which variables in their model are central. For example, they include under a single heading, organizational arrangements, quite a number of components, any one of which could easily be central. And, finally, they do not suggest any means for knowing when congruence has occurred or what levels of congruence or incongruence produce desirable or undesirable effects.

To be fair, more recently Nadler and Tushman (1980) have had some second thoughts about their congruence position:

While our model implies that congruence of organizational components is a desirable state it is, in fact, a double-edged sword. In the short term, congruence seems to be related to effectiveness and performance. A system with high congruence, however, can be resistant to change. It develops ways of insulating itself from outside influences and may be unable to respond to new situations (p. 195).

**Tichy's TPC Framework**

With his organizational framework, Tichy (1983) focuses explicitly on the management of change. He states that there are nine organizational change levers. They are the (1) external interface, or the organization's external environment; (2) mission; (3) strategy; (4) managing organizational mission/strategy processes, that is, realistically engaging the relevant interest groups; (5) task—
change often requires new tasks; (6) prescribed networks—more or less, the formal organizational structure; (7) organizational processes—communicating, problem solving, and decision making; (8) people; and (9) emergent networks—more or less, the informal organization. Figure 6.3 shows how Tichy arranges these nine levers. He assumes that “organizational effectiveness (or output) is a function of the component of the model, as well as a function of how the components interrelate and align into a functioning system” (p. 72).

Even more important in Tichy’s thinking about organization change is his TPC framework. The model in Fig. 6.3 is not unique. What makes Tichy’s thinking unique is his overlay of the three systems—technical, political, and cultural—across the nine-lever model. He contends that there have been three dominant yet fairly distinct traditions guiding the practice of organization change. The technical view is rational, based on empiricism and the scientific method. The political view is based on the belief that organizations have dominant groups, and bargaining is the primary mode of change. The cultural view is the belief that shared symbols, values, and cognitive schemes—as Tichy labels them, are what tie people together and form the organization’s culture. Change occurs by altering norms and the cognitive schemes of organizational members. Taking only one or only two of these views for managing organizational change is dysfunctional. All three must be adjusted and realigned for successful change. The metaphor that Tichy uses to capture this thinking is a rope with three interrelated strands. The strands, or three views, can be understood separately but must be managed together for effective change.

For diagnostic purposes, Tichy uses a matrix like the one shown in Fig. 6.4. This format summarizes what he calls “the analysis of alignments.” Tichy describes the use of the matrix this way:

Based on the diagnostic data collected, a judgment is made for each cell of the matrix regarding the amount of change needed to create alignment. Working across the matrix, the alignment is within a system: technical, political, or cultural. Working down the matrix, the alignment is between systems. The 0 (no change), 1 (moderate change) or 2 (great deal of change) ratings represent the amount of change needed to align that component (p. 164).

In summary, Tichy’s model includes many if not most of the critical variables important to understanding organizations. His model is unique with respect to the strategic rope metaphor and is particularly relevant to OD work, since the emphasis is on change. Moreover, Tichy is clear about what he considers to
be the primary organizational levers that must be pushed or pulled to make change happen effectively. Instead of congruence, alignment is the operational term. And Tichy provides a way of analyzing the key alignments that are necessary according to his framework. Data are first collected and then categorized within his matrix (Fig. 6.4).

There is a human component in Tichy's model, but for the most part his framework ignores issues at the individual level. He admits this omission at the end of his book by stating that he skimmed over the psychological aspects of change. The political and cultural strands are, of course, people concerns but much broader than, say, job-person match (or alignment) and local work unit activities such as teamwork. Finally, the criticism of too much congruence potentially working against change could also apply to Tichy's insistence on alignments.

**Hornstein and Tichy's Emergent Pragmatic Model**

The emergent pragmatic model of organizational diagnosis (Hornstein and Tichy, 1973; Tichy, Hornstein, and Nieberg, 1977) is based on the premise that most managers and consultants "carry around in their heads" implicit theories or models about organizational behavior and about how human systems actually operate. These notions are usually intuitive, ill-formed, and difficult to articulate. Because they are largely intuitive, different observers and members of organizations have different theories, which gives rise to conflicts among consultants or between consultants and clients about what is really wrong with the organization and how to fix it.

Hornstein and Tichy have developed a procedure for helping managers articulate and conceptualize their implicit models. The procedure has managers represent the information they would seek in diagnosing an organization by selecting labels from among twenty-two samples or creating their own from twenty-eight blank labels provided. The labels include such items as informal groupings, fiscal characteristics, turnover, goals, and satisfaction of members with their jobs.

Hornstein and Tichy's approach to organizational diagnosis is shared between consultant and client and among members of the client organization. The approach is called an emergent-pragmatic theory because "the model emerges...a highly collaborative approach between consultant and client, one that results in an emergent model representing different perspectives and experiences."

There are five phases to the emergent-pragmatic approach.

1. Exploring and developing a diagnostic model
2. Developing change strategies
3. Developing change techniques
4. Assessing the necessary conditions for assuring success
5. Evaluating the change strategies

To summarize, the emergent-pragmatic approach to organizational diagnosis is based on the assumption that most managers and consultants have intuitive theories about how organizations function, rather than well-formed conceptual frameworks, and the assumption that many consultants impose their models and theories on client organizations, regardless of how appropriate they may be for the particular client. Hornstein and Tichy advocate a collaborative model of diagnosis to avoid the potential negative consequences of operating on the basis of these two assumptions.

The three models described earlier—Weisbord's six-box model, the Nadler-Tushman congruence model, and Tichy's TPC framework—are generic frameworks and do not fall prey to the problems of Hornstein and Tichy's two premises. When the consultant and the client do not find the Weisbord, Nadler-Tushman, or other formal models to their liking, however, the emergent-pragmatic approach offers a clear alternative. It is a do-it-yourself model and, if both consultant and client are willing to spend the time required to do it right, a mutually satisfying and appropriate model for the client organization is likely to result.

The four models described may all be categorized as contingency models. They do not specify directions for change prior to diagnosis; rather, what needs to be changed emanates from the diagnosis. None of the models advocates a particular design for an organization's internal structure, a certain style of behavior, or a specific approach to management. The inventors of these models do have biases, however. Weisbord says the boxes should be in balance, Nadler and Tushman argue that the various dimensions of the model should fit with one another, as does Tichy, and Hornstein and Tichy state that the consultant and client should collaborate toward the emergence of a model that is appropriate for the given organization. These biases have more to do with the best way to diagnose than with the most important dimension to change.

We now shift from organizational frameworks to more theoretical ways of describing, understanding, and changing organizations.

Lawrence and Lorsch's Contingency Theory
Lawrence and Lorsch, early contingency theorists, specify neither a best way to diagnose nor a particular direction for change. They do emphasize structure and intergroup relationships.

Lawrence and Lorsch hypothesize a cause-and-effect relationship between how well an organization's internal structure matches environmental demands and how well the organization performs (accomplishes its goals and objectives). Their research in the 1960s provided support for their argument (Lawrence and Lorsch, 1967).

To understand the use of Lawrence and Lorsch's contingency theory for diagnosis, keep in mind that its primary concepts are differentiation and integration. These two concepts represent the paradox of any organization design—that labor must simultaneously be divided and coordinated or integrated. Within the Lawrence and Lorsch framework and for diagnostic purposes, therefore, we want to examine our client organization along the dimensions they consider to be important. The methodological appendix of their book provides considerable detail concerning these dimensions and the questions to ask for obtaining the relevant information (Lawrence and Lorsch, 1967). The following list summarizes these dimensions and some of the related questions.

Environmental Demands
1. On what basis does a customer evaluate and choose between competing suppliers in this industry (price, quality, delivery, service, and so forth)?
2. What are the major problems an organization encounters when competing in this industry?
3. Have there been significant changes in the market or technical conditions in this industry in recent years?

Differentiation
1. Regarding structure, what is the average span of control? How important is it to have formal rules for routing procedures and operations?
2. Regarding the time span of feedback, how long does it take for employees to see the consequences of their work?
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1. How independent are any two units: high (each depends on the other for survival), medium (each needs some things from the other), or low (each functions fairly autonomously)?
2. What is the quality of relations between units?

Conflict Management
1. What mode of conflict resolution is used: forcing (top-down edicts), smoothing (being kind and avoiding), or confronting (exposing differences and solving problems)?
2. How much influence do employees have on the hierarchy for solving problems and making decisions?

Employee-Management Contract
1. To what extent do employees feel that what is expected of them is appropriate?
2. To what extent do employees feel that they are compensated and rewarded fairly for their performance?

Summary: These five dimensions represent the organizational domains that Lawrence and Lorsch believe most important for effective diagnosis. Based on their research findings, the organizational diagnostician would be looking for the degree of match between environmental demands and complexities and the internal organizational structure. The greater the environment, the more complex the internal design should be. If the organization’s markets change rapidly and are difficult to predict and forecast, and if the environment in general fluctuates considerably, the organization’s internal structure should be relatively decentralized so that many employees can be in touch with the environment and can act quickly as changes occur. Under these conditions, differentiation may still be high, but a premium is placed on integration. There must be sufficient integrating mechanisms so that communication flows adequately across and among the many subunits and so that superiors in the hierarchy are kept well informed. The plastics industry represented this type of organization in the Lawrence and Lorsch research study. When the environment is relatively stable and not particularly complex (the container industry in their study), a fairly simple and straightforward internal structure may be best, with functional division of labor and centralized authority.

The issue is not whether one organization should be highly differentiated and another highly integrated but that they should be highly differentiated and integrated. High integration seems to be important regardless of environment, and differentiation may be lower for organizations with stable environments. The paradox remains in any case: Both are needed, but they are antagonistic—the more the organization is differentiated, the more integration is required.

The organizational diagnostician should also ask the mode of conflict resolution. Lawrence and Lorsch found that the more organization members and units confront their differences and work to resolve them, rather than smoothing them over or squashing them with edicts from on high, the more effective the organization tended to be.

Finally, it is necessary to know the degree of employees’ satisfaction with their psychological contract with the organization. There is apparently a positive relationship between clarity of employees’ understanding of what is expected of them—their perceived satisfaction with the rewards they receive for performance—and overall organizational performance.

Although Lawrence and Lorsch are contingency theorists, particularly with respect to organization structure, they too have their biases. They stress interfaces—between the organization and its environment, between and among units within the organization, and between individual employees and the organization as represented by management.
Normative Theories

Unlike contingency theorists, normative theorists argue that, for organization development, there is one best way to and direction for change. Major proponents of normative theory are Likert (1967) and Blake and Mouton (1966, 1978).

Likert's Profiles

Likert categorizes organizations, or systems in his terms, as one of four types:

- System 1. Autocratic, top-down, exploitative management
- System 2. Benevolent autocracy (still top-down but not as exploitive)
- System 3. Consultative (employees are consulted about problems and decisions but management still makes the final decisions)
- System 4. Participative management (key policy decisions are made in groups by consensus)

Likert's approach to organizational diagnosis is standardized. The mode used is a questionnaire, the "Profile of Organizational Characteristics," with six sections: leadership, motivation, communication, decisions, goals, and control. (The latest version is labeled the "Survey of Organizations." ) Organization members answer questions in each of these sections by placing the letter N at the place on a twenty-point scale that best represents their opinion now and a P at the place that indicates their previous opinion—how they experienced their organization one or two years ago. Sometimes the consultant asks organization members to use an I instead of a P, to indicate what they would consider ideal for each of the questions.

Organizational profiles typically fall into the System 2 or System 3 categories. If the ideal response is used, its profile will usually occur to the right of the now profile, toward or within System 4. In such cases, the direction for change is established toward System 4.

When one declares that there is one best way, in this case System 4 management, others usually demand evidence. Is System 4 management a better way to run an organization than System 3 or 2 or 1? Contingency theorists, of course, would say no; it depends on the type of business, the nature of the environment, and the technology involved. Likert contends that, regardless of these contingencies, System 4 is best. Likert's (1967) own research supports his claim, and so does research by others. A longitudinal study of perhaps the most systematic change to System 4 management—conducted in the Harwood-Weldon Company, a manufacturer of sleepwear—is a noteworthy example (Marrow, Bowers, and Seashore, 1967). Changes were made in all dimensions of Likert's profile as well as in work flow and organizational structure. The durability of these changes was supported by a later study conducted by Seashore and Bowers (1970).

A System 4 approach was also used as the change goal for a General Motors assembly plant (Dowling, 1975). As a result of these deliberate change efforts toward System 4, significant improvements were accomplished on several indices, including operating efficiency, costs, and grievances.

In summary, Likert's approach to organizational diagnosis is structured and directional. It is structured by use of his questionnaire and later versions of his profile (Taylor and Bowers, 1972), and it is directional in that data that are collected are compared with System 4. The survey feedback method (see Chapter 3 and Mann, 1957) is used as the main intervention; that is, the data from the questionnaire (survey) are reported back to organizational members in a set manner.

In order to use Likert's approach, the consultant should feel comfortable with the questionnaire method as the primary mode for data gathering and with System 4 management as the goal for change. Although participative management may feel comfortable as a change goal for many consultants and clients, the relatively limited diagnosis by profile characteristics only may not be so comfortable.

Blake and Mouton's Grid Organization Development

The other normative approach to OD is based on the managerial grid model developed by Blake and Mouton (1964, 1978). Like Likert's System 4 approach, the grid method of OD is structured and involves a high degree of packaging. Blake and Mouton also argue that there is one best way to manage an organization. Their label is 9,9, which also represents a participative style of management.
Blake and Mouton also depend on questionnaires, but their grid OD (Blake and Mouton, 1968) goes far beyond an initial diagnosis with a questionnaire. Blake and Mouton start from an initial general diagnosis. In a cross-cultural study of what managers consider the most common barriers to business effectiveness, corporate excellence, Blake and Mouton (1968) found communication to be the top of the list, followed by planning. These two barriers were selected by managers much more frequently than the remaining eight (74 percent noted communication and 62 percent mentioned planning). Morale and coordination, for example, the next most frequently mentioned, were noted by less than 50 percent. Blake and Mouton further pointed out that communication and planning were the top two mentioned regardless of country, company, or characteristics of the managers reporting. These two major barriers, and the other less prevalent ones, are symptoms of organizational problems, not causes, according to Blake and Mouton. The causes lie deeper in the system. Faulty planning, for example, is a result of an organization's not having a strategy or having a strategy that is based on unsound rationale. Communication problems derive from the nature of the supervision practiced in the organization.

For addressing these underlying causes, Blake and Mouton have developed a six-phase approach to organization development that considers both the organization's strategic plan, or lack thereof, and the style or approach to supervision or management. They contend that, to achieve excellence, an organizational strategic model should be developed and the supervisory style should be changed in the direction of participative management. Organization members should first examine managerial behavior and style and then move on to develop and implement an ideal strategic organizational model. Before explaining the six phases of their OD approach in more detail, we should consider Blake and Mouton's managerial style model, the Managerial Grid™ because most of their normative rationale is based on this model.

Building on earlier research work on leadership, in which the dual functions of a leader were variously labeled as initiating structure and consideration, task and maintenance, and socioemotional behaviors, Blake and Mouton (1964) simplified the language by using terms closer to managers' understanding: production and people. They did more, however, the creative aspect of their work was to conceptualize each of the two leader functions on a continuum, one for the manager's degree of concern for production and one for his or her concern for people, and to put the two together in the form of a graph, a two-dimensional model.

Blake and Mouton (1981) contend that they have done more than merely simplify the language and create nine-point scales. They argue that the original dimensions—initiation of structure and consideration—and those that followed, especially Hersey and Blanchard's situational leadership model, were conceptualized as independent dimensions. Blake and Mouton's dimensions—production and people—are interdependent, however, and represent attitudes more than behavior. They note that leadership is not possible without both task and people. We shall now consider Blake and Mouton's model in more detail.

Any manager will have some degree of concern for accomplishing the organization's purpose of producing products or services—that is, a concern for production, results, or profits. A manager will also have some degree of concern for the people who are involved in helping to accomplish the organization's purpose. Managers may differ in how concerned they are with each of these managerial functions, but how these two concerns mesh for a given manager determines his or her style or approach to management and defines that manager's use of power.

Blake and Mouton chose nine-point scales to depict their model and to rank the manager's degree of concern for production and people; 1 represents a low concern and 9 indicates a high concern. Although there are eighty-one possible combinations, Blake and Mouton realistically chose to consider only the four more or less extreme positions, represented in the four corners of the grid, and the middle-of-the-road style, position 5.5, in the middle of the grid. Figure 6.5 illustrates the managerial grid and defines each of the five primary styles.

As noted earlier, Blake and Mouton contend that communication problems in the organization stem from the nature of supervision. The predominant style in U.S. organizations today can be characterized as 5.5 (Blake and Mouton, 1978). A popular book at the time, The Gamesman (Maccoby, 1976), was a description of Blake and Mouton's 5.5 manager. In an unpub-
will do the job. At Phase 6 we will see how effectively the first five phases have progressed and we will know, in particular and in detail, what barriers must now be tackled.

Blake and Mouton never state it, but they apparently assume that, unless an organization learns how to communicate more effectively (practice 9,9 management) and plan more logically and systematically (build an ideal strategic model) and begin to implement it, its management will never be able to deal optimally with the specifics of running a business. Phase 6 in the grid OD sequence gets to the specifics.

**Levinson’s Clinical-Historical Approach**

Levinson’s theory of organization behavior is grounded in psychoanalytic theory and views organizations in familiar dimensions: “An organization is composed of persons in authority and ‘siblings’ who relate to these authorities” (Levinson, 1972a: 23). Because it is so closely aligned with psychoanalytic theory, it is not surprising that Levinson’s approach to organizational diagnosis (1972a) is very detailed, emphasizes history, and generally relies on clinical methods. Using this approach, the consultant does a workup on a client organization much as a physician would do with a patient and obtains as complete a history as possible, especially in terms of how the organization fits into its environment. In the search of information, Levinson suggests:

Most newspapers have morgues, or files of clippings, filed by subject. Historical societies often have much information on file. Large organizations will frequently be the subject of articles in trade or professional magazines which may be located through libraries. . . . The sheer availability of various kinds of information is a datum of diagnostic value. (p. 26)

Just as physicians “take a history,” order a blood test, and thumb the patient’s body here and there, Levinson also stresses observation. He notes: “Since the consultant is his own most important instrument, he should begin (by using his antennae for sensing subtleties)” (p. 18). Levinson suggests that the consultant request a tour of as much of the organization as time and practicalities permit in order to form and record initial impressions. “The consultant will find it helpful to keep a diary of his experiences in the company, to record events and observations which will not likely be reported in interviews or questionnaires” (p. 19).

Levinson (1972a) relies on six categories of data for diagnosis:

1. **Consultant observations and feelings.** Notes on how the consultant experiences the organization, especially initial impressions, are recorded and become a set of information for later diagnosis.

2. **Factual data.** Recorded policies and procedures, historical data on file in the organization, annual reports, job descriptions, personnel statistics, and former consultant or task force reports are perused. Collecting this information is not enough, according to Levinson; analyzing how the data interrelate is important, as is the type of language used. The language will convey attitudes toward people and assumptions about what motivates employees.

3. **Outside information.** Information is collected, primarily through interviews, from the organization’s suppliers and competitors, cooperating organizations, agents, professional associations, and the like. This information will help the consultant understand the organization’s environment in general and the impact it has on the client.

4. **Pattern of organization.** The organization chart and the authority-responsibility structure of the organization are the primary indicators of patterns of organization. Levinson stresses a holistic approach rather than a view of the interaction of just one or two subsystems.

5. **Settings.** According to Levinson, “First overall organizational purposes and then how these purposes are subdivided into specific functions performed by definable groups within definable temporal and physical space. . . . The consultant must learn where and by whom essential functions of the organization are carried out” (1972a: 28). Levinson also notes in this context what Rice (1958) has called the time dimension: “temporal boundaries within which the setting’s central purpose is accomplished . . . such as factory shift work . . . or . . . planning activities in a management group” (Levinson, 1972a: 28).

6. **Task patterns.** Group-level variables exist in each setting. Levinson cites four such patterns.
Complementary activities—contributions of each work group member toward some common goal.
Parallel activities—group members performing essentially identical tasks.
Sequential activities—group members performing some phase of the overall group task.
Individualized activities—unique functions performed by each person.

These patterns constitute a setting, and the consultant attempts to learn the setting boundaries by analyzing the task patterns. It is important to note that, although Levinson's theoretical base is psychological and his method of diagnosis is patterned after the clinical model, he does not become absorbed in pieces of the system. His approach is systemic and holistic. Although he is biased toward a Freudian view, he does not lose himself in the analytics but rather looks for systemic issues and considers how the organization influences and is influenced by its environment, how subparts of the organization relate, and how work flows from one setting, activity, and function to another. Thus, being an organizational diagnostician of the Levinson school would require a thorough grounding in psychosanalytic theory, an understanding of the clinical method of diagnosis, and a systems view of organizations that highlights patterns of relationships and work flow.

Summary
In this chapter we have considered the diagnostic phase of organization development consultation in some depth by examining certain models. These models—Weisbrod's six-box model, Nadler and Tushman's congruence model, Tichy's TPC framework, Hor bomb and Tichy's emergent-pragmatic model, Lawrence and Lorsch's contingency model, the normative models of Likert and Blake and Mouton, and Levinson's historical-clinical approach—are not the only ones available (see next chapter, for example). For OD purposes, however, they are some of the most relevant ones and they demonstrate the diversity of the field. There is considerable choice for the OD practitioner-consultant.

I do not often have the time required for using Levinson's approach, although I like his thoroughness and the systemic-flow perspective. When time is short and my client is naive about systems, Weisbrod's six-box model works well. Nadler and Tushman's model is appealing for some of the same reasons Levinson's is, but it is easier to work with and easier to communicate to a client. Tichy's framework is fairly easy to understand, yet somewhat complex in use. Horowitz and Tichy's approach is very useful for clients who are concerned that a consultant might impose something on them, and it is useful for setting the stage for in-depth diagnosis. Lawrence and Lorsch's contingency model is currently the most popular one among OD practitioners, and with good reason. It emphasizes organizational structure, which was overlooked by OD people in the early days, and shows how the organization's environment has an internal impact. Likert's and Blake and Mouton's theories are appealing because they clearly show the way, but if their approaches are chosen, they must be followed completely; a partial application will not work. Their high degree of structure and their normative view turns away some OD practitioners. Under certain circumstances, however, I have found both to be useful—Likert's profile for providing an outside, more objective questionnaire assessment of an organization, and Blake and Mouton's grid for providing a framework for examining managerial style in the organization.

An OD practitioner's choice from among these models should be based primarily on two considerations. First, it is difficult to use a model effectively if one does not understand it. Second, the practitioner should feel comfortable with the model and its approach. If one does not really believe in participative management, using Likert's or Blake and Mouton's approach is not likely to be successful, for example.

As the following chapter shows, I have my own model. As the chapter also shows, my colleague George Litwin and I have tried to learn from many of the models and theories that have preceded ours.
The Burke–Litwin Model of Organizational Performance and Change

In presenting this causal model (therefore a normative view, Burke and Litwin, 1992), I am attempting to provide yet another perspective, and at the same time demonstrate that this more recent framework captures some of the best qualities of previous certain positions about organization change and thus predicts behavior and performance consequences and therefore deals with cause (organizational conditions) and effect (resultant performance).

Important background regarding the development of the model (the concepts of organizational climate and culture) will be presented first, followed by a description of the model. Finally, suggestions for ways to use the model as well as case examples will be provided.

**Background**

**Climate.** The original thinking underlying the model came from George Litwin and others during the 1960s. In 1967 the Harvard Business School sponsored a conference on organizational climate. Results of this conference were subsequently published in two books (Litwin and Stringer, 1968; Togri and

Litwin, 1968). The concept of organizational climate that emerged from this series of studies and papers was that of a psychological state strongly affected by organizational conditions, such as systems, structure, and managerial behavior. In their theory paper, Togri and Litwin (1968) emphasized that there could be no universal set of dimensions or properties for organizational climate. They argued that one could describe climate along different dimensions, depending on the kind of organization being studied and the aspects of human behavior involved. They described climate as a molar, synthetic, or changeable construct. Further, the kind of climate construct they described was relatively malleable; it could be modified by managerial behavior and by systems and strongly influenced by more enduring group norms and values.

This early research and theory development regarding organizational climate clearly linked psychological and organizational variables in a cause-effect model that was empirically testable. Using the model, Litwin and Stringer (1968) were able to predict and to control the motivational and performance consequences of various organizational climates established in their research experiment.

**Culture.** The concept of organizational culture is drawn from anthropology and is used to describe the relatively enduring set of values and norms that underlie a social system. These may not be entirely conscious. Rather, they constitute a "meaning system" that allows members of a social system to attribute meaning and value to the variety of external and internal events they experience. Such underlying values and meaning systems change only as continued culture is applied to generations of individuals in that social system.

The distinction between climate and culture must be very explicit because this model attempts to describe both climate and culture in terms of their interactions with other organizational variables. Thus, this model builds on earlier research and theory with regard to predicting motivation and performance effects.

In addition, the variables that influence and are influenced by climate need to be distinguished from those influenced by culture. Thus, there are two distinct sets of organizational...
The Burke-Litwin Model

The Burke-Litwin model has been refined through a series of studies directed by Burke (Bernstein and Burke, 1988; Fox, 1986; Michela et al., 1988). Recent collaboration has led to the current form of this model, which attempts

1. to specify the interrelationships of organizational variables; and
2. to distinguish transformational and transactional dynamics in organizational behavior and change.

Figure 7.1 summarizes the model.

In accordance with accepted thinking about organizations from general systems theory (Katz and Kahn, 1978), the external environment represents the input and the individual and organizational performance box represents the output. Feedback loops in both directions. The remaining boxes of the model represent the throughput aspect of general systems theory.

The model is complex, as is the rich intricacy of organizational phenomena. However, this model, exhibited two dimensionally, is still an oversimplification; a hologram would be a better representation.

Arrows in both directions convey the open-systems principle that change in one factor will eventually have an impact on the others. Moreover, if the model could be diagrammed so that arrows were circular (as they would be in a hologram), reality could be represented more accurately. Yet this is a causal model. For example, although culture and systems affect one another, culture has a stronger influence on systems than vice versa.

The model could be displayed differently. External environment could be on the left and performance on the right, with all throughput boxes in between, as with the Nadler-Tushman...
model (see Chapter 6). However, displaying, as shown, makes a
difference about organizational change. Organizational change
stems more from environmental impact than from any other fac-
tor. Moreover, with respect to organizational change, the vari-
able of strategy, leadership, and culture have more "weight"
than the variables of structure, management practices, and sys-
tems; that is, having leaders communicate the new strategy is
not sufficient for effective change. Changing culture must be
planned as well as aligned with strategy and leader behavior.
How the model is displayed does not dictate where change could
start; however, it does indicate the weighting of change dynam-
ics. The reader can think of the model in terms of gravity, with
the push toward performance being in the weighted order dis-
played in Fig. 7.1.

In summary, the model, as shown in Fig. 7.1, portrays the
following:
- The primary variables that need to be considered in
  any attempt to predict and explain the total behavioral
  output of an organization
- The most important interactions among these
  variables
- The ways the variables affect change

**Transformational and Transactional Dynamics**

The concept of transformational change in organizations is
suggested by such writers as Bass (1985), Burke (1986), Burns
(1978), McClelland (1975), and Tichy and Devanna (1986).
Figure 7.2 displays the transformational variables (the upper
half of the model). Transformational refers to areas in which
alteration is likely caused by interaction with environmental
forces (both within and without) which require entirely new
behavior sets on the part of organizational members.

Figure 7.3 shows the transactional variables (the lower
half of the model). These variables are very similar to those or-
iginally isolated by Litwin and Stringer (1968) and later by
Michaels et al. (1988). They are transactional in that alteration
occurs primarily via relatively short-term reciprocity among peo-
ple and groups. In other words, "You do this for me and I'll do
that for you."

**Figure 7.2**
The Transformational Factors

Each category or box in the model can be described as fol-

- **External environment.** Any outside condition or situation
  that influences the performance of the organization.
  Those conditions include such things as marketplaces,
  world financial conditions, political/governmental circum-
  stances, and so on.

- **Mission and strategy.** What employees believe is the cen-
  tral purpose of the organization and how the organization
  intends to achieve that purpose over an extended time.

- **Leadership.** Executive behavior that provides direction
  and encourages others to take needed action. For pur-
  poses of data gathering, this box includes perceptions of exec-
  utive practices and values.

- **Culture.** "The way we do things around here." Culture is
  the collection of overt and covert rules, values, and princi-
  ples that guide organizational behavior and that have
  been strongly influenced by history, custom, and practice.

- **Structure.** The arrangement of functions and people into
  specific areas and levels of responsibility, decision-making
figure 7.3

the transactional factors

Task requirements and individual skills/abilities. The behavior required for task effectiveness, including specific skills and knowledge required for people to accomplish the work assigned and for which they feel directly responsible. This box concerns what is often referred to as job-person match.

Individual needs and values. The specific psychological factors that provide desire and worth for individual actions or thoughts.

Motivation. Aroused behavioral tendencies to move toward goals, take needed action, and persist until satisfaction is attained. This is the net resultant motivation; that is, the resultant net energy generated by the sum of achievement, power, affection, discovery, and other important human motives.

Individual and organizational performance. The outcomes or results, with indicators of effort and achievement. Such indicators might include productivity, customer or staff satisfaction, profit, and service quality.

Climate Results from Transactions; Culture Change Requires Transformation

In the causal model, day-to-day climate is a result of transactions related to issues such as

- Sense of direction. The effect of mission clarity, or lack thereof, on one's daily responsibilities.
- Role and responsibility. The effect of structure, reinforced by managerial practice.
- Standards and commitment. The effect of managerial practice, reinforced by culture.
- Fairness of rewards. The effect of systems, reinforced by managerial practice.
- Focus on customer versus internal pressures or standards of excellence. The effect of culture, reinforced by other variables.

In contrast, the concept of organizational culture has to do with those underlying values and meaning systems that are difficult to manage, to alter, and even to be realized completely (Schein, 1992). Moreover, instant change in culture seems to be...
a contradiction in terms. By definition, those things that can be changed quickly are not the underlying reward systems but the behaviors that are attached to the meaning systems. It is relatively easy to alter superficial human behavior; it is undoubtedly quite difficult to alter something unconscious that is hidden in symbols and mythology and that functions as the fabric helping an organization to remain together, intact, and viable. To change something so deeply embedded in organizational life does indeed require transformational experiences and events.

Using the Model: Data Gathering and Analysis

Distinguishing transformational and transactional thinking about organizations has implications for planning organizational change. Unless one is conducting an overall organizational diagnosis, preliminary interviews will result in enough information to construct a fairly targeted survey. Survey targets would be determined from the interviews and, most likely, would be focused on either transformational or transactional issues. Transformational issues call for a survey that probes mission and strategy, leadership, culture, and performance. Transactional issues need a focus on structure, systems, management practices, climate, and performance. Other transactional probes might involve motivation, including task requirements (job-person match) and individual needs and values. For example, parts or all of "The Job Diagnostic Survey" (Hackman and Oldham, 1980) might be appropriate.

An OD consultant helping to manage change would conduct preliminary interviews with, say, fifteen to thirty representative individuals in the organization. If a summary of these interviews revealed that significant organizational change was needed, additional data would be collected related to the top or transformational part of Fig. 7.1. Note that in major organizational change, transformational variables represent the primary levers, those areas in which change must be focused. The following examples represent transformational change (concentrated at the top of the model, as illustrated in Fig. 7.2).

1. An acquisition in which the acquired organization’s culture, leadership, and business strategy are dramatically different from those of the acquiring organization (even if both organizations are in the same industry), thereby necessitating a new, merged organization (for an example of how the model has been used to facilitate a merger, see Burke and Jackson, 1981).

2. A federal agency in which the mission has been modified and the structure and leadership changed significantly, yet the culture remains in the past.

3. A high-tech firm whose leadership has changed recently and is perceived negatively, whose strategy is unclear, and who’s internal politics have moved from minimal (before) to predominant (after). The buzz and cry here is "We have no direction from our leaders and no culture to guide our behavior in the meantime."

For an organization in which the presenting problem is more a fine-tuning or improving process, the second layer of the model (shown in Fig. 7.3) serves as the point of concentration. Examples include changes in the organization’s structure, modification of the reward system, management development (perhaps in the form of a program that concentrates on behavioral practices); or the administration of a climate survey to measure job satisfaction, job clarity, degree of teamwork, and so on.

It is also useful to consider the model in a vertical manner. For example, Bernstein and Burke (1989) examined the causal chain of culture, management practices, and climate in a large manufacturing organization. In this case, feedback to executives showed how and to what degree cultural variables influenced management practices and, in turn, work-unit climate (the dependent variable).

The change effort at British Airways (BA) is a good example of an organization in which practically all boxes of the Burke-Litwin model were eventually examined and changed. The model provided a framework for executives and managers in BA to understand the massive change they were attempting to manage. To understand the model in use a bit more as well as to consider a significant example of large system change, let us review the change in BA.

Change at British Airways

Prior to 1987 and practically since World War II (although two organizations for most of that time period), British Airways (BA)
was a government organization, the product of a merger between British European Airways (BEA) and British Overseas Airways Corporation (BOAC) in the early 1970s. These two organizations had in turn been spawned from Britain’s Royal Air Force. The BA of 1963, when Colin Marshall arrived as president and CEO, operated largely as a function of its history, rather like the military, and was draining the British treasury with financial losses year after year. Moreover, passengers referred to BA as “bloody awful.” Prime Minister Margaret Thatcher had decided earlier that BA was to be privatized and had brought in Lord John King, a successful businessman, to be chairman. King recruited Marshall from Avis Rent-A-Car in 1983 and gave him the charge and the authority to change BA so that it could survive privatization.

In addition to the external environmental force on British Airways by Prime Minister Thatcher and her government administration, another key environmental change was the growing deregulation of international air traffic—many air fares were no longer set by governments but instead by the marketplace.

Internally, BA had to change its mission and strategy as well as its corporate culture. BA’s mission was to serve with distinction as the United Kingdom’s flagship airline and strategically to compete both domestically and internationally. The mission and strategy would need to change more toward the customer and BA would need to become much more competitive. The culture would need to be transformed from one described as bureaucratic and militaristic to one that was service oriented and market driven.

Let us now consider the changes that took place in BA’s mission and strategy, leadership, and culture, in other words, the transformational changes.

**Mission and Strategy.** To make BA more competitive and to reduce costs, the first step Marshall took was to reduce the size of the workforce from about 59,000 to 37,000. The downsizing was done with a certain amount of compassion via primarily early retirements with substantial financial settlements. Marshall’s background was marketing in a service industry and he began to change BA’s strategy accordingly. BA was to become “The World’s Favourite Airline” with a strong emphasis on the customer by providing superior service.

**Leadership.** Of course the major change here was the hiring of Marshall. He in turn hired Nicholas Georgiades, a psychologist and former professor and consultant, as head of human resources. Georgiades developed the specific tactics and programs required to bring about the culture change. Gordon Dunlop led the way financially via his position as chief financial officer. He was indispensable in transforming the accounting and financial functions from a government orientation to one that helped managers to understand competition and the marketplace.

**Culture.** Led by Georgiades, a series of programs and activities were developed to shift the culture from too much bureaucracy to a real service orientation. The first program was called “Putting People First.” Aimed at helping line workers and managers understand the service nature of the airline industry, it was intended to challenge the prevailing wisdom about how things were to be done at BA (Goodstein and Burke, 1991: 12).

The next steps were to focus even more intensely on the culture. Georgiades conceptualized the process metaphorically as a “three-legged stool.” The seat was the new, desired culture (customer-service oriented) and the three legs were (1) the “Managing People First” (MPF) program, a five-day residential experience to help managers learn about how to manage their people in such a way (more participatively, for example) that they would be more service oriented; (2) performance appraisal where half of a manager’s evaluation was based on results and half on how the results were achieved, the how being an incorporation of the behaviors and practices emphasized in the MPF program; and (3) pay for performance, rewarding managers according to how they were rated in (2) above.

In addition to these interventions primarily targeted at management, a five-day residential training program was conducted for all human resource people in BA. This program concentrated on consultation skills to enhance the HR people’s abilities to help line managers to apply what they had learned in the MPF program.

Part of the rationale for concentrating on managers in the early stages of the culture change was based on the research work of Ben Schneider. In a series of studies (Schneider, 1980, 1990; Schneider and Bowen, 1985) he has demonstrated that
how “front line” people in a service business (in his case, banks; therefore, tellers, loan officers) are treated by their respective supervisors has a differential effect on customer satisfaction. In bank branches where front-line employees were managed more participatively as opposed to bureaucratically—following procedures strictly, for example—customer satisfaction was significantly higher. With British Airways being a service business, we applied this same principle. You do not have to teach cabin crew members or ticket agents how to smile. Rather you need to teach managers about how to manage these front-line people so that smiles come naturally by their desire to treat customers with respect and enthusiasm. The MPF program was therefore designed and conducted to help managers to manage more participatively, openly, respectfully, enthusiastically, and with greater trust in their subordinates. Managers cannot cannot manage the myriad of hour-by-hour contacts that employees have with customers. They can, however, work with their subordinates in an involving manner that will in turn have a positive effect on customers.

In summary, since the BA change was clearly fundamental and transformational in nature, concentrating on the top three boxes of the Burke–Litwin model that were changed in response to external environment demands was the appropriate approach to take. Subsequently, efforts were concentrated on (1) the climate via team-building processes, (2) support systems by modifying, for example, rewards (pay for performance) and, as noted above, (2) training all human resource people in consulting skills to help managers apply what they had learned in the MPF program.

For a more detailed description of the history behind the BA change and a brief overview of the change efforts, see the case by Leach and Kotter (1990). Goodstein and Burke (1991) have provided a more comprehensive analysis of the change process itself at BA.

That BA has changed is now a matter of record (Goodstein and Burke, 1991). It is one of the most profitable airlines in the world and its significantly improved service means that now passengers consider it “bloody awesome” rather than “bloody awful” (see Business Week, October 9, 1989: 97).

Considering the Burke–Litwin model from a vertical perspective entails hypothesizing causal effects and assuming that the “weight” of change is top-down; that is, the heaviest or most influential organizational dimensions for change are external environment, first and foremost, and then mission-strategy, leadership, and culture.

It is interesting to note that executives and managers typically concern themselves with the left side of the model illustrated in Fig. 7.1: mission and strategy, structure, task requirements, and individual skills or abilities. In contrast, behavioral scientists are more likely to be concerned with the right side and mid- dle of Fig. 7.1: leadership, culture, systems (especially rewards), management practices, climate, individual needs and values, and motivation. For a fundamental, large system change effort one should be concerned with the entire model and with a more effective integration of purpose and practice.

As with other models, the Burke–Litwin model has its limitations. For example, the model does not explicitly account for technology, the organization’s technical strengths, those core competencies that make it competitive in the marketplace, or effective in accomplishing its mission. Since technology largely pervades the entire organization, displaying the Burke–Litwin model three-dimensionally with technology as the third dimension might improve its validity.

Conclusion

Provided we do not allow ourselves to be trapped by a particular model, and as a consequence “not see” certain, critical information about an organization, using a model for diagnosis is highly beneficial. A sufficiently comprehensive model can help us to organize data into useful categories and to see more easily and quickly domains in the organization that need attention. Choosing the model should depend on at least three criteria. First, the model should be one that you as a practitioner thoroughly understand and feel comfortable with as you work with organizational members. Second, the model you choose should fit the client organization as closely as possible; that is, be comprehensive enough to cover as many aspects of the organization as appropriate, yet be simple and clear enough for organizational
Planning and Managing Change

It is easy to write, if not to assume, that diagnosis is one activity and intervention (that is, planning and implementing change) is quite another. In practice, however, this is simply not true. As Schein (1869) pointed out, simply entering a human system to conduct a diagnosis is an intervention. It is helpful to our understanding, nevertheless, to consider the phases of planning and managing change as following diagnosis and feedback. Thus, once a diagnosis has been made and feedback has been provided to the client, it is time to plan the appropriate steps to take so that problems identified in the diagnostic phase are addressed and a more ideal future state for the organization can be determined. Guiding this planning phase should be a set of coherent and interrelated concepts—a theory, model, a conceptual frame of reference.

This chapter first defines intervention and then covers the planning and management of change phase in more detail. Finally, we shall consider ways to determine if progress is being made in a change effort.

According to Argyris (1970), collecting data from an organization is intervening, which supports Schein's contention and our earlier claim that the phases of OD are not discrete. For this phase of organization development, however, we shall think in terms of some specified activity, some event or planned sequence of events that occurs as a result of diagnosis and feedback. The process of moving from a functional way of organizing to a project form, for example, regardless of how long it takes (and it might take months) could constitute an OD intervention. Another
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## 1.0 INTRODUCTION

### OBJECTIVES - SELF-AWARENESS
- To develop and assess the behavioral profile of graduate students (distance learning) team.
- To develop individual team members' awareness of their behavioral profile.
- To improve interpersonal relationship and communication by understanding people (whether staff or customers) of different profiles.
- To relate the graduate students teams' behavioral profile and its implications against graduate students (distance learning) mission and performance.

### EXPECTED BENEFITS - SELF-AWARENESS
- Enable the graduate student (distance learning) teams members to be aware of their potential strengths and weaknesses to make future challenges.
- Enable the participants to understand interpersonal relationship based on behavioral profile.
- Ability to be familiar with the "soft" competency concept on the team, job and staff.

### OBJECTIVES - JOB TERMS OF REFERENCE
- To assist the existing incumbents or job holders for the various positions to prepare their Job Terms of Reference (i.e., modified Job Description) based on simplified but strategically focused format.
- To finalize the Job Terms of Reference of participants as basis to develop the job "soft" competencies using the Human Job Analysis (HJA) approach.
- To provide forums for the respective heads and their respective teams on how to sharpen their approach on their jobs and focus through the Job Terms of Reference.

### EXPECTED BENEFITS - JOB TERMS OF REFERENCE
- Enable the participants to be a "performance driven" within the shortest possible time frame and be more committed to their job.
- Better understanding of the organizational mission and its relationship to managerial and executive performance.
- Better understanding of the job functions and how it is linked to organizational mission.
- Understanding and defining performance criteria based on DISC.
# Self Awareness Workshop

<table>
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<tr>
<th>Time</th>
<th>Session</th>
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</thead>
<tbody>
<tr>
<td>10:00-10:15 am</td>
<td><strong>Introduction</strong>&lt;br&gt;  - Workshop Objectives (20 min)</td>
</tr>
<tr>
<td>10:00-11:00 am</td>
<td><strong>Issues and Problems of Graduate Students (Distance Learning)</strong> (50 min)</td>
</tr>
<tr>
<td>11:00-11:30 am</td>
<td><strong>Framework to Work As Teams</strong>&lt;br&gt;  - Mission&lt;br&gt;  - Skill Competencies&lt;br&gt;  - Task Competencies&lt;br&gt;  - Productivity/Performance (30 min)</td>
</tr>
<tr>
<td>11:30-1:00 pm</td>
<td><strong>Group Exercise - Develop Team Mission of Graduate Students</strong>&lt;br&gt;  - Presentation (90 min)</td>
</tr>
<tr>
<td>1:00-2:00 pm</td>
<td><strong>Lunch Break/Prayer</strong></td>
</tr>
<tr>
<td>2:00-2:30 pm</td>
<td><strong>Theoretical Framework of Thomas DISC</strong>&lt;br&gt;  - Read Individual Report&lt;br&gt;  - Gauge Accuracy of Report&lt;br&gt;  - Questions and Answers (30 min)</td>
</tr>
<tr>
<td>2:30-3:00 pm</td>
<td><strong>Spider Web Game</strong></td>
</tr>
<tr>
<td>3:00-3:15 pm</td>
<td><strong>Coffee/Tea Break</strong></td>
</tr>
<tr>
<td>3:15-4:00 pm</td>
<td><strong>Presentation of Spider Web Game</strong></td>
</tr>
<tr>
<td>4:00-4:30 pm</td>
<td><strong>Human Job Analysis</strong>&lt;br&gt;  - Process&lt;br&gt;  - Core Factors</td>
</tr>
<tr>
<td>4:30-5:00 pm</td>
<td><strong>Questions and Answers</strong></td>
</tr>
</tbody>
</table>

**End of Session**
FACILITATOR'S PROFILE - ENCIK OMAR ISMAIL

Encik Omar Ismail is a Director/Principal Consultant of Thomas International Centre, Malaysia. He started his career with Kassim Chan Management Consultants Sdn Bhd (member of Deloitte Touche Tohmatsu) in 1979 as Consultant. In the initial years, as part of his training program, he was assigned to numerous assignments covering varied fields such as marketing, management, organisation development, financial management, project evaluation and operations audit.

Beginning in 1984, Encik Omar was assigned to the HR Consulting Group and began to specialise and undertake assignments relating to Organisational Development and Human Resources Management. The nature of work that he was involved in includes designing and refining organisational structure, job evaluation, preparing job descriptions, executive hiring, performance evaluation, etc.

Since 1990, the Firm's HR Consulting Group has been restructured to provide even more specialisation among its consultants. Encik Omar is now in-charge of competencies and he has undertaken many assignments with regard to it.

He graduated in 1976 with MBA and also MS (1977) from Ohio State University. He was also trained as Certified User of Thomas DISC management tools. Currently he is also a Certified Trainer for Thomas DISC Certified Users Programme.

At present he is appointed as Adjunct Associate Professor at Universiti Putra Malaysia (previously known as Universiti Pertanian Malaysia) on a contract basis.

His clients include amongst others the following corporations and institutions:

<table>
<thead>
<tr>
<th>Malaysian Shipyards Engineering</th>
<th>DCM Berhad</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bintulu Port Sdn Bhd</td>
<td>Maybank Berhad</td>
</tr>
<tr>
<td>Malaysia Commercial Banks Association</td>
<td>Kwong Yik Bank Bhd</td>
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<tr>
<td>Telekom Malaysia Berhad</td>
<td>United Overseas Bank Group</td>
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<td>Tenaga Nasional Berhad</td>
<td>Aetna Universal Insurance</td>
</tr>
<tr>
<td>Phillips Malaysia Bhd</td>
<td>American Malaysia Life Assurance</td>
</tr>
<tr>
<td>R.J. Reynolds Tobacco Company Sdn Bhd</td>
<td>Federal Auto (M) Bhd</td>
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<tr>
<td>Philip Morris Bhd</td>
<td>Royal Selangor Bhd</td>
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<tr>
<td>Urban Development Authority (UDA)</td>
<td>Jabatan Perancangan Bandar dan Desa</td>
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<tr>
<td>Federal Agricultural Marketing Authority (FAMA)</td>
<td>Economic Planning Unit</td>
</tr>
<tr>
<td>Ministry of Infrastructure Development, Sarawak</td>
<td>Prime Minister's Department,</td>
</tr>
<tr>
<td>Maybank Life Assurance Sdn Bhd</td>
<td>Universiti Putra Malaysia</td>
</tr>
<tr>
<td>DHL Worldwide</td>
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</tr>
</tbody>
</table>
3.0 APPROACH AND METHODOLOGY

- The workshop session is made up of lecture, group exercise, game, counselling, data presentation and discussion.

- The Thomas DISC Management Systems questionnaires were used for the workshop, specifically to prepare the Personal Profile Analysis (PPA) report and also the Human Job Analysis (HJA) graphical output. The behavioural dimensions for the Thomas Systems comprise 4 main factors, namely:
  - Dominance
  - Influence
  - Steadiness
  - Compliance
4.2 Framework to Work As Team

The schematic representation of this framework can be seen in Chart 1.0 with the following key factors:

- Team Mission
- Competency - Hard and Soft
- Team Productivity and Performance

The above factors are detailed out below:

- **Team Mission**
  - For any team to be effective there is a need for a goal or mission of what the team would like to achieve.
  - Mission is essential because it serves as benchmark to evaluate whether the team is successful or otherwise in achieving the mission.
  - In the absence of team mission there is nothing to evaluate the team performance.
  - With team mission members are guided how to approach the issues and problems of the team rather than personal liking.

- **Competency**

  The schematic representation of Job Competency can be seen in Chart 2.0.

  - Competency is essentially the interaction or combination of 3 main factors within the individual or organisation.
These factors are job skills, job knowledge and attributes of the individual or organisation.

(Please note: Most literatures will identify attitude rather than attributes as part of competency, if we are able to understand a person attributes therefore automatically about 87% of the attitude will be known. The attributes can only be ascertained if we have the tools and methodology to evaluate them. In this case we find that Thomas DISC is a convenient tool to identify attributes within short period of time.)

The competency can be grouped into 2 main areas:

i) Hard Competency - refers to something that is tangible which we can see or feel, namely:
   - Organisation structures
   - Policies
   - Systems and procedures
   - Qualifications
   - Skills
   - Experiences, etc

ii) Soft Competency - refers to something which we cannot see or feel, it is nebulous in nature, namely:
   - Individual attributes or behavioural traits
   - Individual values
   - Culture of organisation
   - Job attributes

Job Competency also made up of hard and soft competencies.

- the requirement between the hard and the soft aspect is largely dependent on the job scope and its level in the organisation. As a rule the higher the job position the more emphasis is given on the soft compared to the hard. Generally it is relatively easy to overcome the deficiencies of the hard competency through training and development.
- It is much a harder task to overcome the deficiencies of soft competency because the individual will be changing his natural self and behave differently at work and at home resulting in stress, uncertainty, tightness, dissonance, etc, which is not conducive behaviourally.

- Organisational performance is largely dependent on its manpower whether they possessed the right amount of hard and soft team.

- The team competency is the summation of hard and soft competencies.

- **Team Productivity**
  - In this context, the team productivity as the positive interaction among team members resulting in more productive effort towards achieving the team mission.

- **Team Performance**
  - It is resultant effect of the team output which is to compared with the team mission.
  - Generally, the team having the right hard and soft competencies will be able to achieve the mission comfortably.
4.3 How To Improve Team Performance

- Based on the Team Framework as outlined in Section 4.2 we need to understand which variables are either fixed, controllable or non-controllable as discussed below:

  - **Team Mission** - Must be established and fixed.
  - **Hard Competency** - Some of the variables within the Hard Competency such as organisation structure can be controllable or non-controllable features.
  - **Soft Competency** - Similarly, these variables can be controllable or otherwise, for example if there is a relatively poor job matching between the job holder (incumbent) and the job profile the possible course of actions would be to transfer to another job more suited to the incumbent, counselling, re-training and finally re-placement. The flexibility of taking action can be considered as controllable feature.

- **Productivity & Performance**
  - it is dependent on the interaction of both the soft and hard competencies
  - it is always easy to improve the hard compared to the soft.
  - whilst hard skills is important organisations should not underestimate the importance of soft competencies.
  - increase or decrease in the productivity and performance is largely dependent on the combination the above factors.

- We assure that most organisations are well prepared for the hard competencies and if there is problem in the area, it can be improved easily because it is tangible and can be seen with naked eyes.

- However, most organisations are unprepared for the soft competency because it is not tangible and it can be easily missed. It is an area, most organisations take chances and normally they use "trial and error" methodology resulting in unhealthy working environment.
Tools will be needed to improve the soft components and for this purpose, we have used Thomas DISC namely for the following purposes:

- to identify staff or individual behavioural attributes.
- to develop job profile or behavioural attributes required for the job.
- to identify "culture" of the group based on the composite attributes.

Thomas DISC has 2 sets of tools, namely:

- Personal Profile Analysis (PPA) Report
- Human Job Analysis (HJA)

4.4 The Theoretical Concept of Thomas DISC

![Diagram of Thomas DISC Concept]

- Unfriendly Environment
- Friendly Environment
- Active Behaviour
- Passive Behaviour
- High D = Dominance
- High C = Compliance
- High I = Influence
- High S = Sturdiness
- Power
- Policy
- People
- Pace

4.5 Personal Profile Analysis Report (PPA)

Key Output of This Session:

- PPA Individual Report - Narrative Report
- Team Profile - Graphical output in one page (Chart 3.0)
- Composite Profile - Graphical output for the group (Chart 4.0)

- The participant Personal Profile Analysis (PPA) report with the graphical output were extended to them for their review, comments and also to gauge the accuracy of the report.
- Generally, the staff comments on the report is favourable and some of them were really surprise by the report and on the average the staff consider the report accuracy is around ..........%.
4.6 How to read the Individual Report - Notes

Graph I - Work Mask
(5% Accuracy)

Graph II - Behaviour Under Pressure
(12% Accuracy)

Graph III - Self Image
(70% Accuracy)
4.8 Group Exercise - SPIDER WEB GAME

- The purpose of the game is to reinforce the concept of DISC and also to strengthen the framework to work as a team in a simulated fashion which lasts between 30-45 minutes.

- Besides enjoying themselves, participants will be exposed on how the respective individual reaction during the game to re-confirm their respective profiles.

- After the game, participants make presentation and share their experiences.

- Independent observers were also appointed among participants to observe the exercise and provide feedback and comments to the team.

- Please proceed with the game after the facilitator has grouped the participants into a team of 8-12 persons and also appointed the team leader and observers for the respective team(s).

- Please read the instruction on the game in the following pages.
You are given a maximum 30 minutes to develop the mission and to organise the team on how to achieve the mission.

The scenario for the mission is based on the following instructions and rules.

1. Construct your spider web using the supplied materials. Follow the diagram. (Refer next page)

2. Your team must pass through the spider web from one side to the other. You may not go around! You must pass through! Once you are through the spider web, you may not return to the other side.

3. Each team member must go through a different hole (numbered 1-9 on the diagram)

4. The string is “electrified”. If anyone touches the string, the entire team must go back to the beginning.

5. Other penalties may be issued for touching the string. (At the discretion of the facilitators).
Some questions to get you started.

1. What happened during the planning and organising stage.
2. Did you develop any mission? What was the target for the mission?
3. Did you evaluate what activities needed to achieve the mission?
4. How do you organise the team? Did you appoint a team leader? What criteria you used to select the leader?
5. Individually, what role do you play? Were you happy with the role?
6. What degree of commitment existed to getting the mission achieved?
7. How was the energy level?
8. Any norms or ground rules present?
9. How did various team members feel about their experience?
10. What attributed to the "success" or "failure" in getting the mission achieved?
11. Given the chance to go through the process what steps would you take to achieve the mission?
Using the DISC dimensions - rate your performance on the appropriate measures.

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<th>2</th>
<th>3</th>
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<tr>
<td>Chart 7.0</td>
<td>Master Job Graph Interpretation</td>
</tr>
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</table>
JOB COMPETENCY

Hard Competency

- Job Skills Requirement
- Job Knowledge Requirement

Skills

Knowledge

Attributes

Soft Competency

- Job Attributes Requirement

Implication to Organisational Performance

(+)
- Job Performance
- Productivity
- Candidate for Promotion/Transfer
- Training and Development Programme for different job

(-)
- Job Performance
- Productivity
- Need to minimize gap
- Training and Development Programme for the same job

(+)
- Job Performance
- Productivity
- Promotion/Transfer
- Training and Development not necessary

(-)
- Job Performance
- Productivity
- Need for Transfer/Counselling
- Training and Development not much impact
Composite Profile

Graph I: Workmask (Modification)

Graph II: Under Pressure

Graph III: Self Image (Potentials)
THE HUMAN JOB ANALYSIS PROCESS FROM INPUT TO OUTPUT...

1. **Job Terms of Reference**
   - Input
   - Chart 6.0

2. **Panel Members**
   - Nominated by Management
   - (3-5 persons)
   - And Thamir Facilitator
   - Human Job Analysis
   - Output Example
   - Graph Interpretation
   - Chart 8.0

3. **Core Competent Factors**
   - DISC
   - Q1
   - Q2
   - Q3
   - Q4

4. **Ideal Job Profile**

<table>
<thead>
<tr>
<th>High Dominance</th>
<th>Quick reaction, competitive, firmly decided, strong and logical.</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Influence</td>
<td>Social interaction, optimistic attitude, inspirational verbalization, persuasive approach by selling self and ideas, very open to the ideas of others.</td>
</tr>
<tr>
<td>Low Compliance</td>
<td>Independent in assuming tasks; must be persistent, firm and confident, practical approach, individualistic, problem-solving.</td>
</tr>
<tr>
<td>Low Staminance</td>
<td>Tends to act alone, develops new and different activities, active, mobile, develops opportunities to be heard in presenting new concepts.</td>
</tr>
</tbody>
</table>
The Glorious Failure

Micha Popper
University of Haifa, Israel

This article describes an organizational intervention that was considered highly successful at first sight and in the short term. However, after some time it emerged that the effects of this organizational intervention were surprisingly different from what had been planned and foreseen. A deeper analysis indicates the substantial effects of the basic assumptions (not always conscious) of management, foremen, workers, and the professional team conducting the intervention. The dynamics of influence of these assumptions and the possible overall implications for organizational interventions are discussed.

One of the popular models for analysis of organizational cultures, suggested by Schein (1990), distinguishes among three levels of culture: (a) the overt, visible level, which includes the characteristic behaviors of the organization’s members (dress style, mannerisms, rituals, ways of speaking); (b) the organization’s central values, which form a kind of “code” or “cognitive map”, guiding members’ behavior; and (c) the level of “basic assumptions.” The last level, which is also the deepest level, is the most abstract and the hardest to describe. To borrow an image from the world of computers, the “basic assumptions” are the operating system, “organizational values” are the application program, and “behaviors” are the actual applications.

The following case study, describing an intervention in an organization, illustrates the link among Schein’s (1990) three levels of analysis of a culture and the decisive weight of the basic assumptions. However, the case study indicates the possible existence of different basic assumptions in the same organization. This has far-reaching...
Implications for the planning of interventions designed to generate changes in the organizational culture.

BACKGROUND

The organization in question manufactures military products for the Israeli army and is, in fact, part of the army. Its structure is singular in that the entire middle and senior management level consists of military personnel—namely engineers who are officers—and the foremen as well as the assembly and production workers are all civilians.

The officers are regular soldiers at the rank of major (workshop commanders) or lieutenant colonel (plant commanders), with a brigadier in command of the entire complex, which is known as the “Center.” The officers’ average age is 35, and they serve in the Center for 3-year periods as part of their career track in technical and administrative roles. Besides their relative youth, these officers (like most of the officers in the Israel Defense Force) are characterized by strong achievement orientation and high career commitment (Yardi, Wiener, & Popper, 1989).

The civilian population at the Center is composed of people who started working there in the 1950s and 1960s, most of them right after completing their compulsory military service. Most of them have worked in the organization for about 30 years, and their average age is 55. Beyond being older and having spent a long time in the Center, the civilians are characterized by a very high level of commitment to the organization, compared both with the officers and with similar workers in other organizations (Yardi et al., 1989). This finding is compatible with predictions derived from theories dealing with the growth of commitment to an organization, such as investment theory (Becker, 1960; Salancik, 1977; Swanson, 1981) and cognitive dissonance theory (Kiesler, 1971; Wicklund & Brehm, 1976). According to the logic of these theories, commitment is a function of the individual’s investment. The higher the investment (especially emotional investment), the less willingness to seek alternatives and thus the higher the commitment to the organization. Theories such as cognitive dissonance theory complement the psychological aspect of the explanation by clarifying the process of rationalization of decisions taken. To preserve his or her feeling of inner consistency, to justify a choice to himself or herself, the individual will feel more committed. The civilian workers at the Center relate to the organization as to a family. The concept of “family,” with all its emotional implications, is the key to understanding their motivation. The civilian workers maintain close and intensive ties within the work groups; they know each others’ families and spend vacations together. They all are people who came to the place when they were young and grew older together and will stay together until they reach retirement age. In fact, most of them admit that the security guaranteed by a public organization, particularly a military organization, was a central factor in their decision to remain at the Center at various crossroads in their lives.

The Center practiced an outdated method of evaluating workers (from its beginning in the 1950s), based on a short eight-item questionnaire with very general questions, such as, “How honest do you consider the worker?” Similarly phrased questions related
to other aspects such as "discipline," "diligence," and so forth. The breakdown of evaluation scores was totally nondifferentiated; 52% of the workers were excellent according to the formal evaluations, and most of the others (31%) were "very good."

Another organizational mechanism that existed in the Center was shortening the interval between raises on the wage scale. Instead of adjusting the workers' wages automatically once a year, the defense ministry adopted a policy whereby the management was allowed to shorten the time between pay raises. Because the management was restricted in the overall number of months by which it could shorten the intervals between workers' raises, it obviously wanted to shorten the time for the best workers and not shorten the time between raises for those who did not deserve it.

When this mechanism was introduced, it was based on the principle of "reward for endeavor." The worker who contributed more would be entitled to a pay raise after a shorter interval. Of course there was no way to determine eligibility on the basis of the formal evaluations, which lacked differentiation. Thus management had to choose between (a) ignoring the evaluations completely and granting more frequent wage increases on the basis of informal personal knowledge and (b) shortening the interval between raises for everyone equally, so that nobody received the maximum but all received slightly more frequent raises. This second path, in fact, became the organization's practice throughout the years. Clearly, this solution negated the whole idea of the incentive of "reward for endeavor." On the other hand, it helped to prevent "industrial unrest."

Of course, it remained possible for management to cancel this existing arrangement and devise a method of evaluation and incentives that would formally reflect what everyone informally knew: the real differences in the workers' contributions. This, indeed, was the choice made by a new commander of the Center who was energetic and liked change. He decided to challenge the traditional situation and set himself the task of devising an evaluation system that would reflect the actual differences between workers and serve as the exclusive basis for allocating wage increases.

As the Center's organizational consultant, I was asked to construct a new evaluation system, the main task of which would be to reflect the existing differences (which were common knowledge) in the workers' contributions. For this purpose, I requested professional assistance from the army's behavioral science department—a body that provides services to the various army units—and I was given the services of two professionals in the specific area of constructing evaluation systems. These were a social science researcher and a programming expert.

This team set out to create the methodology and the statistical base for the new evaluation system. Although at the time I myself had only a few months' acquaintance with the Center, the commander's initiative seemed at face value to be appropriate and necessary. In discussions with me, the foremen had complained that they did not have the tools and means required to motivate the workers to greater efforts. One of the most outstanding foremen said, "Why should the workers try harder? In any case they all get the same wages in the end." At that stage I felt that I had to help the foremen with this problem. Also, it seemed unfair to me that workers who put no effort into their work should receive the same salaries as others who exerted themselves considerably. Moreover, in the absence of prospects for promotion and mobility, wage
differences seemed to be the only possible incentive and reward, both in the symbolic sense of recognizing efforts and in the concrete material sense.

THE MAJOR PROBLEMS FACING THE TEAM

Lack of Scatter Potential in the Evaluations

The evaluation forms contained eight very general items, referring to characteristics that are the basis for judgment and evaluation in any situation (not necessarily a work situation)—for example, honesty, order, and so forth. This structure magnified the "classic" errors, such as the "halo effect"—judgments influenced by a salient characteristic (such as good looks)—that regularly appear in such evaluations and have been discussed at length in the literature (see, e.g., Harris, 1994; Roberts, 1994). The more specifically the items are formulated and the more items there are, the more these types of error decrease.

The Foremen's Ambivalence

Another major difficulty, much to my surprise, stemmed from the ambivalent attitude of the foremen—the evaluators.

Although they had complained in talks with me and with their commanders that they did not possess the tools to persuade workers to try harder, when the project reached the implementation stage it soon became clear that the foremen did not really identify with the management level at the Center. They were rank-and-file workers who had been appointed foremen in the course of time because they were good workers. Although they were well aware of the differences among workers and of their differential contributions, the foremen tended not to express this in their evaluations because they perceived themselves more as members of this group than as its managers.

In other words, the foremen's significant reference group was the workers; it was not management, which was composed of military personnel. This orientation of the foremen was put to the test when the need to differentiate among the workers was explained to them. They were asked in the first talks to classify the workers into three categories: "excellent," "very good," and "good." Management was prepared to be satisfied with this differentiation. However, it turned out that even this division was hard for them. Although nothing was said outright, the foremen preferred to maintain good industrial relations with the group of workers from which they had grown. In these circumstances, management decided to develop a system of evaluation that would force the foremen to state what they actually knew about the workers' differential contributions. The assumption was that the first step (the move to a differential system of evaluation) would be welcomed by the foremen, but for reasons of social desirability they were afraid of upheavals. However, if it were imposed from above, this psychological obstacle would be removed and the foremen would be able to tell the workers that they were not the ones who had chosen this system. At the same time,
this would help to strengthen the position of the foremen as managers, and in the end they would identify with the actions taken by the management.

THE PROFESSIONAL TEAM’S WORKING METHOD

The professional team determined principles and planned a series of steps to achieve differential evaluation of the workers. The principles they set were as follows:

Relativism. The “evaluation unit”—the basis for evaluation and calculation—would be the workshop. (The typical workshop includes 15 to 20 work groups, each group comprising about 20 workers and supervised by a civilian foreman. The entire workshop is headed by an army major.) The practical meaning of the principle of relativism is that the foreman, the “evaluator,” was expected to evaluate his workers comparatively within his group. The officer in charge of the workshop, the “reviewer,” was expected to compare all the workers from a standpoint outside the work groups from an overview of the whole workshop, taking account also of possible differences between the work groups. The purpose of this procedure was to prevent distortions whereby a worker who “fell” into a particularly good group might be evaluated exactly like a mediocre worker who happened to be in a poor group. To give suitable expression both to the group level and the workshop level, they received equal weight in the worker’s final score: 50% to the evaluator and 50% to the reviewer.

The evaluation system would help to improve the standard of management. This principle was determined from an organizational viewpoint. The organizational consultant who headed the intervention team emphasized that the development of an evaluation system should not be seen as merely a “computerized statistical project” (as the statistics and computer expert thought, arguing that it was possible to achieve differentia
tion in worker evaluation solely by statistical and computer methods), but as a project to improve the level of management by introducing training and feedback.

THE STEPS TAKEN BY THE PROFESSIONAL TEAM

Construction of a New Worker Evaluation Form

The first step taken was the construction of a new form containing as many behavioral items as possible (unlike the original form with its eight items relating only to general characteristics). The form was constructed on the basis of a study in which the foremen were asked to identify the “critical behaviors” that distinguished good and outstanding workers from the others. After dozens of such behaviors were collected, the items were factor analyzed. Four factors were found: (a) professionalism, (b) human relations, (c) discipline, and (d) devotion to work. Each factor comprised about 10 behavioral items. Based on these factors, the final form was constructed with the following scores: (a) the scores for the behavioral items (45 items), (b) factor scores
summarizing the score of each factor, and (c) a general evaluation score. This latter score was separate and did not reflect the sum of the items or factors. The underlying assumption was that the scores of the items indicated specific behaviors, the factor scores reflected a broader view of the collection of items in a certain factor, and the general evaluation score expressed the principle of “gestalt” in the evaluation process, assuming that this score was more than the “sum of all the parts.” The worker’s final score was the weighted mean all scores (each equally weighted). This structure enlarged the scatter potential.

STATISTICAL FEEDBACK

Increasing the scatter potential of the worker evaluation form was only one step, and it was not sufficient to address all the issues presented. Therefore, we added statistical elements to ensure that the anticipated differentiation indeed would occur. The elements added were the following:

a. Statistical feedback for each evaluator. Every foreman who evaluated his group received feedback on the degree of differentiation expressed in his evaluation. If there was not enough differentiation (according to predetermined parameters), the foreman was asked to fill out the evaluation form again.

b. Review feedback. Every workshop manager (as mentioned) the workshop framework included some 20 work groups) received the breakdown of evaluations for all the foremen in his workshop. His evaluation of these foremen related, among other things, to the degree of differentiation in their evaluations.

This procedure was designed to exert constant practical and psychological pressure on the evaluators to maintain differentiation.

TRAINING

As mentioned, the planned change was not expected to be purely technical but was regarded as a change in the style and standard of management. Therefore, a comprehensive training program was planned to provide the foremen with the information required to fill out the new evaluation forms and, beyond that, to give them training in management, which they had never received. (As stated, these were rank-and-file workers who had become foremen without any training.) In other words, beyond the information generally given in guidance for evaluators (such as the “halo effect,” “common statistical biases”), the foremen also were offered the management’s viewpoint, with emphasis on management’s wish to view them as an organic part of the entire management level. Indeed, the head of the Center came to every training course for the foremen, spent hours in talks and discussions with them, and made every possible effort to help them internalize “management values.” Thus, in the end, the initial aim of “changing the method of worker evaluation” became an overall endeavor to strengthen and, in fact, to “build up” the rank of foremen who had never been built
up as managers in any way before. The underlying assumption was that this rank was the main lever for change and improvement in efficiency, especially through the introduction of more intensive procedures emphasizing achievement and personal effort.

IMPLEMENTATION OF THE PROCEDURE

Once a form with great “differential potential” had been constructed, a computerized feedback system had been devised to give statistical feedback to the evaluators and reviewers, and a training system had been created for the assimilation of knowledge and values, the practical stage of implementation began.

First, the forms were administered to the foremen. Forms that did not express differentiation according to the criteria “dictated” to the computer were returned to the foremen, who were asked to fill them out again after receiving guidance both from the professional team and from the workshop manager. The result of this first interaction was an understanding of the new system and clear awareness of the fact that it was not possible to avoid differentiation. The foremen understood, and this aim was achieved in full. The same scene recurred each time in the next 3 years. On the face of it, it might be said that the task was completed. The salient expression of the new method’s technical success was evident in the discussions of workers’ rankings. Now, so differently from the past, there were no endless discussions about the “real” quality of a worker and his eligibility for a pay jump. All decisions could be made quickly, based on the statistical breakdown obtained from the computer. Clear criteria were set for the allocation of pay jumps for each level, so that the highest scores got the maximum pay jumps. Below a set cutoff line there was no pay jump eligibility. The breakdown of scores and the resultant distribution of pay jumps were supposed to transmit a clear message that it pays to work harder. The more efforts the worker made, the higher he would be ranked in his group and the higher his reward. Looking at the new evaluation process in this way, management could rub its hands in satisfaction and sit back to enjoy the success, and that, indeed, was their tendency. However, I was not content with purely technical and statistical indications. Because I saw this intervention as a tool for improving the quality of management and, in fact, for changing the organizational culture, I conducted an in-depth diagnostic examination to see how the procedures instituted had affected the feelings and attitudes of the workers and foremen beyond the technical success. The main findings of this examination and an analysis of their implications are presented in the next section.

DIAGNOSIS OF THE EFFECT OF THE NEW WORKER EVALUATION SYSTEM

The effect of the new worker evaluation system was examined to understand the more complex psychological processes generated by the change, especially at the level of interaction between foremen and workers, and to understand possible changes in
the organizational culture at this level. Specifically, had the workers' achievement orientation risen due to the new worker evaluation system?

This diagnosis was conducted through various methodologies: interviews with foremen, workers, and workshop and plant commanders; direct observation; and attitude questionnaires. The diagnosis revealed processes whose direction was totally different from what might have been inferred from the statistical data. The main phenomena found were as follows:

Tension and Bitterness Among the Workers

For decades, members of each work group at the Center had received almost identical evaluations, although it was clear that some workers were better than others. This was one of the factors that contributed to the intimate family feeling that came from working together for many years, with a feeling of equality and an "us" (the group) and "them" (the rest of the world, especially management) attitude. Apparently the family feeling in the group was so strong that the result of the differential evaluations imposed on them could be compared to the impact on a large family whose children suddenly stop receiving equal presents. After years without favoritism, some of the children suddenly receive more expensive gifts than the others, implying that some children are worth more and leading to the feelings expected to arise in such circumstances: anger, envy, and bitter feelings of injustices. A typical expression of this is found in the following exchange. A worker who had been placed low in the new evaluation system was asked by his foreman to perform a certain task. He shouted angrily at the foreman, "Tell David to do it. You gave him an 'A' [the highest score]. I only got a 'C.' Leave me alone."

Suspicion

The image of a family whose children suddenly feel they are not receiving equal presents and, more important, are not being treated equally helps to explain the growing suspicion that marked the workers' behavior. There was a different spirit at the Center. Every effort was made with one eye on the foreman. People's behavior began to seem unnatural, and they began to suspect each other, each thinking the others' behavior was intended to curry favor and get higher scores in the evaluation, leading to higher financial rewards. The result of all this was that the workers became less cooperative. The effect of the insidious suspicion showed up clearly in the breaks. The breaks, which formerly had been a time for relaxing, laughing, and having a sense of camaraderie around the coffee pot, became gloomy and silent, each worker sitting separately with his coffee in his own corner.

Feeling of Helplessness

A feeling of helplessness overcame both workers and foremen. Suddenly they all felt dominated by new rules (identified with the military management) that were as immutable as "forces of nature." (What they could have done, perhaps, was to find ways of adjusting to these new "forces of nature.") This feeling was especially severe
among the foremen. They felt most poignantly from the first interaction that they had no room to maneuver and that the basis of their influence at work had been eroded. For example, a worker who got a low place in the breakdown of scores the first time around after years of getting the highest score (as most had done in the old system) complained to the foreman. The foreman showed him the evaluation form, saying, "Look, I gave you a high summarizing score [90]; it's the computer that distorts everything and changes the score" (the computer graded the scores relative to the group, so that even if they all got good absolute scores there were still differences between them). "It's the bloody computer, not me. It's not my fault." Thus the computer acquired an almost demonic psychological significance, and although allowing the foremen to hide behind its "inexplicable" action, the computer acquired the character of a vast inexorable force sweeping over them.

The result was a live demonstration of the gap between management's "declared theory" and "theory in use," the theory that guides actual behaviors. Management, after the project's first run, felt it had implemented a differential evaluation system providing strong incentives for personal achievement ("Now everybody can achieve more if he tries hard enough"), but the workers felt that the new evaluation system damaged the entire basis of their motivation for work. Furthermore, the objective results, such as the number of errors found in quality control or the time taken to perform work functions, did not indicate any improvement. At this point I began to examine the hidden psychodynamic meaning of the procedure introduced, and this led me to analyze the organizational culture and the meaning of the intervention in terms of the local culture or, more precisely, the local cultures. Accordingly, the entire intervention is described in the next section in terms of the analysis of organizational cultures.

ANALYSIS OF THE INTERVENTION IN TERMS OF "ORGANIZATIONAL CULTURES"

The evaluation system in question was considered at the time of implementation to be the best and most advanced ever constructed in Israel. It was presented at professional conventions and highly praised in many methodological, statistical, and computer contexts. The system expressed the latest knowledge in these fields (e.g., innovative software programs for statistical feedback). From this point of view, the system won the highest acclaim. However, in the plant itself, at the Center, the new system at best failed to be assimilated and at worst did real damage. This, then, is an example of impressive professional success expressing the forefront of knowledge coupled with total failure in terms of management. This case clearly illustrates the need to analyze the characteristics of a culture before planning and implementing interventions, sophisticated as those interventions may be in the technical sense.

Management at the Center, as described, consists of army officers—young engineers on a highly mobile military career track—but the workers are much older and hold the same job in the organization without any mobility. The management and the workers can be characterized as follows:
A glance at the evaluation system indicates that it strongly expresses management values, the values of the young officers. The messages derived from this system are "be competitive, achieve, and be rewarded for your individual efforts." This is the officers' culture—the management culture. On the other hand, the messages of the workers' culture are that the group is more important than personal achievement: "Our commitment is to the 'family' of workers, the organization, and not to management, which constantly changes. Our concern is to guard the workplace for all of us."

It seems, therefore, that the assimilation of this sophisticated evaluation system did not constitute the introduction of an effective management tool to improve the organization, but rather was an intervention at the systemic level of the organization—the level of basic assumptions. Sometimes there may be differences between the basic assumptions of management and of workers. Such differences gradually diminish with the growing awareness that the organization's struggle for survival in an increasingly competitive market is an interest common to management and workers. The feeling of being on two sides of a barrier, "them" and "us," which was once so typical of many organizations, especially industrial ones, has decreased considerably in our time (see, e.g., Toffler, 1990).

The case described here stands out sharply because it illustrates the importance of basic assumptions and values for understanding the limitations of structured interventions. What we find here is an expression of the sharp division between management and workers, a division that has the salience of a dichotomy between cultures in the broadest sense and concerns basic assumptions regarding the workers' motives. All of the "classic" assumptions that are at the basis of the terms culture and intercultural differences find expression in this intervention. That is why the situation at the Center is not a question of organizational change, or even of a simple attempt to change a culture, but one of a war of cultures: The instruments that were developed on management's initiative were, to continue this war image, an attempt to develop weapons that would swiftly impose the management culture. However, as has happened more than once in the history of swift conquests and ensuing attempts at subjugation, guerrilla actions were not slow in coming, and resistance movements quickly found routes of expression that necessitated rethinking at the level of basic assumptions of the culture and, of course, of the intervention process.

The following points illustrate this argument. After the worker evaluation system was introduced, workers and foremen soon discovered that the computerized system (based on relative statistical principles) always maintained differentiation, distinctions among the workers that could not be circumvented in any way by filling out the forms differently. (The foremen, in private talks with me, "not for quotation," admitted that
the evaluation system accurately reflected the real differences between the workers' relative contributions.) In everyday reality, there was a great deal of tension to the point of personal insults and efforts by workers to avoid every unusual effort. The tensions operated on every level. The "losers" among the workers felt that the new system had given them a raw deal, and therefore they were antagonistic toward the whole system. But the motivation of the so-called winners, those who received the higher scores, also was damaged (to the great surprise of management). The "winning" workers felt their friends' hostility and even a sense of betrayal. This may, perhaps, be compared to the feeling of betrayal existing in elite combat units, where deviants are perceived as "betraying their comrades in arms." Furthermore, the foremen, who themselves had risen from the ranks and for whom the workers were the emotional reference group, were increasingly avoided. They were painfully aware, they testified, of the growing alienation between them and the workers, their friends.

In the end, unable to make changes in the technical aspects of the system, the foremen found a "political solution" to their problem. They came to an agreement with the workers (without knowledge of the senior staff) on a principle of multiannual rotation. Each year, according to a prearranged list, different workers would be placed at the head of the table, and thus over a period of several years there would be no "winners" or "losers." All would receive equal evaluations and rewards, although (because of the system of differentiation) this would happen over periods of several years. In other words, the foremen found a way to circumvent the differentiation achieved at the technical level and preserve the principle of equal distribution. Thus an absurd situation evolved, whereby management had its differential system to distinguish between workers, and the workers (who officially had the same differential system) "worked" it to maintain the principle of equality.

**WHAT ARE THE LESSONS TO BE LEARNED FROM THIS CASE?**

My intention in attempting to answer this question is, of course, to find lessons that may yield general principles applicable to planning interventions in general and to interventions of a structural nature in particular (such as introducing a worker evaluation system).

The first lesson concerns the initial examination of the sources of the desire for change. In other words, before any intervention it is advisable to examine who the initiators of the change are and what their motives (which may sometimes be unconscious) are. For whom does the change serve? I stress this point because, in my experience and that of my colleagues, blindness exists concerning the real motives for initiating change (Lipshitz & Papper, 1996). This case illustrates clearly the need for such prior analysis.

The management level in this case was less committed to the organization and more committed to their careers than the workers. Furthermore, in this organization the management level pursues a career track based on the principle of rotation. This means that the main motive of these officer-managers is to "leave their mark" on the organization, which will help to advance their careers in the army at large, not
necessarily in this particular organization. Their frame of reference is not the Center, which is only a subunit of a huge organization. This leaves a mark on the thinking of someone on a personal career track, where a person is tested (or so he thinks) by the initiatives he takes. In fact, the value of “initiative” is a central theme in the Israeli army, and it has a powerful halo effect in officer evaluations. In fact, it is the major factor in considering officers for promotion. The desire for change is, therefore, first and foremost personal and much less (if at all) concerned with the good of all the people in the Center, those who stay there all their lives.

The fact of change or, more precisely, the fact of initiating change, is perceived as rewarding in the officers’ personal and achieving value system. The rotation track ensures that the initiator of the change moves on to another role or to another place within a short time, and thus it often happens that the officers do not actually see the results of their initiatives for change. These circumstances strengthen the officers’ motivation to initiate change for change’s sake because the separation between the actual initiative and the responsibility for results (which will occur when someone else is in charge in the rotation process) permits management to focus on the actual initiating of changes, building themselves an image of “reformers.” This image was particularly important to the commander of the Center—the initiator of the project. He was well aware of the history of related promotions. All his predecessors in that role who had introduced changes to the Center had been promoted to the head of the corps, and other commanders who were perceived as “keeping things going,” even if they did it very well, were not promoted—in fact, this was their last role in the army. This knowledge carried a driving message: The Center commander saw this project as a means to create the “appropriate image” required for his promotion.

The motives of the professional group—the team of consultants—were not the same as those of management. But as we will see in the analysis below, they were not basically different. Despite the different sources of motivation, an identity of interest grew in the actual fact of intervention.

As stated, the professional team consisted of a researcher in the social sciences, a computer expert with a background in statistics, and myself, as organizational consultant to the Center. The social scientist was able to conduct research under excellent conditions. Evaluation tests were at that time a “hot subject” in Israel, and this was an opportunity to conduct a study that could further his reputation. For the computer expert, this was a rare opportunity to develop new programs from scratch, unrestricted by directions from above and, in fact, with no budgetary restrictions. This was a challenging project, unique at that stage in his professional life.

For myself, despite years as a consultant, my experience hitherto had been mainly in the area of classic interventions: team development, personal consultancy to managers, facilitation of think tanks, and so forth. These interventions usually focus on psychodynamic processes. Here, for the first time, I had the chance to lead an intervention that included elements of research, computerization, constructing instruments, and personal and group supervision. Of course, what seemed most challenging was the combination of all these elements in one intervention without any budgetary restrictions. Thus, indeed, seemed a unique professional challenge unlike anything I had ever done or encountered in the professional circles to which I belonged.
It seems, therefore, that the professional team and the management, particularly the head of the Center, shared the same motive with different nuances—to "make their mark" on the system. The commander wanted to make his "personal mark" for purposes of promotion, and the members of the professional team, each in his field, wanted to create and leave a "professional mark" that would be unique in the professional circles in which he moved.

This does not mean that management and the professional team were concerned only with their own narrow interests. On the contrary, their thinking was that the intervention was good for the Center as a whole, and that all concerned would cooperate and regard the intervention as furthering their own interests, too. For example, they thought the foremen would be in favor of it because it gave them more power and authority. The "good workers" would support it because the new system recognized their greater contribution and gave them higher rewards. In fact, the only resistance anticipated was from the less diligent workers, who enjoyed equal rewards with the good workers. And this was exactly the situation the intervention was designed to rectify. In addition to the instrumental benefit for the Center, project leaders also rationalized this as "natural justice": Those who try harder deserve more.

The study by Vardi et al. (1989) compared workers in the Center with similar workers in civilian plants. With one exception, the variables in the comparison were identical: salaries, workers' ages, work conditions, work hours, type of tasks, and size of work groups. The only difference was the type of product. The Center manufactured items connected with security, and the other plants produced consumer goods. The comparison revealed that the organizational commitment of the Center's workers was much higher than that of workers in civilian plants because of the importance that the workers attribute to the products they manufacture. As the workers expressed it, "We contribute to national security."

Thus the workers' high level of commitment, and perhaps also the fact that they had served in the army, led the planners to believe that they, like the other members of the organization, would cooperate in the project. In the planners' view, the project would both serve the private interests of the various groups and promote the sense of a shared mission. This seemed to be an excellent combination of interests and ideological and emotional motives.

The lesson to be learned from the assumptions concerning motivation relates to the project's basic approach to the objects of the intervention. The planners and leaders of the project viewed the organization as a whole, assuming that all people involved were on the same side in terms of interests and organizational values. They did, in fact, discuss the dichotomy between management and workers, but their assessment was that despite differences in education, occupation, age, and basic interests, the common elements were greater than the differences. In light of the workers' high commitment to the organization and the sense that all the parties involved believed that they were fulfilling a mission of vital importance to the state, it was easy to attribute to all of them the same kind of "rational" thinking. Moreover, the planners did not take into consideration the possibility that the Center was a collection of groups whose actions were motivated by needs, emotions, and forces that were likely to outweigh the other forces. It later appeared that it would have been much more accurate and effective to
consider all the parties involved in the intervention as separate groups existing in the same organization but differing in their emotional involvement.

A preliminary diagnosis in terms of intergroup relations (Alderfer, 1987) would have removed or reduced the blindness with regard to the obstacles that emerged unexpectedly during the course of this intervention. This kind of diagnosis would, first of all, have revealed that the similarity attributed to the attitudes of management and workers was at best wishful thinking on the planners' part. Second, it would have quickly shown that the situation was more complex than a simple dichotomy between management and workers.

Thus it was not enough to treat management and workers as two groups in the organization or as two interest groups. What was required was a more thorough understanding of the dynamics of both organizational groups and identity groups. An identity group (Alderfer, 1987) is a group whose members have similar biological characteristics (age, sex), historical backgrounds (e.g., immigrants from the same country), and life experience, and who embrace a shared meaning for their experience. An organizational group is one whose members hold similar positions in the organization, participate in the same forums, and consequently have similar views concerning what happens in the organization.

This distinction indicates the sources, depth, and intensity of group cohesiveness in these two types of group. The organizational group is a collection of individuals who become an ad hoc group for a certain period due to organizational circumstances. In contrast, the sources of group cohesiveness in the identity group are not dependent on circumstances but are much deeper at the extraorganizational level. Therefore, relationships in the identity group are invested with more emotion than those in the organizational group. The management and the professional group of experts are, by this definition, organizational groups, but the workers group is an identity group. The affective, attitudinal, and behavioral aspects of this distinction can be demonstrated by two well-known models: the organizational demography model (Pfeffer, 1983) and the attraction model (Schneider, 1987).

According to Pfeffer, the demographic composition of organizations influences many behavioral patterns, including communications. Among the dimensions of demographic composition Pfeffer considers important are age, tenure, sex, race, socioeconomic background, and religion.

Schneider (1987) claims that members of organizations are attracted to other members whom they see as similar to themselves. Thus homogeneity of personalities, values, and interests are the characteristics that count most significantly in organizations.

On the basis of these explanations, it is easy to see why "identical thinking" developed between the management and the professional consultants who conducted the project. First, these were two organizational groups, both temporarily participating in the organization, so that in the nature of things their involvement was less emotional. This was rationalized by both groups as a claim that they were able to see things objectively in an overall, long-term view, of which the workers were not capable. The management thought it was their duty to convince the workers that this project was
the right thing in terms of the national good and that it would not harm the majority of "good" workers.

Further, the demographic and psychological variables of these two groups (management and consultants) were identical. Both were composed of young people with academic education, similar ethnic background (Jewish families from Europe and North America), a strong universal professional orientation, and individualistic motivation. Thus, to some extent, they may also be defined as an identity group, although one less cohesive than the workers group.

The workers, as described, were much older than the managers. They shared a long history together in the organization and had similar demographic variables that differed from those of the management and professional team. Most of them came from families of Jewish immigrants from North Africa and from poor, uneducated families, and they themselves had secondary education or less. Therefore, according to the models of both Pfeffer and Schneire, the organizational intervention intensified the cohesiveness inside the workers group and sharpened the dichotomy between them and management.

Another lesson concerns the initial premise that the project would empower the foremen by providing them with a tool that would enable them to give the workers a differential reward. Management believed that the foremen had a real ambition to be managers, that the new evaluation system not only gave them a powerful management tool but also strengthened their identity as belonging to the management level.

In reality, the foremen group, which was the most crucial group for the project and the foundation on which it rested, felt differently from what the planners had anticipated and thus behaved differently. The responses of this group were consistent with the distinctions noted by Alderfer (1987), Pfeffer (1983), and Schneider (1987). When dynamics of intergroup conflict came into play, the forces that create identity groups were the strongest. The similar demographic and personality variables—the extraorganizational variables—drive the foremen (who had risen from the ranks) to "come home." In a situation perceived by them as conflictual, this tendency was stronger than was the wish to be a manager.

This analysis has important implications for the whole issue of changes in organizational culture. Schein's (1990) model provides an economical and efficient conceptual framework for analyzing organizational culture. However, the present case demonstrates the need to see these concepts as much more dynamic and complex. In fact, Schein, in describing the development of organizational cultures, also sees this development in terms of group dynamics and learning theory. According to him,

Organizational culture is the pattern of basic assumptions which a given group has invented, discovered, or developed in learning to cope with its problems of external adaptation and internal integration, which have worked well enough to be considered valid and therefore to be taught to new members as the correct way to perceive, think, and feel in relation to those problems. (quoted in Alderfer, 1987, p. 213)

This argument means that an organization in which there are distinct groups with different basic assumptions (developed through different learning in the adaptation...
process) will have several cultures. The organization can contain these differences if it has a sufficiently broad range of agreement or, in other words, is capable of including contradictions and of conducting constant negotiations, without being paralyzed by conflicts (O'Reilly, Caldwell, & Barnett, 1989; Ting-Toomey, 1993). The case presented here clearly illustrates that it is possible to achieve and maintain "calm interaction" between different groups in an organization when it does not include a large number of identity groups. Interaction with an organizational group that is less involved and less "passionate" as a group permits the degree of inclusion required to conduct negotiations as an ongoing process. However, in situations where some fine equilibrium is disturbed, the primary instincts of the identity group go into action. This happens, as this case study demonstrates, when group identity begins to be threatened.

In this situation, organizational culture is no longer a monolithic concept. When workers feel threatened in the most basic sense, it is only natural that their group culture will be stronger than anything else. Hence the symptoms we found after the intervention—tension, bitterness, suspicion, and unwillingness to cooperate. To put it simply, the intervention provoked the workers to the most instinctive level of response—battle for their survival as a group.

This view of the case leads us to conclude that generating change in an organizational culture is a very complex matter. To accomplish such change, many hidden aspects need to be revealed before starting the intervention.

It seems that our initial analysis had failed to understand the dynamics between the management culture and the workers' culture. We had thought that the foremen also wanted the new evaluation system, which would have been beneficial to all the "positive elements" at the Center. We had assumed that the hesitance in initial responses simply reflected natural tension and suspicion between the management culture, with its values of "achievement" and "individualism," and the workers' culture, whose values centered around "security," "family," "tradition," and so forth.

As consultant, I thought this was just a question of natural fears and resistance to change by those who represent the old tradition. If so, it was just a matter of time and confidence building, persuading participants that the change under way is for the good of the organization and most of its members. I saw the workers' attitude as "outdated," as one that is becoming obsolete in progressive organizations. This approach of mine came from my experience with high-tech firms and my involvement in projects such as introducing total quality management (TQM) into organizations. In those cases, there is a deliberate attempt to blur the differences between management and workers and to emphasize common interests and the need to learn together. Shared learning mechanisms are established for management and workers in the form of frameworks such as interhierarchical think tanks. There is considerable democratization of the organizational systems, and workers are treated as a human resource (not just manpower). The whole spirit of this approach, both in the literature (e.g., Kim, 1993; Senge, 1990; Toffler, 1990) and in other organizations where I have worked brought me to the view (perhaps naive) that tension and conflicts between an "oppressive management" and "oppressed workers" were an anachronistic assumption, and the time had come to see things differently and to attempt to decrease the gaps between workers and management. I did not think for one moment that the intervention that so appealed to
us with its inner logic and its contribution to the "good guys" would in the end be perceived as an almost classical war of cultures—a war that might be described in current terms as a war between yuppies and downtrodden workers, between a group of selfish, cold, instrumental, rootless bosses and a group of people with strong emotional bonds in their collective and their tradition.

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CONCLUSION

This case analysis taught me a number of lessons on the conceptual level and on the level of implementation.

On the conceptual level, I realized that the most important factor in understanding the culture of an organization is the dynamics of the identity groups that exist in it. They are what really determine the organization's basic assumptions.

From my point of view, this underscores the need for accurate diagnosis. In my previous diagnoses I tended to attribute great weight to management's part in creating the organizational culture, and I devoted much thought to understanding management's influence on the workers' theory in practice (Argyris & Schön, 1978). (Schein's description of the development of organizational cultures also attaches central importance to the founders and leaders of the organization.) The present case suggests that extraorganizational demographic and psychological variables may be of major importance in forming the cultures of groups in an organization. This is not a new or surprising idea. However, it has more important implications than I first thought, with regard both to evaluating the impact of these factors and to the possibility of several cultures coexisting within the same organization. This latter point has recently been much discussed in the literature (see, e.g., Larkey, 1996).

Furthermore, this case study shows the importance of the "ethnocentric argument" (Levine & Campbell, 1972; Sumner, 1906). In Sumner's words, "'Ethnocentrism' is . . . (a) view of things in which one's own group is the center of everything, and all others are scaled and rated with reference to it. . . . Each group nourishes its own pride and vanity, boasts itself superior, exalts its own divinities, and looks with contempt on outsiders" (p. 13).

Definite lessons on the level of implementation derive, of course, from these conceptual understandings. I can phrase these lessons in terms of "What would I do today?"

The main change in my professional approach would be expressed in all the steps I would take before commencing the intervention. I stress this point because, as I will describe below, these steps may lead to a decision not to undertake the intervention.

First, my sharpened awareness of the factors discussed here (ethnocentrism, identity groups, organizational groups, intergroup relations, attraction, demographic variables, etc.) would render me more skeptical with regard to my ability as a consultant to understand in depth the real dynamics involved. Therefore, my diagnostic approach would be much more modest and cautious and certainly would not be based solely on my own evaluations and those of management. I would use more observers and a variety of research methods, including researchers engaged in participant observation.
with the workers, I would form heterogeneous teams (including some workers) to
discuss and interpret the data and would place the different interpretations in confron-
tation until I identified a core on which there was broad agreement. Only then would
I examine the plans and the implications of the intervention, and even then I would
leave a margin for the possibility of error arising out of the ethnocentrism of the
intervention team. To put this to the test I would conduct a pilot in one of the workshops
to check the applicability of the project to the whole Center. Indeed, since my
experience with this case, the use of pilot projects has become a sine qua non in my
interventions. I have found that the pilot always reveals things that were not anticipated,
even by the most astute and experienced planners who were firmly convinced that they
had envisaged every possible scenario.

In conclusion, after it became clear that there was a huge gap between the workers’
feelings and the tremendous success of the evaluation system in every professional
forum where it was presented (because of its technical achievements in differentiation
and advanced computer and statistical work), the inevitable question was, “What
now?” This is not an easy question to answer. The contrast between the feeling of
success at the beginning and the admission of failure at the end was almost unbearable.
In addition, this contrast could severely damage the professional image of the team of
consultants and of the management, headed by the commander of the Center. The
potential damage was especially severe in view of the interests of these groups, as
described earlier. The solution finally suggested was to sever the link between the new
evaluation system and financial rewards. The new system became solely a tool for
feedback. In this way the emotional threat to the workers was removed, and the
evaluation system was still used for learning and development. The culture of the
division group had won. Perhaps this, after all, is the most important unit for analysis
of organizational culture. It may be that there is an ethnocentric bias on the part of
writers of research papers, leading them to overemphasize the role of management in
forming the organizational culture.

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have not always been clear that my ultimate client was the same person, or his or her boss, or a specific organizational unit such as the top management group, or the total system. It seems to me that other OD consultants are likewise somewhat perplexed about the identity of the ultimate client. As I read works about living systems and reflect on OD practice, I conclude that my ultimate client is that behavior in organizations represented by interactions, by relationships and interface. These interactions represent the basic reality of organizational life and therefore my consultation should concentrate on them. Furthermore, I should pay special attention to nonroutine events of organizational life, since these occurrences generate energy among members to return the system to a steady state, to achieve homeostasis and equilibrium. It is this use of energy and its direction that will tell me more about how the organization really operates than the energy that the members of the organization expend to maintain normal, daily operations. Just as Kurt Lewin observed that the best way to diagnose an organization is to attempt to change it, we may also state that it is easier to understand an organization when it is disturbed by atypical events than when it is operating as usual.

It is not my contention that one should entirely ignore everyday routine, the organizational structure with its boxes and lines, individuals, work units, the president and the board of direction. It is more a matter of emphasis for me to focus especially on the in-between. I also believe that relationships and interactions in organizations will grow even more important in the future because of the changing nature of authority. Inforstronomy becomes more a function of expertise and knowledge rather than position, and of the increasing degrees of complexity in managing organizations. It is virtually impossible for a single individual to know a considerable amount, much less everything, about running an organization or even a part of it. This is especially true of high technology organizations, public or private. Thus, mutual dependency is more the rule than the exception. 

Because OD practitioners are knowledgeable about interpersonal process and are skilled in dealing with relationships, there will be plenty of opportunity for constructive work, changing cultures and applying OD in new ways. We simply must become clearer about the true subject (in my term, client) of that.

### 6

#### Understanding Organizations: The Process of Diagnosis

Without a framework for understanding, the data an OD practitioner collects about a client organization may remain nothing more than an array of personal comments of the who-said-what-about-whom variety. For the information to become useful, it must be treated in organizational terms. Since OD represents a systematic approach to change, and the data for diagnosis are largely in systems language, the categories for diagnosis are systems labels. This chapter covers selected models of and theories about organizations that are useful in the diagnostic phase of OD consultation because they help to organize and systematize the potentially confusing masses of data. Among the models and theories from which the OD practitioner may choose, some are merely descriptive while others emphasize dimensions for diagnosis, thereby providing direction for change. The purpose of this chapter is to provide the practitioner with some criteria and bases for making choices.

The models and theories I have chosen to consider in this chapter are all behavior-oriented. Although some other frameworks emphasize technological, financial, or informational aspects of organizations, behavior-oriented models are more valuable for OD practice because the role of the OD practitioner is to understand what people do or do not do in organizations. Word processing and office technology, for example, are of interest to OD practitioners, but only in terms of the changes people will have to make, not for the electronic wizardry involved (Gould and Williams, 1976).
The various models we shall explore are all based on the open-system notion of input-throughput-output, and all recognize that an organization exists in an environment context, and is a socio-technical system. All recognize the same fundamentals—an open system that exists in an environment and consists of people and technology.

We shall first examine four models that are largely descriptive: a model of simplicity with structure, two models of complexity with structure, and a developing your own model.

Organizational Models

Weisbord’s Six-Box Model

A model is useful when it helps us visualize reality, and Weisbord’s (1970, 1976) model meets this criterion very well. Weisbord depicts his model as a radar screen, with “blips” that tell us about organizational highlights and issues good and bad. Just as air traffic controllers use their radar, we too must focus primarily on the screen as a whole, not on individual blips (see Fig. 6.1).

Every organization is situated within an environment and, as the arrows in the figure indicate, is influenced by and influences various elements of that environment. In Weisbord’s model, the organization is represented by six boxes: purpose, structure, rewards, help mechanisms, relationships, and leadership. Weisbord believes that, for each box, the client organization should be diagnosed in terms of both its formal and its informal systems. A key aspect of any organizational diagnosis is the gap between the formal dimensions of an organization, such as the organization chart (the structure box), and its informal policies, such as how authority is actually exercised. The larger this gap is, the more likely it is that the organization is functioning ineffectively.

Weisbord provides key diagnostic questions for each of the six boxes. For the purpose box, the two most important factors are goal clarity, the extent to which organization members are clear about the organization’s mission and purpose, and goal agreements, people’s support of the organization’s purpose. For structure, the primary question is whether there is an adequate fit between the purpose and the internal structure that is supposed to serve that purpose. With respect to relationships, Weisbord contends that three types are most important: between individuals, between units or departments that perform different tasks, and between the people and the nature and requirements of their jobs. He also states that the OD consultant should “diagnose first for required interdependence, then for quality of relations, and finally for model of conflict management” (Weisbord, 1976, 440).

Figure 6.1
Weisbord’s Six-Box Organizational Model

In proceeding with the reward box, the consultant should diagnose the similarities and differences between the organization's formal rewards (the compensation package, incentive systems, and the like) and organization members' perceived rewards or punishments.

Weisbord makes the leadership box central because he believes that a primary job of the leader is to watch for signs of stress among the other boxes and to maintain balance among them. To help the OD consultant in diagnosing the leadership box, Weisbord refers to an important book published some years ago by Seabre cav (1968), citing the four most important leadership tasks. According to Seabre cav, the consultant should determine the extent to which organizations' leaders (1) defining purposes, (2) embodying purposes in programs, (3) maintaining the organization's integrity, and (4) controlling order with respect to internal conflict.

For the last box, helpful mechanisms, Weisbord refers analogously to the concept that binds an organization together to make it more than a collection of individuals with separate needs (Weisbord, 1976: 443). Thus, helpful mechanisms are the processes that every organization must attend to in order to survive: planning, control, budgeting, and other information systems that help organization members accomplish their respective jobs and meet organizational objectives. The OD consultant's task is to determine which mechanisms (or which aspects of them) help members accomplish organizational purposes and which seem to hinder more than they help. When a helpful mechanism becomes red tape, it probably is no longer helpful.

Table 9.1 gives a summary of the six-box model and the diagnostic questions to be asked.

In summary, Weisbord's model is particularly useful when the consultant does not have as much time as would be desirable for diagnosis, when a relatively uncomplicated organizational map is needed for quick service, or when the client is accustomed to thinking in systems terms. In the latter case, the model helps the client to visualize his or her organization as a systemic whole without the use of strange terminology. I have also found Weisbord's model useful in supervising and guiding students in their initial OD consultations.
The Nadler-Tushman Congruence Model

For a more sophisticated client and when more time is available, a more complex model of organizations might be useful (e.g., the Tushman model). In such instances, the Nadler and Tushman (1977) congruence model might serve the purpose.

Nadler and Tushman make the same assumptions as Weisbrod—that an organization is an open system and therefore is influenced by its environment (inputs) and also shapes its environment to some extent by outputs. An organization thus is in the transformation entity between inputs and outputs. Figure 6.2 represents the Nadler-Tushman congruence model.

**Inputs.** Nadler and Tushman view inputs to the system as relatively fixed; the four they cite are the environment, the resources available to the organization, the organization's history, and strategies that are developed and evolve over time. These inputs help define how people in the organization behave, and they serve as constraints on behavior as well as opportunities for action.

As we know from the works of Burns and Stalker (1961) and Lawrence and Lorsch (1967), the extent to which an organization's environment is relatively stable or dynamic significantly affects internal operations, structure, and policy. For many organizations a very important aspect of environment is the parent system and its directives. For many organizations nonsubsidary, or divisional profit centers of larger corporations, colleges within a university, or hospitals within a larger health care delivery system. These subordinate organizations may operate relatively autonomously with respect to the outside world (having their own purchasing operations, for example) but because of corporate policy may be fairly restricted in how much money they can spend. Thus, for many organizations we must think of their environments in at least two categories: the larger parent system and the rest of the outside world—government regulations, competitors, and the marketplace in general.

According to the Nadler-Tushman model, resources include capital, money, property, equipment, and so on, raw materials, technology, people, and various intangibles, such as company name, which may have a high value to the company's market.

An organization's history is also input to the system. The history determines, for example, patterns of employee behavior,
policy, the types of people the organization attracts and recruits, and even how decisions get made in a crisis.

Although strategy is categorized as an input in the models, Nadler and Tushman set it apart. Strategy is the process of determining how the organization's resources are best used within the environment for optimal organizational functioning. It is the act of identifying opportunities in the environment and determining whether the organization's resources are adequate for capitalizing on these opportunities. History plays a subtle but influential role in this strategic process.

Some organizations are very strategic—that is, they plan. Other organizations simply react to changes in their environments or act opportunistically rather than according to a long-range plan that determines which opportunities will be seized and which are to be ignored. As Nadler and Tushman point out, however, organizations have strategies whether they are deliberate and formal or unintentional and informal.

Outputs. We shall move to the right-hand side of the model to consider outputs before covering the transformation process. Thus we shall examine the organization's environment from the standpoint of how it influences the system and how the organization operates internally.

For diagnostic purposes, Nadler and Tushman present four key categories of outputs: system functioning, group behavior, intergroup relations, and individual behavior and effectiveness. With respect to the effectiveness of the system functioning as a whole, the following three questions should elicit the necessary information:

1. How well is the organization attaining its desired goal of production, service, return on investment, and so on?
2. How well is the organization utilizing its resources?
3. How well is the organization coping with changes in its environment over time?

The remaining three outputs are more directly behavioral: how well groups or units within the organization are performing, how effectively these units communicate with one another, resolve differences, and collaborate when necessary, and how

Individuals behave. For this last output, individual behavior, we are interested in such matters as turnover, absenteeism, and, of course, individual job performance.

The Transformation Process. The components of the transformation process and their interactions are what we normally think of when we consider an organization—the people, the various tasks and jobs, the organization's managerial structure (the organization chart), and all the relationships of individuals, groups, and subsystems. As Fig. 6.2 shows, four interactive major components compose the transformation process that changes inputs into outputs.

The task component consists of the jobs to be done and the inherent characteristics of the work itself. The primary task dimensions are the extent and nature of the required interdependence between and among task performers, the level of skill needed, and the kinds of information required to perform the tasks adequately.

The individual component consists of all the differences and similarities among employees, particularly demographic data, skills and professional levels, and personality-attitudinal variables.

Organizational arrangements include the managerial and operational structure of the organization, work flow and design, the reward system, management information systems, and the like. These arrangements are the formal mechanisms used by management to direct and control behavior and to organize and accomplish the work to be done.

The fourth component, informal organization, is the social structure within the organization, including the grapevine, the organization's implicit politics, and the informal authority-information structure (whom you see for what).

Conformity: The Concept of Fit. As nadler and Tushman point out, a mere listing and description of these system inputs, outputs, and components is insufficient for modeling an organization. An organization is dynamic, never static, and the model must represent this reality, as the arrow in Fig. 6.2 do. Nadler and Tushman go beyond depicting relationships, however. Their term, fit, is a measure of the congruence between pairs of inputs and especially between the components of the transformation process. They contend that inconsistent fits
between any pair will result in less than optimal organizational and individual performance. Nadler and Tushman’s hypothesis, therefore, is that the better the fit, the more effective the organization will be.

Nadler and Tushman recommend three steps for diagnosis:

1. Identify the system. Is the system for diagnosis an autonomous organization, a subsidiary, a division, or a part of some larger system? What are the boundaries of the system, its membership, its tasks, and—if it is part of a larger organization—its relationships with other units?

2. Determine the nature of the key variables. What are the dimensions of the inputs and components? What are the desired outputs?

3. Diagnose the state of fits. This is the most important step, involving two related activities: determining fits between components and diagnosing the link between the fits and the organization’s outputs.

The OD consultant must concentrate on the degree to which the key components are congruent with one another.

Questions such as the following should be asked:

- To what extent do the organizational arrangements fit with the requirements of the task?
- To what extent do individual skills and needs fit with task requirements, with organizational arrangements, and with the informal organization? Hackman and Oldham’s (1976) job characteristics theory is a useful supplementary model for this part of the diagnosis, as is expectancy theory (Vroom, 1964; Lawler, 1973).
- To what extent do task requirements fit with both the formal and the informal organization? Information-processing models are useful supplements for this aspect of the diagnosis (Kolbrough, 1977; Tushman and Nadler, 1978).

To diagnose the link between fits and outputs, the OD consultant must focus on the outcomes of the diagnoses of the various component fits and their behavioral consequences on the set of behaviors associated with systems outputs: goal attainment, resource utilization, and overall system performance.

Considering the component fits, at each level, in light of system outputs helps identify critical problems of the organization. As these problems are addressed and changes are made, the system is then monitored through the feedback loop for purposes of evaluation.

In summary, the dimensions of the Nadler-Tushman model are quite comprehensive and have face validity. However, their notion of congruence suggests certain cause-effect linkages. For example, little or no congruence between, say, strategy and structure in their model produces poor organizational performance. Also, a mismatch between what’s going on in the organization’s environment and strategy—for example, no plan for dealing with a recent change in government regulation—would imply a causal relationship to performance. Many other congruences or lacks thereof could be mentioned. The number of possibilities is large. Nadler and Tushman, however, do not provide ideas or, say, a formula for determining which variables in their model are central. For example, they include under a single heading, organizational arrangements, quite a number of components, any one of which could easily be central. And, finally, they do not suggest any means for knowing when congruence has occurred or what levels of congruence or incongruence produce desirable or undesirable effects.

To be fair, more recently Nadler and Tushman (1980) have had some second thoughts about their congruence position.

While our model implies that congruence of organizational components is a desirable state, it is, in fact, a double-edged sword. In the short term, congruence seems to be related to effectiveness and performance. A system with high congruence, however, can be resistant to change. It develops ways of insulating itself from outside influences and may be unable to respond to new situations (p. 195).

**Tichy’s TPC Framework**

With his organizational framework, Tichy (1983) focuses explicitly on the management of change. He states that there are nine organizational change levers. They are the (1) external interface, (2) the organization’s external environment, (3) mission, (4) strategy, (5) managing organizational implementation strategy in respect to that, (6) realistically engaging the relevant interest groups, (7) task—
change often requires new tasks; (4) prescribed networks—more or less, the formal organizational structure; (5) organizational processes—communicating, problem solving, and decision making; (6) people; and (7) emergent networks—more or less, the informal organization. Figure 6.3 shows how Tichy arranges these nine layers. He assumes that "organizational effectiveness (or output) is a function of the component of the model, as well as a function of how the components interact and align into a functioning system" (p. 72).

Even more important in Tichy's thinking about organization change is his TPC framework. The model in Fig. 6.3 is not unique. What makes Tichy's thinking unique is his overlay of the three systems—technical, political, and cultural—across the nine-layer model. He contends that there have been three dominant yet fairly distinct traditions guiding the practice of organization change. The technical view is rational, based on empiricism and the scientific method. The political view is based on the belief that organizations have dominant groups, and bargaining is the primary mode of change. The cultural view is the belief that shared symbols, values, and "cognitive schemes," as Tichy labels them, are what tie people together and form the organization's culture. Change occurs by altering norms and the cognitive schemes of organizational members. Taking only one or only two of these views for managing organizational change is dysfunctional. All three must be adjusted and realigned for successful change. The metaphor that Tichy uses to capture this thinking is a rope with three interrelated strands. The strands, or three views, can be understood separately but must be managed together for effective change.

For diagnostic purposes, Tichy uses a matrix like the one shown in Fig. 6.4. This format quantifies what he calls "the analysis of alignments." Tichy describes the use of the matrix this way:

Based on the diagnostic data collected, a judgment is made for each cell of the matrix regarding the amount of change needed to create alignment. Working across the matrix, the alignment is within a system: technical, political, or cultural. Working down the matrix, the alignment is between systems. The 0 (no change), 1 (moderate change), or 2 (great deal of change) ratings represent the amount of change needed to align that component (p. 104).

In summary, Tichy's model includes many if not most of the critical variables important to understanding organizations. His model is unique with respect to the strategic rope metaphor and is particularly relevant to OD work, since the emphasis is on change. Moreover, Tichy is clear about what he considers to
be the primary organizational lever that must be pushed or pulled to make change happen effectively. Instead of congruence, alignment is the operational term. And Tichy provides a way of analyzing the key alignments that are necessary according to his framework. These are first collected and then categorized within his matrix (Fig. 6.4).

There is a human component in Tichy's model, but for the most part his framework ignores issues at the individual level. He admits this omission at the end of his book by stating that he skimmed over the psychological aspects of change. The political and cultural contexts are, of course, people concerned about the broader (than, say, job-person match or alignment) and local work unit activities such as teamwork. Finally, the criticism of too much congruence potentially working against change could also apply to Tichy's insistence on alignments.

Hornstein and Tichy's Emergent Pragmatic Model

Hornstein and Tichy's Emergent Pragmatic Model

1977) is based on the premise that most managers and consultants "carry around in their heads" implicit theories or models about organizational behavior and about how human systems actually operate. These notions are usually intuitive, ill-formed, and difficult to articulate. Because they are largely intuitive, different observers and members of organizations have different theories, which gives rise to conflicts among consultants and clients about what is really wrong with the organization and how to fix it.

Hornstein and Tichy have developed a procedure for helping managers articulate and conceptualize their implicit models. The procedure has managers represent the information they would seek in diagnosing an organization by selecting labels from among twenty-two samples or creating their own from twenty-eight blank labels provided. The labels include such items as informal groupings, formal characteristics, turnover, goals, and satisfaction of members with their jobs.

Hornstein and Tichy's approach to organizational diagnosis is shared between consultant and client and among members of the client organization. The approach is called an emergent pragmatic theory because "the model emerges from an exploration of both the consultant's and client's assumptions about behavior and organizations...and draws on both the consultant's and client's organizational experiences as well as on empirical and theoretical work in the field" (Tichy, Hornstein, and Nielson, 1977: 307, emphasis added).

Another of Hornstein and Tichy's premises is that, consciously or not, organizational consultants tend to impose their theories and models of human systems on their clients. These impositions often do not fit with the client members' perceptions and beliefs or do not jibe with the client organization's underlying values. To improve congruence, Hornstein and Tichy advocate a highly collaborative approach between consultants and clients, one that results in an emergent model representing different perspectives and experiences.

There are five phases in the emergent pragmatic approach, the consultant guides the client group through these phases:

1. Exploring and developing a diagnostic model
2. Developing change strategies
3. Developing change techniques
4. Assessing the necessary conditions for assuring success.

5. Evaluating the change strategies.

To summarize, the emergent-pragmatic approach to organizational diagnosis is based on the assumption that most managers and consultants have intuitive theories about how organizations function, rather than well-formed conceptual frameworks, and the assumption that many consultants impose their models and theories on client organizations, regardless of how appropriate they may be for the particular client. House and Tichy advocate a collaborative model of diagnosis to avoid the potential negative consequences of operating on the basis of these two assumptions.

The three models described earlier—Weber's six-box model, the Nadler-Tushman congruence model, and Tichy's TPC framework—are generic frameworks and do not fall prey to the problems of House and Tichy's two premises. When the consultant and the client do not find the Weber, Nadler-Tushman, or other formal models to their liking, however, the emergent-pragmatic approach offers a clear alternative. It is a do-it-yourself model and, if both consultant and client are willing to spend the time required to do it right, a mutually satisfying and appropriate model for the client organization is likely to result.

The four models described may all be categorized as contingency models. They do not specify directions for change prior to diagnosis; rather, what needs to be changed emanates from the diagnosis. None of the models advocates a particular design for an organization's internal structure, a certain style of behavior, or a specific approach to management. The inventors of these models have biases, however. Weber's model is balanced, Nadler and Tushman argue that the various dimensions of their model should fit with one another, and so does Tichy, and House and Tichy state that the consultant and client should collaborate toward the emergence of a model that is consistent with the organization's overall needs.

These biases have more to do with the best way to diagnose than with the most important dimension to change. We now shift from organizational frameworks to more theoretical ways of describing, understanding, and changing organizations.
3. Regarding interpersonal relationships, how important are they, and how much interaction is necessary?
4. Regarding goal certainty, how clear-cut are the goals? How are they measured?

Integration
1. How interdependent are any two units: high (each depends on the other for survival), medium (each needs some things from the other), or low (each function fairly autonomously)?
2. What is the quality of relations between units?

Conflict Management
1. What mode of conflict resolution is used: forcing (top-down), smoothing (letting kind and avoiding), or confronting (exposing differences and solving problems)?
2. How much influence do employees have on the hierarchy for solving problems and making decisions?

Employee-Management Contract
1. To what extent do employees feel what is expected of them is appropriate?
2. To what extent do employees feel that they are compensated and rewarded fairly for their performance?

Summary. These five dimensions represent the organizational domains that Lawrence and Lorsch believe are most important for effective diagnosis. Based on their research findings, the organizational diagnosis would be looking for the degree of match between environmental demands and complexities and the internal organizational structure. The greater the environmental complexity, the more complex the internal design should be. If the organization's markets change rapidly and are difficult to predict and forecast, and if the environment in general fluctuates considerably, the organization's internal structure should be relatively decentralized so that many employees can be in touch with the environment and can act quickly as changes occur. Under these conditions, differentiation may still be high, but a premium is placed on integration. There must be sufficient integrating mechanisms so that communication flows adequately across and among the many subunits and so that superiors in the hierarchy are kept well informed. The plastics industry represented this type of organization in the Lawrence and Lorsch research study. When the environment is relatively stable and not particularly complex (the container industry in their study), a fairly simple and straightforward internal structure may be best, with functional division of labor and centralized authority.

The issue is not whether one organization should be highly differentiated and another highly integrated but that they should be highly differentiated and integrated. High integration seems to be important regardless of environment, and differentiation may be lower for organizations with stable environments. The paradox remains in any case: Both are needed, but they are antagonistic—the more the organization is differentiated, the more integration is required.

The organizational diagnosis should also seek the mode of conflict resolution. Lawrence and Lorsch found that the more organization members and units confront their differences and work to resolve them, rather than smoothing them over or squashing them with edicts from on high, the more effective the organization tended to be.

Finally, it is necessary to key the degree of employees' satisfaction with their psychological contract with the organization. There is apparently a positive relationship between clarity of employees' understanding of what is expected of them—their perceived satisfaction with the rewards they receive for performance—and overall organizational performance.

Although Lawrence and Lorsch are contingency theorists, particularly with respect to organization structure, they too have their biases. They stress interfaces—between the organization and its environment, between and among units within the organization, and between individual employees and the organization as represented by management.
Normative Theories

Unlike contingency theorists, normative theorists argue that, for organization development, there is one best way to frame direction for change. Major proponents of normative theory are Likert (1967) and Blake and Mouton (1968, 1974).

Likert's Profiles

Likert categorizes organizations or systems in his terms, as one of four types:

- System 1: Autocratic, top-down, exploitative management
- System 2: Benevolent autocracy (still top-down but not as exploitative)
- System 3: Consultative (employees are consulted about problems and decisions, but management still makes the final decisions)
- System 4: Participative management (key policy decisions are made in groups by consensus)

Likert's approach to organizational diagnosis is standardized. The mode used is a questionnaire, the "Profile of Organizational Characteristics," with six sections: leadership, motivation, communication, decision, goals, and control. The latest version in labeled the "Survey of Organizations." Organization members answer questions in each of these sections by placing the letter N at the place on a twenty-point scale that best represents their opinion now and P at the place that indicates their previous opinion - how they experienced the organization one or two years ago. Sometimes the consultant asks organization members to use an N instead of a P, to indicate what they would consider ideal for each of the questions.

Organizational profiles typically fall into the System 2 or System 3 categories. If the ideal response is used, its profile will usually occur to the right of the new profile, toward or within System 4. In such cases, the direction for change is established toward System 4.

When one declares that there is one best way, in this case System 4 management, others usually demand evidence. Is System 4 management a better way to run an organization than System 3 or 2 or 1? Contingency theorists, of course, would say no; it depends on the type of business, the nature of the environment, and the technology involved. Likert contends that, regardless of these contingencies, System 4 is best. Likert's (1967) own research supports his claim, and so does research by others. A longitudinal study of perhaps the most systematic change to System 4 management - conducted in a Harwood-Weiden Company, a manufacturer of sleepwear - is a noteworthy example (Marrow, Bowers, and Seashore, 1967). Changes were made in all dimensions of Likert's profile as well as in work flow and organizational structure. The durability of these changes was supported by a later study conducted by Seashore and Bowers (1970).

A System 4 approach was also used as the change goal for a General Motors assembly plant (Dowling, 1975). As a result of this deliberate change effort toward System 4, significant improvements were accomplished on several indices, including operating efficiency, cost, and grievances.

In summary, Likert's approach to organizational diagnosis is structured and directional. It is structured by use of his questionnaire and later versions of his profile (Taylor and Bowers, 1972), and it is directional in that data that are collected are compared with System 4. The survey feedback method (see Chapter 3 and Mann, 1957) is used as the main intervention; that is, the data from the questionnaire (survey) are reported back to organizational members in a set manner.

In order to use Likert's approach, the consultant should feel comfortable with the questionnaire method as the primary mode for data gathering and with System 4 management as the goal for change. Although participative management may feel comfortable as a change goal for many consultants and clients, the relatively limited diagnosis by profile characteristics only may not be so comfortable.

Blake and Mouton's Grid Organization Development

The other normative approach to OD is based on the managerial grid model developed by Blake and Mouton (1964, 1978). Like Likert's System 4 approach, the grid method of OD is structured and involves a high degree of packaging. Blake and Mouton also argue that there is one best way to manage an organization. Their label is 9,9, which also represents a participative style of management.
Understanding production and people. They did more, however, the creative aspect of their work was to conceptualize each of the two leader functions on a continuum, one for the manager's degree of concern for production and one for his or her concern for people, and to put the two together in the form of a graph, a two-dimensional model.

Blake and Mouton (1964) point out that they have done more than merely simplify the language and create nine-point scales. They argue that the original dimensions—initiation of structure and consideration—and those that followed, especially Hersey and Blanchard's situational leadership model, were conceptualized as independent dimensions. Blake and Mouton's dimensions—production and people—are interdependent, however, and represent attitudes more than behavior. They note that leadership is not possible without both task and people. We shall now consider Blake and Mouton's model in more detail.

Any manager will have some degree of concern for accomplishing the organization's purpose of producing products or services—that is, a concern for production, results, or profits. A manager will also have some degree of concern for the people who are involved in helping to accomplish the organization's purpose. Managers may differ in how concerned they are with each of these managerial functions, but how these two concerns mesh for a given manager determines his or her style of approach to management and defines that manager's use of power.

Blake and Mouton chose nine-point scales to depict their model and to rank the manager's degree of concern for production and people; 1 represents a low concern and 9 indicates a high concern. Although there are eighty-one possible combinations, Blake and Mouton realistically chose to consider only the four more or less extreme positions, represented in the four corners of the grid, and the middle of the grid, position 5.5 in the middle of the grid. Figure 6.5 illustrates the managerial grid and defines each of the five primary styles.

Building on earlier research work on leadership, in which the dual functions of a leader were variably labeled as initiation of structure and consideration, task and maintenance, and task and interpersonal behaviors, Blake and Mouton (1964) simplified the language by using terms closer to managers'
will do the job. At Phase 6 we will see how effectively the first five phases have progressed and we will know, in particular and in detail, what barriers must now be tackled.

Blake and Mouton never state it, but they apparently assume that, unless an organization learns how to communicate more effectively (practice 9.9 management) and plan more logically and systematically (build an ideal strategic model and begin to implement it), its management will never be able to deal optimally with the specifics of running a business. Phase 6 in the grid (9.9) sequence gets to the specifics.

Levinson's Clinical-Historical Approach

Levinson's theory of organization behavior is grounded in psychoanalytic theory and views organizations in familial dimensions. "An organization is composed of persons in authority and 'siblings' who relate to these authorities" (Levinson, 1972a: 26). Because it is so closely aligned with psychiatric theory, it is not surprising that Levinson's approach to organizational diagnosis (1972a) is very detailed, emphasizes history, and generally relies on clinical methods. Using this approach, the consultant does a walk-through on a client organization much as a physician would do with a patient and obtains as complete a history as possible, especially in terms of how the organization fits into its environment. In the search of information, Levinson suggests:

"Most newspapers have archives, or files of clippings, filed by subject. Historical societies often have much information on file. Large organizations will frequently be the subject of articles in trade or professional magazines which may be located through libraries. The sheer availability of various kinds of information is a datum of diagnostic value." (p. 26)

Just as physicians "take a history," order a blood test, and listen to the patient's body here and there, Levinson also stresses observation. He notes: "Since the consultant is his own most important instrument, he should begin by using his antennae for sensing subtleties" (p. 18). Levinson suggests that the consultant require a tour of as much of the organization as time and practicalities permit in order to form and record initial impressions. "The consultant will find it helpful to keep a diary of his experiences in the company, to record events and observations which will not otherwise be reported in interviews or questionnaires" (p. 19).

Levinson (1972a) relies on six categories of data for diagnosis:

1. Consultant observations and feelings. Notes on how the consultant experiences the organization, especially initial impressions, are recorded and become a set of information for later diagnosis.

2. Factual data. Recorded policies and procedures, historical data on file in the organization, annual reports, job descriptions, personnel statistics, and former consultant or task force reports are pursued. Collecting this information is not enough, according to Levinson; analyzing how the data interrelate is important, as is the type of language used. The language will convey attitudes toward people and assumptions about what motivates employees.

3. Outside information. Information is collected, primarily through interviews, from the organization's suppliers and competitors, cooperating organizations, agents, professional associations, and the like. This information will help the consultant understand the organization's environment in general and the impact it has on the client.

4. Pattern of organization. The organization client and the authority-responsibility structure of the organization are the primary indicators of patterns of organization. Levinson stresses a holistic approach rather than a view of the interaction of just one or two subsystems.

5. Settings. According to Levinson, "First overall organizational purposes and then how those purposes are subdivided into specific functions performed by definable groups within definable temporal and physical space... The consultant must learn where and by whom essential functions of the organization are carried out" (1972a: 28). Levinson also notes in this context what Rice (1968) has called the time dimension: "temporal boundaries within which the setting's central purpose is accomplished... such as factory shift work... or... planning activities in a management group" (Levinson, 1972a: 29).

6. Task patterns. Group-level variables exist in each setting. Levinson cites four such patterns.
Complementary activities—contributions of each work group member toward some common goal
Paralleled activities—group members performing essentially identical tasks
Sequential activities—group members performing some phase of the overall group task
Individualized activities—unique functions performed by each person

These patterns constitute a setting, and the consultant attempts to learn the setting boundaries by analyzing the task patterns.

It is important to note that, although Levinson's theoretical base is psychological and his method of diagnosis is patterned after the clinical model, he does not become absorbed in pieces of the system. His approach is systemic and holistic. Although he is biased toward a Freudian view, he does not lose himself in the analytics but rather looks for systemic issues and considers how the organization influences and is influenced by its environment, how subparts of the organization relate, and how work flows from one setting, activity, and function to another. Thus, being an organizational diagnostician of the Levinson school would require a thorough grounding in psychodynamic theory, an understanding of the clinical method of diagnosis, and a systems view of organizations that highlights patterns of relationships and work flow.

Summary

In this chapter we have considered the diagnostic phase of organization development consultation in some depth by examining certain models. These models—Weisbord's six-box model, Nadler and Tushman's congruence model, Tichy's TPC framework, Hord and Tichy's emergent, pragmatic model, Lawrence and Lorsch's contingency model, the normative models of Likert and Blake and Mouton, and Levinson's historical-clinical approach—are not the only ones available (see next chapter, for example). For OD purposes, however, they are some of the most relevant ones and they demonstrate the diversity of the field. There is considerable choice for the OD practitioner-consultant.

I do not often have the time required for using Levinson's approach, although I like his thoroughness and the systemic flow perspective. When time is short and my client is naive, Weisbord's six-box model works well. Nadler and Tushman's model is appealing because they are some of the same reasons Levinson's is, but it is easier to work with and easier to communicate to a client. Tichy's framework is fairly easy to understand, yet somewhat complex to use. Hord and Tichy's approach is very useful for clients who are concerned that a consultant might impose something on them, and it is useful for setting the stage for in-depth diagnosis. Lawrence and Lorsch's contingency model is currently the most popular among OD practitioners. Its emphasis on organizational structures and with good reason. It emphasizes organizational structures, which were overlooked by OD people in the early days, and shows how the organization's environment has an internal impact. Likert's and Blake and Mouton's theories are appealing because they clearly show the way, but if their approaches are chosen, they must be followed completely; partial application will not work. Their high degree of structure and their normative view turn away some OD practitioners. Under certain circumstances, however, I have found both to be useful. Likert's questionnaire profile for providing an outside, more objective questionnaire assessment of an organization, and Blake and Mouton's grid for providing a framework for examining managerial style in the organization.

An OD practitioner's choice from among these models is difficult, as discussed previously. First, it is difficult to use a model effectively if one does not understand it; second, the practitioner should feel comfortable with the model and its approach. If one does not really believe in participative management, using Likert's or Blake and Mouton's approach is not likely to be successful, for example.

As the following chapter shows, I have my own model. As the chapter also shows, my colleague George Lavin and I have tried to learn from many of the models and theories that have preceded ours.
The Burke-Litwin Model of Organizational Performance and Change

In presenting this causal model (therefore a normative view, Burke and Litwin, 1992) I am attempting to provide yet another perspective, and at the same time demonstrate that this more recent framework captures some of the best qualities of previous models. As does Tichy in the TPC framework, this model takes certain positions about organization change and thus predicts behavior and performance consequences and therefore deals with cause organizational conditions) and effect (resultant performance).

Important background regarding the development of the model (the concepts of organizational climate and culture) will be presented first, followed by a description of the model. Finally, suggestions for ways to use the model as well as case examples will be provided.

Background

Climate. The original thinking underlying the model came from George Litwin and others during the 1960s. In 1967 the Harvard Business School sponsored a conference on organizational climate. Results of this conference were subsequently published in two books (Litwin and Stringer, 1968; Tichy and Litwin, 1969). The concept of organizational climate that emerged from this series of studies and papers was that of a psychological state strongly affected by organizational conditions, such as systems, structure, and managerial behavior. In their theory paper, Tichy and Litwin (1968) emphasized that there could be no universal set of dimensions or properties for organizational climate. They argued that one could describe climate along different dimensions, depending on the kind of organization being studied and the aspects of human behavior involved. They described climate as a more, synthetic, or changeable construct. Further, the kind of climate construct they described was one that the kind of climate construct they described was one that could be modified by managerial behavior relatively easily; it could be modified by managerial behavior.

This early research and theory development regarding organizational climate clearly linked psychological and organizational variables in a cause-effect model that was empirically testable. Using the model, Litwin and Stringer (1968) were able to identify and to control the motivational and performance concepts to predict and control the motivational and performance concepts to predict and control the motivational and performance concepts in their sequence of various organizational climates established in their research experiment.

Culture. The concept of organizational culture is drawn from anthropology and is used to describe the relatively enduring set of values and norms that underlie a social system. These underlying values and norms dictate a "meanings" system that allows members of a social system to attribute meaning and value to the variety of external and internal events they experience. Such underlying values and meaning systems provide a culture that is applied to generations of individuals in that social system.

The distinction between culture and climate must be very explicit because this model attempts to describe both climate and culture in terms of their interactions and other organizational variables. Thus this model builds on earlier research and theory with regard to predicting motivation and performance effects.

In addition, the variables that influence and are influenced by climate need to be distinguished from those influenced by culture. Thus there are two distinct sets of organizational variables that influence and are influenced by climate and culture.
The Burke-Litwin Model has been refined through a series of studies directed by Burke (Bernstein and Burke, 1989; Fox, 1990; Michailson et al., 1988). Recent collaboration has led to the current form of this model, which attempts

1. To specify the interrelationships of organizational variables; and
2. To distinguish transformational and transactional dynamics in organizational behavior and change.

Figure 7.1 summarizes the model.

In accordance with accepted thinking about organizations from general systems theory (Katz and Kahn, 1978), the external environment box represents the input and the individual and organization variables in both directions. The remaining boxes of the model represent the throughput aspect of general systems theory.

The model is complex, as is the richness of organizational phenomena. However, this model, exhibited two dimensionally, is still oversimplified; a hologram would be a better representation.

Arrows in both directions convey the open-systems principle that change in one factor will eventually have an impact on the others. Moreover, if the model could be diagrammed so that it could be represented more accurately. Yet this is a casual model. For example, although culture and systems affect one another, culture has a stronger influence on systems than vice versa.

Figure 7.1
The Burke-Litwin Model of Organizational Performance and Change
Source: The Burke-Litwin Model of Individual and Organizational Performance
model (see Chapter 6). However, displaying as shown makes a statement about organizational change: Organizational change stems from environmental impact rather than from any other factor. Moreover, with respect to organizational change, the variables of strategy, leadership, and culture have more "weight" than the variables of structure, management practices, and systems, that is, having leaders communicate the new strategy is not sufficient for effective change. Changing culture must be planned as well as aligned with strategy and leader behavior. How the model is displayed does not dictate where change could start, however, it does indicate the weighting of change dynamics. The reader can think of the model in terms of gravity, with the push toward performance being in the weighted order displayed in Fig. 7.1.

In summary, the model, as shown in Fig. 7.1, portrays the following:

- The primary variables that need to be considered in any attempt to predict and explain the total behavioral output of an organization
- The most important interactions among these variables
- The ways the variables affect change

**Translational and Transactional Dynamics**

The concept of translational change in organizations is suggested by such writers as Bass (1985), Burns (1978), McClelland (1975), and Tichy and Devanna (1986).

Figure 7.2 displays the translational variables (the upper half of the model) and the transactional dynamics (the lower half of the model). The two variables are very similar to those originally isolated by Lautman and Stringer (1968) and later by Mintzberg et al. (1990). They are transactional in that alteration occurs primarily in relatively short-term reciprocally among people and groups. In other words, "You do this for me and I’ll do that for you."

![Figure 7.2 The Translational Factors](image)

Each category or box in the model can be described as follows:

**External environment.** Any outside condition or situation that influences the performance of the organization. These conditions include such things as marketplaces, world financial conditions, political/governmental circumstances, and so on.

**Mission and strategy.** What employees believe is the central purpose of the organization and how the organization intends to achieve that purpose over an extended time.

**Leadership.** Executive behavior that provides direction and encourages others to take needed action. For purposes of data gathering, this box includes perceptions of executive practices and values.

**Culture.** "The way we do things around here." Culture is the collection of overt and covert rules, values, and principles that guide organizational behavior and that have been strongly influenced by history, custom, and practice.

**Structure.** The arrangement of functions and people into specific areas and levels of responsibility, decision-making
authority, and relationships. Structure assures effective implementation of the organization's mission and strategy.

**Management practices.** What managers do in the normal course of events to use the human and material resources at their disposal to carry out the organization's strategy.

**Systems.** Standardized policies and mechanisms that are designed to facilitate work. Systems primarily manifest themselves in the organization's reward systems and in control systems such as the organization's management information system, goal and budget development, and human resource allocation.

**Climate.** The collective current impressions, expectations, and feelings of the members of local work units. These in turn affect members' relations with supervisors, with one another, and with other units.

**Task requirements and individual skillabilities.** The behavior required for task effectiveness, including specific skills and knowledge required for people to accomplish the work assigned and for which they feel directly responsible. This box concerns what is often referred to as the person match.

**Individual needs and values.** The specific psychological factors that provide the desire and worth for individual actions or thoughts.

**Motivation.** Arisen behavioral tendencies to move toward goals, take needed action, and persist until satisfaction is attained. This is the net resultant motivation, that is, the resultant net energy generated by the sum of achievement, power, affection, discovery, and other important human motives.

**Individual and organizational performance.** The outcomes or results, with indicators of effort and achievement. Such indicators might include productivity, customer or client satisfaction, profit, and service quality.

**Climate Results from Transactions; Culture Change Requires Transformation**

In the causal model, day-to-day climate is a result of transactions related to issues such as:

- **Sense of direction.** The effect of mission clarity, or lack thereof, on one's daily responsibilities.
- **Role and responsibility.** The effect of structure, reinforced by managerial practice.
- **Standards and commitment.** The effect of managerial practice, reinforced by culture.
- **Fairness of rewards.** The effect of systems, reinforced by managerial practice.
- **Focus on customer versus internal pressures or standards of excellence.** The effect of culture, reinforced by other variables.

In contrast, the concept of organizational culture has to do with those underlying values and meaning systems that are difficult to manage, to alter, and even to be realized completely (Schein, 1992). Moreover, instant change in culture seems to be
n contradiction in terms. By definition, those things that can be changed quickly are not the underlying reward systems but the behaviors that are attached to the meaning systems. It is relatively easy to alter superficial human behavior; it is undoubtedly quite difficult to alter something unconscious that is hidden in symbols and mythology and that functions as the fabric helping an organization to remain together, intact, and viable. To change something so deeply embedded in organizational life does indeed require transformational experiences and events.

Using the Model: Data Gathering and Analysis

Distinguishing transformational and transactional thinking about organizations has implications for planning organizational change. Unless one is conducting an overall organizational diagnosis, preliminary interviews will result in enough information to construct a fairly targeted survey. Survey targets would be determined from the interviews and, most likely, would be focused on either transformational or transactional issues. Transformational issues call for a survey that probes mission and strategy, leadership, culture, and performance. Transactional issues need a focus on structure, systems, management practices, climate, and performance. Other transactional probes might involve motivation, including task requirements (job-person match) and individual needs and values. For example, parts or all of “The Job Diagnostic Survey” (Hackman and Oldham, 1980) might be appropriate.

An OD consultant helping to manage change would conduct preliminary interviews with, say, fifteen to thirty representative individuals in the organization. If a summary of these interviews revealed that significant organizational change was needed, additional data would be collected related to the top or transformational part of Fig. 7.1. Note that, in major organizational change, transformational variables represent the primary levels, those means in which change must be focused. The following examples represent transformational change (concentrated at the top of the model, as illustrated in Fig. 7.2).

1. An acquisition in which the acquired organization’s culture, leadership, and business strategy are dramatically different from those of the acquiring organization (even if both organizations are in the same industry).

2. A federal agency in which the mission has been modified and the structure and leadership changed significantly, yet the culture remains in the past.

3. A high-tech firm whose leadership has changed recently and is perceived negatively, whose strategy is unclear, and whose internal politics have moved from minimal (before) to predominant (after). The hue and cry here is “We have no direction from our leaders and no culture to guide our behavior in the meantime.”

For an organization in which the presenting problem is more a fine-tuning or improving process, the second layer of the model (shown in Fig. 7.3) serves as the point of concentration. Examples include changes in the organization’s structure, modification of the reward system; management development (perhaps in the form of a program that concentrates on behavioral practices); or the administration of a climate survey to measure job satisfaction, job clarity, degree of teamwork, and so on.

It is also useful to consider the model in a vertical manner. For example, Bernstein and Burke (1990) examined the causal chain of culture, management practices, and climate in a large manufacturing organization. In this case, feedback to executives showed how and to what degree cultural variables influenced management practices and, in turn, work-unit climate (the dependent variable).

The change effort at British Airways (BA) is a good example of an organization in which practically all boxes of the Burke-Litwin model were eventually examined and changed. The model provided a framework for executives and managers in BA to understand the massive change they were attempting to manage. To understand the model in use a bit more as well as to consider a significant example of large system change, let us review the change in BA.

Change at British Airways

Prior to 1987 and practically since World War II (although two organizations for most of that time period), British Airways (BA)
was a government organization, the product of a merger between British European Airways (BEA) and British Overseas Airways Corporation (BOAC) in the early 1970s. These two organizations had in turn been spawned from Britain's Royal Air Force. The BA of 1983, when Colin Marshall arrived as president and CEO, operated largely as a function of its history, rather like the military, and was draining the British treasury with financial losses year after year. Moreover, passengers referred to BA as "bloody awful." Prime Minister Margaret Thatcher had decided earlier that BA was to be privatized and had brought in Lord John King, a successful businessman, to be chairman. King recruited Marshall from Avis Rent-A-Car in 1983 and gave him the charge and the authority to change BA so that it could survive privatization.

In addition to the external environmental force on British Airways by Prime Minister Thatcher and her government administration, another key environmental change was the growing deregulation of international air traffic—many air fares were no longer set by governments but instead by the marketplace.

Internally, BA had to change its mission and strategy as well as its corporate culture. BA's mission was to serve with distinction as the United Kingdom's flagship airline and strategically to compete both domestically and internationally. The mission and strategy would need to change more toward the customer and BA would need to become much more competitive. The culture would need to be transformed from one described as bureaucratic and militaristic to one that was service oriented and market driven.

Let us now consider the changes that took place in BA's mission and strategy, leadership, and culture, in other words the transformational changes.

**Leadership.** Of course the major change here was the hiring of Marshall. He in turn hired Nicholas Georgiades, a psychologist and former professor and consultant, as head of human resources. Georgiades developed the specific tactics and programs required to bring about the culture change. Gordon Dunlop led the way financially via his position as chief financial officer. He was indispensable in transforming the accounting and financial functions from a government orientation to one that helped managers understand competition and the marketplace.

**Culture.** Led by Georgiades, a series of programs and activities were developed to shift the culture from too much bureaucracy to a real service orientation. The first program was called "Putting People First." "Aimed at helping line workers and managers understand the service nature of the airline industry, it was intended to challenge the prevailing wisdom about how things were to be done at BA" (Godstein and Burke, 1991: 12).

The second step was to focus even more intimately on the culture. Georgiades conceptualized the process metaphorically as a "three-legged stool." The seat was the new, desired culture (customer-service oriented) and the three legs were (1) the "Managing People First" (MPF) program, a five-day residential experience to help managers learn about how to manage their people in such a way (more participatively, for example) that they would be more service oriented; (2) performance appraisal where half of a manager's evaluation was based on results and half on how the results were achieved, the how being an interpretation of the behaviors and practices emphasized in the MPF program; and (3) pay for performance, rewarding managers according to how they were rated in (2) above.

In addition to these interventions, primarily targeted at management, a five-day residential training program was conducted for all human resource people in BA. This program concentrated on consultation skills to enhance the HR people's abilities to help line managers apply what they had learned in the MPF program.

Part of the rationale for concentrating on managers in the early stages of the culture change was based on the research work of Don Schmidt. In a series of studies (Schmidt, 1980, 1990, Schmidt and Bowen, 1985) he has demonstrated that
how "front line" people in a service business (in this case, banks; therefore, telling, boss offices) are treated by their respective branch supervisors has a differential effect on customer satisfaction. In participatively-as opposed to bureaucratically—following procedures strictly, for example—customer satisfaction was significantly higher. With British Airways being a service business, this applied this same principle. You do not have to teach cabin crew members or ticket agents how to smile. Rather you need to teach managers about how to manage these front-line people so that they show genuine enthusiasm naturally by their desire to treat customers with respect and enthusiasm. The MPP program was therefore designed and conducted to help managers manage more personally, in touch with customers, and with the myriad of hourly-hour contacts that employees have with customers every day. The 5,000 flight attendants described in the popular book (Carlton, 1987) can, however, work with their subordinates in an involving manner that will in turn have a positive effect on customers.

In summary, since the BA change was clearly fundamental and transformational in nature, concentrating on the top three boxes of the Burke-Litwin model that were changed in response to external environmental demands was the appropriate approach to take. Subsequently, efforts were concentrated on (1) modifying the climate via team building processes, (2) support systems by modifying, for example, rewards (pay for performance) and, as noted above, (3) training all human resource people in consulting skills to help managers apply some change in the MPP program.

For a more detailed description of the history behind the Burke-Litwin model, see the case study by Heintze and Johnson (1990). 

That BA has changed is now a matter of record (Fuller and Burke, 1991). It is one of the most profitable airlines in the world and its significantly improved service means that now passengers consider it "bloody awesome" rather than "bloody awful" (see Business Week, October 9, 1989: 57).

Considering the Burke-Litwin model from a vertical perspective entails hypothesizing causal effects and assuming that the "weight" of change is top-down; that is, the highest or most influential organizational dimensions for change are external environment, first and foremost, and then mission-strategy, leadership, and culture.

It is interesting to note that executives and managers typically concern themselves with the left side of the model illustrated in Fig. 7.1: mission and strategy, structure, task requirements and individual skills or abilities. In contrast, behavioral scientists are more likely to be concerned with the right side and middle of Fig. 7.1: leadership, culture, systems (especially rewards), management practices, climate, individual needs and values, and motivation. For a fundamental, large system change effort one should be concerned with the entire model and with a more effective integration of purpose and practice.

As with other models, the Burke-Litwin model has its limitations. For example, the model does not explicitly account for technology, the organization's technical strengths, those core competencies that make it competitive in the marketplace, or effective in accomplishing its mission. Since technology largely provides the entire organization, displaying the Burke-Litwin model three-dimensionally with technology as the third dimension might improve its validity.

Conclusion

Provided we do not allow ourselves to be trapped by a particular model, and in consequence "not see" certain, critical information about an organization, using a model for diagnosis is highly beneficial. A sufficiently comprehensive model can help us to organize data into useful categories and to see more easily and quickly problems in the organization that need attention. Choosing the model should depend on at least three criteria. First, the model should be one that you as a practitioner thoroughly understand and feel comfortable with as you work with organizational members. Second, the model you choose should fit the client organization as closely as possible; that is, be comprehensive enough to cover as many aspects of the organization as appropriate, yet be simple and clear enough for organizational
Planning and Managing Change

It is easy to write, if not to assume, that diagnosis is one activity and intervention (that is, planning and implementing change) is quite another. In practice, however, this is simply not true. As Schein (1969) pointed out, simply entering a human system to conduct a diagnosis is an intervention.

It is helpful to our understanding, nevertheless, to consider the phases of planning and managing change as following diagnosis and feedback. Thus, once a diagnosis has been made and feedback has been provided to the client, it is time to plan the appropriate steps to take so that problems identified in the diagnostic phase are addressed and a more ideal future state for the organization can be determined. Guiding this planning phase should be a set of coherent and interrelated concepts—a theory, model, a conceptual frame of reference.

This chapter first defines intervention and then covers the planning and management of change phase in more detail. Finally, we shall consider ways to determine if progress is being made in a change effort.

According to Argyris (1970), collecting data from an organization is intervening, which supports Schein's contention and our earlier claim that the phases of OD are not discrete. For this phase of organization development, however, we shall think in terms of some specified activity, some event or planned sequence of events that occurs as a result of diagnosis and feedback. The process of moving from a functional way of organizing to a project form, for example, regardless of how long it takes (and it might take months) could constitute an OD intervention. Another
Chapter 1. Introduction

World Immersed in Change

Change is a constant throughout life, and how we adapt to change determines whether we grow and evolve as individuals, or whether we become stagnant and inflexible. The same premise applies on a national and international level. Today, more than ever before, the world is immersed in change. Consider the dramatic events we’ve witnessed in recent years.

For 45 years or so, we lived in a bipolar world, with communist forces on one side and democratic forces on the other. That balance of power literally dominated worldwide events until the collapse of the Soviet Union. The creation of the Commonwealth in 1991 represents a major turning point in the course of history for all nations—not just the former Soviet Union.

At one time, military strength determined the global powers. This no longer holds true; in the 1990s global power hinges upon economic prowess. Soon the U.S. will have to contend with the giant economic power of the European Community (EC). Despite their differences, leaders of 12 nations—Belgium, Britain, Denmark, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, and Spain—have agreed that a common political purpose will improve their position in world affairs. Such an alliance will undoubtedly have a tremendous affect on international relations, as the remaining nations begin to adjust to the shift in power. Already American companies wanting to continue to do business in Western Europe are having to accommodate the developing ISO 9000 series of standards.
We see similar evidence of change within the Asian economic community. Japan, Singapore, Korea, and Taiwan, significant entities on their own, could merge to form another economic giant. We may even see the emergence of a North and South American economic community, if Mexico joins the free trade zone of the U.S. and Canada. Though the development of economic blocs sharply contrasts the political trends, who can predict what the future might hold? The only thing we know for certain is that things will change.

One-half of all the technological advances we enjoy today have been developed since 1900. Many items we take for granted—from antibiotics and latex paint to lap-top computers and fax machines—are relatively new. This innovative technology has brought forth new concerns as well. For example, we see a widespread sensitivity and heightened awareness of environmental issues. Fifteen years ago, our nation confronted environmental problems like untreated waste polluting bodies of water and toxic fumes billowing from smoke stacks. We attacked these problems in the U.S. and realized some “easy wins.” But soon the widespread, worldwide scope of our past actions began to surface. Though some of these problems have been addressed, the world now faces more difficult, intractable international environmental issues with no readily apparent solutions.

However, a glimmer of hope lies within our children, who’ve become acutely aware of the environment. Not long ago I was watching Saturday morning cartoons with my sons, Joey Jr. and Michael, and in one particular episode, the villain attempted to introduce ozone eaters into the atmosphere. The hero’s task was to stop him from releasing the ozone eaters. Suddenly my seven-year-old son, Michael, looked up at me and said, “Dad, we’ve got to save the earth.” (My how times have changed. When I was a kid growing up in New Jersey, Saturday morning cartoon villains always tied damsels to railroad tracks.)

I believe that left to it's own devices, the earth will take care of itself; “saving the earth” is truly not the issue. Mankind must stop destroying it so that we can continue to inhabit the planet. Ultimately, the solution entails personal responsibility. We must all take a leadership role in protecting our environment and strive toward a common focus. Much like TQM, we need to take action individually and work as a team. We can’t afford to wait for someone else to take the initiative.
We live in a fast-paced society. Just keeping up with current events can be a challenge. As the rate of change increases, individuals and organizations need a way to manage that change—to make sense of it and put it in perspective. Total Quality Management, a change-process within itself, provides an avenue for coping with change and directing it toward a positive outcome for the future.

**TQM as a Change Process**

To successfully implement any change process, we must address the systems in our business and the basic behaviors of our people to facilitate this change. In America today, the interest in quality extends into every competitive business and industry. For example, GMARA Industrial Cleaning, a joint venture between General Motors and ARA Services, adheres to a quality program that brought remarkable results for their customers and workforce alike. GMARA personnel take pride in improving things behind the scenes in the industrial cleaning area, working as part of a team with their customers—most often, plant populations of 2,000 to 3,000 people.

New employees receive extensive classroom training through lectures, discussions, and reading materials. This formal education instills an attitude of professionalism. At GMARA, employees develop self-esteem early on, as they learn that dedicated managers and supervisors do the same line of work. They also receive individual attention from a team of industrial cleaning implementers, helping them devise an employee development plan. Training sessions follow periodically to expand their knowledge of tools and requirements.

Jobs are designed so that performance is measurable. It's easy to measure square footage cleaned, but in establishing a benchmark, various attributes—such as the amount of dirt and the type of floor covering—must be considered and adjusted for. Then the general standard can be modified accordingly. This careful measurement helps employees realize that management fully understands all aspects of their work.

Beyond enjoying a clean work environment, GMARA customers have reaped unexpected benefits as well—such as a simplified waste disposal system. Under GMARA's management, companies that previously used 400-500 different products through an unmanaged cleaning force have
learned to consolidate and eliminate 60 percent of them. This not only decreases the possibility of error in the products' use, but also simplifies waste disposal and reduces the amount of Environmental Protection Agency (EPA) reporting required—an expensive and time-consuming procedure. GMARA's commitment to service excellence is reflected in its climbing sales figures—over 30 percent a year. At this company, everyone learns not only to accept what they do, but to do it with enthusiasm.

Implementing TQM also changes the behavior of management significantly. Practices considered beneficial just a few years ago are now dated and outmoded. Joe Mullins, who has directed several AT&T laboratories, has witnessed a great deal of corporate change in the past few decades. One of the major trends he sees is industry's shift toward fewer managerial positions, with more teams and informal leaders. In the old autocratic or perhaps "paternalistic" management style, the leader took pride in understanding all the details and running the organization directly. Today, however, there are too many details for one individual to handle as the spans of control increase.

So organizations are flattening out—replacing managers with people who act more informally, as leaders, teachers, or advisors. TQM philosophy fits right into this process, because the people reporting to the manager require self-direction and self-motivation. Therefore, managers can become far more efficient by teaching and coaching their people toward more independent decision making.

It's a difficult transition, especially for managers and employees raised in the old school. But it can be accomplished. Not long ago, Ted Sahd, a friend of mine, told me about a technical division at Wright-Patterson Air Force Base run by a person with a Ph.D. in psychology. When asked how he could lead all those highly-specialized technical managers, the psychologist replied, "Because I don't have the technical knowledge. I don't threaten them and they know that I trust their word."

As the world becomes more complex and new information bombards us at every turn, this new management style is becoming the trend. Effective managers will spend less time overseeing the jobs being done and more time helping their staff learn how to solve problems independently. This does not mean that engineering managers need not have the same good grasp of engineering issues. The fact that only 20% of CEOs in U.S. manufacturing
are engineers, as opposed to some 80% in Japan, may indicate something significant. However, micromanagement of engineering projects by management is not the wave of the future. Instead, team and participatory approaches have become the definite trend.

No doubt, change is imminent in our society. An organization positioned for change will succeed and in doing so, redefine the standards for its competitors. In contrast, those unwilling or unprepared for change will be left behind—victims of the change process.

As the World War II British Prime Minister of “blood, sweat, and tears” fame, Sir Winston Churchill, once said, “There is nothing wrong with change if it is in the right direction. To improve is to change, so to be perfect is to have changed often.” To constantly strive for change and create a willingness on behalf of your people to participate in this change is to practice TQM.

The Need to Improve the Way We Do Business

The motives for pursuing quality differ from company to company. In an extremely competitive, price-conscious industry, an organization’s need for TQM becomes readily apparent. For example, Summit Electric Supply Company, a distributor with 150 employees in six locations, serves the construction market, an industry known for tight profit margins. Summit’s customers include anyone buying electrical products—primarily electrical contractors and industrial and commercial organizations. It costs customers money to have someone waiting in line at the counter for supplies, so Summit’s staff works at a fast tempo.

To stay ahead of the competition, Summit sells quality as a value-added service, introducing revolutionary ideas into a very traditional business. By learning to anticipate customers’ requirements, Summit has redefined electrical distribution sales and service within its market areas. The company pursues every reasonable method for gaining customer feedback, seriously asking customers to measure its performance against the competition. How customers respond to these inquiries represents a behavioral change in and of itself. Before TQM, if you called a customer and asked how your product or service was performing for them, a common reaction might have been, “ Gee, what’s wrong? You wouldn’t be asking unless there was a problem.”
Summit wants to create a “revolution in customers’ expectations,” a term coined by their Quality Coordinator, Larry Ecton, by demonstrating that all supply houses are not alike. As a result of the quality-related innovations, the company has enjoyed more than 20 percent growth per year in a basically flat industry. In essence, the pie may be getting smaller, but Summit Electric Supply Company is gaining a larger percentage of that pie.

Some industries, however, are just discovering the need for TQM. For example, the prevailing philosophy in the concrete industry has been that of providing a commodity. After all—a yard of concrete is a yard of concrete. Aside from variations in price, manufacturers in this industry offer a very similar product. But the San Juan Concrete Company introduced a customer-service perspective into its business, differentiating it from other competitors.

San Juan Concrete Company produces sand and gravel, ready-mix concrete and hot-mix asphalt for commercial and residential contractors. When management decided to concentrate on improving customer service, TQM techniques helped educate the 90 employees in defining and delivering good service.

In this industry, customers usually select their suppliers based on price. But after the sale occurs, service factors come into play. Customers typically place an order and expect delivery within 30 minutes to an hour. In that brief amount of time, the company must manufacture the right amount and type of product (consisting of an average of eight or nine components), load it into a truck, and deliver it to the customer’s job site—the epitome of a Just-In-Time (JIT) operation. In order to accommodate this extremely short turn-around time, every process must be evaluated and improved wherever possible.

Even established industry leaders strive for continuous process improvement, as in the case of Wal-Mart. This company began its climb to the top in 1945, when Sam Walton opened Walton’s Ben Franklin in Newport, Arkansas. Today 1,747 Wal-Mart stores and 220 Sam’s Clubs thrive in 43 states and in Puerto Rico. No matter how you look at it, that represents nearly 50 years of phenomenal growth and progress.
Until the end of the 1980s, Sears had led the industry for decades. In fact, I grew up wearing Sears jeans, because my mom could pay for them over a period of time, using her Sears revolving charge account. But in late 1990 and early 1991, Wal-Mart’s sales surpassed both Sears and K-Mart and became the nation’s largest retailer.

This company had never set the goal of becoming the “largest,” only on becoming the “best.” Because Sam Walton lived the philosophy of, “If we’re standing still, we’re going backwards,” he encouraged new ideas. Even after his corporation had attained unprecedented success, “Mr. Sam” sought ways to improve operations in his stores. For instance, after hearing about other companies’ activities in the quality arena he said, “That sounds like something that we really need to incorporate into our company (For our associates and our customers).” So it’s important to realize that highly successful organizations pursue TQM too—especially if they want to remain on top.

Although companies implement TQM for a variety of reasons, the outcome is the same: an improved competitive position and a common vocabulary. American consumers have become intrigued by the subject of quality. Though they may not be able to articulate its precise meaning, they recognize—and appreciate—quality when they see it. Organizations that fail to speak the language and develop systems to ensure quality goods and services will not survive. The need for quality today is no longer a veiled threat; there is no veil.

**Quality Pays**

The U.S. General Accounting Office (GAO) conducted a review of the 20 highest-scoring applicants for the Malcolm Baldrige National Quality Award over a two-year period to evaluate the impact of TQM practices on their organizations. Although each company developed its system in a unique environment, in nearly all cases those using TQM techniques achieved better employee relations, greater customer satisfaction, higher productivity, improved profitability, and increased market share. Similar results have been seen in companies that have applied for the prestigious Deming Prize in Japan. The results, which represent four decades of experience, confirm a distinctive relationship between quality and profit.
Employee-related indicators proved an extremely important feature in implementing a successful TQM system. The GAO survey rated the factors pertaining to employee performance. Clearly, employee safety/health, employee satisfaction, and attendance serve as very positive indications that an organization is providing a valuable service to its employees through the quality process.

Within this same survey, customer satisfaction encompassed issues of overall satisfaction, customer complaints, and retention rates. A variety of industries have found that it takes one-fourth as much company resources to keep an existing customer than to attract a new one. So customer satisfaction and retention are important factors in any successful quality process.

In terms of financial performance, we see similar positive results. Market share increased for 9 of the 11 reporting companies, consistent increases in sales per employee, return on assets, etc. Undoubtedly, the employee and customer results above contributed in a significant way. Officials from the two companies experiencing a decrease attributed that decline to increased foreign competition.

Other studies of TQM's impact on corporate performance have resulted in similar conclusions. For example, The Conference Board, Inc., a New York business research group, surveyed senior executives at large U.S. corporations about their quality management practices. Of 149 firms responding, 111 had a quality management program in place, and 13 said they plan to institute TQM.

In order for such change to take place, the very foundation of an organization, the corporate culture, must be addressed. An organization's culture is defined as the set of values, beliefs, and behaviors that form its core identity. Quality companies agree that an open, responsive culture is the key to a firm's future competitiveness—or even survival. Open corporate cultures share the following characteristics: widespread information-sharing, fewer barriers among departments and workers, a spirit of innovation, and a high level of employee satisfaction. The systematic and behavioral aspects of any successful quality process are inseparable; each closely influences the other, as we will see when we move into the discussion of the implementation process.
The Origin of TQM

Most TQM training courses attribute the foundation of TQM to Dr. W. Edwards Deming’s and Dr. Joseph Juran’s efforts to revitalize Japan’s crumbling economy after World War II, at the request of General MacArthur. Beaten militarily and economically, Japan’s quality and manufacturing techniques ranked poorly in worldwide competition. However, the Japanese possessed an uncanny ability to copy. In fact, Japan had a town named USA (pronounced oo-sa), and products manufactured in this area bore the label, “Made in USA,” in an attempt to capitalize on the quality reputation the United States held at that time.

Japan’s transformation from “copier” to “leader” began when Deming and Juran introduced the Statistical Quality Control (SQC) concept of management, a statistical theory originated by Sir Ronald Fisher over 70 years ago. During World War II Walter Shewhart, a Bell-Laboratories physicist, used this theory to develop the zero-defects approach to producing telephones. Deming, who had worked with Shewhart, developed his own version of SQC, which he introduced to Japan. Japan’s emergence as an economic powerhouse can be directly attributed to the application of these concepts.

However, to find the very earliest hints of TQM, we must look beyond the basic concepts of SQC and process variability. Careful research reveals that the fundamentals of TQM philosophy date back to the “Penney Idea” of 1913—the seven tenants on which J.C. Penney was built:

1. To serve the public, as nearly as we can, to its complete satisfaction.
2. To expect for the service we render a fair remuneration and not all the profit the traffic will bear.
3. To do all in our power to pack the customer’s dollar full of value, quality, and satisfaction.
4. To continue to train ourselves and our associates so that the services we give will be more and more intelligently performed.
5. To improve constantly the human factor in our business.

6. To reward men and women in our organization through participation in what the business produces.

7. To test our every policy, method, and act in this way: "Does it square with what is just and right?"

By 1940 J.C. Penney had 1,586 stores and sales of $300 million. There were no employees or clerks in these stores. Instead, Mr. Penney referred to his staff members as "associates." He created this term in the early days, while seeking a means for expansion. To provide the needed capital for opening new J.C. Penney stores, he invited his managers to save up and become partners in the company.

The Penney Idea espouses customer satisfaction, fairness, quality, value, associate training, and rewards for performance. The phrase, "To test our every policy, method and act," represents what we refer to today as empowering our people to challenge the status quo and arm them with the tools of continuous process improvement to create positive change. The basic concept of TQM isn’t new; those who have prospered in American business recognize how to tailor these simple concepts to their own industry. And contrary to popular belief, the “Total” in TQM was founded in the service sector in America—not in the manufacturing industry. So when thinking of America’s quality greats, maybe we should add John C. Penney’s name to the list.

It’s easier to implement TQM when its basic philosophy aligns with your personal beliefs. Consider Wal-Mart, for example, with its emphasis on people. Associates wear the slogan, “Our People Make the Difference,” right on their name badges. This focus on people began with the company founder, Sam Walton, who recognized that the strength in a company lies in its people. But this attitude existed long before the corporation. Sam Walton was always known a “people person.” In fact, his college yearbook describes him as, “the person who knew the names of all the janitors.” Further, his scholastic record reflects his determination to achieve excellence.
Throughout his life, "Mr. Sam" understood his priorities. For example, vendors who visit the home office are often surprised to see people sharing an office, with used furniture at that. Mr. Sam believed in putting the money where it counts—in the stores. For a man of great vision, he maintained simple tastes. In 1989 he finally traded in his beat-up pick-up truck for a new one. But he mentioned to several people that it just wasn’t the same.

Today as you thumb through the yellow pages of a telephone book, you’ll see advertisements for quality automobile parts, quality dry cleaning services, quality health care, and so forth. The real challenge today is not to say you are a quality organization, but to demonstrate quality in the goods and services you provide. IBM’s CEO John Akers expressed it well: “I am sick and tired of visiting plants to hear nothing but great things about quality and cycle time—and then to visit customers who tell me of problems.” We hear lots of talk about quality, but as long as customers are still complaining, we haven’t reached our goal.

**TQM in Private and Public Sectors**

We see abundant examples of TQM operating in private industry. Many companies, such as Summit Electric Supply, are making innovative changes on behalf of American consumers. For example, Summit Electric Supply Company does not believe customers should expect to stand in line, so they’ve issued a guarantee. If it takes more than 30 seconds for a customer to receive assistance at the counter, that customer receives a $5.00 coin, redeemable at Summit’s counter.

About ten percent of Summit’s sales stem from systems contracts—a form of partnership between the supplier and the customer. Basically, customers agree to purchase all (or most) of their electrical products from Summit; in return, they get extraordinary service and guaranteed pricing levels. They also benefit from free consulting and training for planning future projects. Entering into a systems contract with Summit Electric Supply Company significantly increases cost savings, reduces prices, and assures a very high level of quality. Summit has built a strong reputation on having the right products at the right place at the right time.
Every detail—right down to providing legible paperwork—has been examined from the customers' perspective. As a result, customers find they can save time and money by depending upon Summit as their strategic supplier.

In government, TQM techniques are also being used as a means of curtailing waste. For example, at Kirtland Air Force Base (KAFB), the Air Force Stock Fund, which operates as a bank account, experienced a substantial deficit, even though the customers paid a surcharge for purchases of supplies and equipment. To curtail the deficit, the process owner, Chief of Supply, sought volunteers knowledgeable in the process to form a team and select a leader. The KAFB quality organization provided a team facilitator and an on-call statistician. The facilitator provided training in data collection, interviewing, and JIT concepts. In two-hour weekly meetings, the team reviewed customer requirements, purchase requests, initial item descriptions, processing and pricing procedures of vendors, and delivery lead times. Then the statisticians and analysts portrayed the data in a user-friendly format, so the Chief of Supply and the Quality Council could see the variation built into the process.

This measurement proved most intriguing. Customer interviews revealed that what the customer wanted, what the customer ordered, and what the customer actually received commonly got tangled within the process. After confirming the data, the team prepared recommendations into a briefing for the Quality Council. All team members contributed to the final report, using tools such as check sheets, flow charts, cause-and-effect diagrams, force-field analyses, histograms, and Pareto run and control charts.

The team approach to process improvement revealed the instability of the current process. Measuring and eliminating variation improves the process and enables an organization to benchmark to excellence and define the total cost of quality implementation. In government, as in private industry, leadership must help manage changes—from recognizing the need for improvement to instituting action.

The Defense Contract Management Area Operations (DCMAO), Phoenix, a part of the Defense Contract Management Command (DCMC), was created in June 1994 to improve and streamline contract management within the Department of Defense (DoD).
Consequently, individual service organizations performing contract and major program management were abolished in favor of a single DoD element reporting directly to the Secretary of Defense. This action fulfilled a major recommendation of the Defense Management Review (Packard Commission).

Inherent in the establishment of the DCMC was a commitment to change the way contract and program management within the DoD were performed. The major change centered around providing a more customer-focused approach, intended to increase performance in an environment of reduced budgets, increasing competition for defense business, and reducing the time required for buying new systems and maintaining stock levels.

This program provided a foundation for building an organizational vision, complete with guiding principles and employee expectations. These, along with the commander’s expectations, were used to form three Quality Management Boards (QMB)—Customer Focus, Business Practices, and People—made up of both workers and management striving to increase customer satisfaction, improve processes, and address personnel needs.

Operationally, under the broad direction of the Business Practices QMB, program support teams were created to provide program managers with an integrated assessment of major program status at contractor facilities. These assessments focus on program cost, schedule, and quality issues, not just stand-alone functional assessments. The In-Plant Quality Evaluation (IQUE) program allows the DCMAO to make product acceptance decisions on behalf of its customers (other organizations within government) based upon objective evidence of contractor performance. Customer requirements are identified through contractor site visits and surveys.

Another change resulting from the internalization of TQM as a “way of life” has been the formation of divisional and functional/multi-functional Process Action Teams throughout the organization. The concept of TQM has become accepted and embraced as a way of doing business in resolving and improving the processes in which everyone works. This has facilitated the working team concept in the organization and has brought a better understanding of issues such as empowerment, ownership, and accountability.
How successful has DCMAO been? They are making inroads; two-and-a-half years ago 320 people were in DCMAO Phoenix; now there are 265. The workload has not decreased significantly; in fact they have assumed additional roles and missions. Customers are extremely happy with the new and better products they are receiving, as the organization meets or beats every traditional workload measure. DCMAO Phoenix personnel want to do a good job and the more they know about their customers, the more they can do for them. This could not have occurred without the upfront planning investment in Total Quality Management.

TQM as It Applies to Small Companies

It's easy to see how quality applies in a large company with lots of resources, but 84% of all American companies have less than 50 employees. The federal government defines a small business as one with fewer than 500 employees, or $30M in annual sales. And during a 1990 workshop on the subject of TQM in government contracting, a representative of Martin Marietta Corporation suggested a small company is one with less than one billion dollars in annual sales. I personally subscribe to the "less than 50 employees" definition, since so many companies fit into this category.

Yet small businesses are making great strides in quality-improvement initiatives. For example, Marlow Industries, with 160 people, was the third small company to receive the prestigious Malcolm Baldrige National Quality Award, of 104 small business applications from the inception of the award in 1988. Let's look at two excellent examples of how small companies apply quality to their day-to-day business practices.

First, consider the accomplishments of Mike Robinson, former General Manager of the Albuquerque Marriott Hotel, and present owner of the Ozarka Lodge in Eureka Springs, Arkansas, a 100-year-old seasonal resort with 45 rooms. Mike learned about TQM through his work at the Marriott. Impressed with the results, he adapted that quality program to suit a much smaller operation. In contrast to the Marriott's several hundred employees, the Ozarka employs two people (Mike and his wife, Janet) during the off-season, and up to eight full-time and three part-time workers during the peak season. A true small company by any measure.
After assessing his staff’s training needs, Mike presented a half-day orientation session. In plain, simple language, he spoke about the new goals of improvement and commitment. He explained that the staff could expect pay increases based upon the contributions they made to the growth of the Lodge, rather than length of service.

Then he led the group through team-building exercises to strengthen cohesiveness. For technical skills training, the staff divided into groups; Janie discussed specific procedures with the front office people, while Mike worked with the housekeeping people, outlining the room standards.

Mike began the TQM initiative by evaluating the status quo and looking for areas needing improvement. He focused on little things, realizing that they add up to big improvements. For instance, he noticed that no employee feedback system existed, so he instituted the Idea Form. When employees observe a problem, they fill out a card, stating the nature of the problem and suggesting a solution. To add incentive, Mike added a reward. The employee who submits the most Idea Forms each month receives a $20.00 bonus. This simple system yielded significant improvements in just four months of operation.

Next, Mike introduced the idea of tracking housekeepers’ productivity in terms of person-hours per room. Mike evaluates productivity every day and provides feedback to the employees, who chart their own productivity on the wall in the housekeeping area. Since pay raises are tied to productivity, the staff has a good incentive. As a result, total housekeeping hours have dropped from 1.5 person-hours per occupied room to 1 hour, with an eventual goal of 45 minutes.

TQM does look different in a small organization. Small-scale operations have fewer resources, but they also require fewer. At the Marriott, for example, a TQM rally could involve several thousand dollars and a great deal of preparation time. In contrast, a rally for the Ozarks Lodge during the off-season might consist of Mike and Janie going out to dinner. The reduced need for a large dollar investment ties directly into the inherent strengths of all small organizations. Top-management commitment and communication are two key ingredients in any TQM process. Mike and Janie know their staff is getting the message, because they work side-by-side every day.
Now let's look at an entirely different small business, Computer One™, a woman-owned Apple Computer, Inc. dealer in Albuquerque, New Mexico, with 21 associates. In addition to the $7.5 million they averaged in 1991 equipment sales, they perform a variety of services—such as technical and logistics support by telephone, prompt dispatch, and 24-hour warranty service. They also provide a free training package, covering all products sold through their JIT system.

Computer One wants customers to realize the advantage of doing business with one dealer, so the company builds very specifically on the customers’ needs. For instance, after a year’s history of delivering on-time service at a level of 95 percent or above to Sandia National Laboratories, they have begun to concentrate on getting more of the items only occasionally needed by Sandia to further improve service. In many ways, Computer One serves as an extension of their customers’ organization. Since communication occurs over the telephone and through a paperless system, they can easily adapt to using the customers’ paperwork whenever a product leaves or returns to Computer One.

TQM applies particularly well to a small business in the realm of process improvement, especially in a company experiencing rapid growth. Small businesses can implement change and evaluate the results much faster than large organizations. At weekly planning meetings, every associate can contribute feedback and offer ways to improve.

And customer feedback can come quite quickly, too. Not long ago, Chris, a Computer One technician, provided training in the field for five Sandians. As soon as he left the site, the supervisor picked up the phone and called Caroline Roberts, President of Computer One, to let her know that Chris had done an outstanding job in training the entire section on using their new Macintosh. Normally, negative feedback travels much faster than positive comments. When a customer goes out of his or her way to compliment an associate’s performance, you know you’re doing something right.

The trend of quality in American industry is moving toward the smaller companies. As many industry giants implement quality processes, they reach a natural point where they must turn to their providers of goods and services for help in achieving the next level of excellence. And in many cases, these suppliers are very small companies with very big futures.
Problem Company: Tell-Tale Signs

We've all heard that "ignorance is bliss." This is true, at least in the short term. I once heard the following story about a perception of quality. "On the first of every month, quality was king. Management spoke of quality and encouraged improvement of quality. Defective products and services were nipped in the bud and corrected prior to ever making it into the hands of the customer. But, as the first of the month passed and the middle of the month approached, quality took on a new meaning. As the end of the month came closer, the motto became, 'ship it and we'll fix it in the field,' or 'we'll accept it as a return later. But for now, we can sock the shipment and look good on paper.'"

The bliss of ignorance is reflected in the short-sighted type of management just described. Managers often do not recognize the problems with the way they conduct business, or they would surely change their ways. For that reason, I elected to include this section, so that management might better understand the "tell-tale signs of un-quality."

This understanding of un-quality was first brought to my attention by a young woman who noticed two key points that had eluded me in my own experience on this important subject. First, she recognized certain things one could notice, or better yet look for, that would suggest the need for improvement. Second, and most important, she observed a cyclic behavior to un-quality; it feeds on itself. In sharp contrast to TQM, where you are continually moving to improve the way you do business, un-quality continually degrades quality, productivity, and most importantly, employee morale.

The signs of un-quality are displayed in Exhibit 1.1. A department, division, or entire organization may enter this cycle at any point. Let us say, the quality of goods and services in a company decreases. The reason at this point is unimportant. We notice the time necessary to accomplish this process increases. This may be the result of conflict between personnel, unclear procedures, or any number of reasons. Usually as a reflex response, management increases the number of inspections. This makes sense under the traditional way of doing business. Employees can't be trusted to "do it right the first time"; therefore, we will "inspect quality in." As a result, morale suffers and workers—often the better employees—begin to leave.
EXHIBIT 1-1
Signs of Un-Quality

The number of management meetings increases to discuss this growing problem; finger-pointing flourishes; and the phone rings constantly with customer complaints. Management concludes these problems are obviously the fault of the workers. Therefore, they respond by managing the work force more, not better (also known as micro-management). We have now come full circle, and because of the accumulation of bad management decisions, we witness further quality deterioration. The cycle goes on and on.

The sequence of events may differ from company to company, but the outcome remains the same. Early on, the effects of reduced quality are hidden from management by shipping poor quality goods or providing inadequate services. The books look good because quotas are made, but the hidden problems resurface elsewhere later, usually for an increased cost. Your best employees leave, and it is difficult to hire the better prospects off the street because you have a bad reputation. Field returns rise, and you find yourself fixing problems at about 100 times the amount it would have cost to correct them in the plant or prevent in the first place.

Last, and most important, morale deteriorates and the traditional barriers between management and labor are further reinforced, because the workforce was blamed before the cause of the problem was even understood.
Poor credibility between management and labor intensifies, because quality standards were conveyed as a variable. Products and services of unacceptable quality on the first of the month were shipped on the 30th regardless. To the employees, there were no standards to follow.

I could go on describing how the cycle continues, eventually resulting in lost sales and lost jobs, but that is not the point. The important point is that management can recognize tell-tale signs and identify opportunities for improvement. If you can relate to any of these comments, I will have been half-successful by merely getting you thinking. If you go one step further and say you are going to do something about your company’s problems and use TQM as your vehicle to success, we will both succeed.
Chapter 2. TQM: The Basics

Total Quality Management Defined

Attempts to define TQM have led to many wandering conversations, meandering trails of misunderstanding and voluminous descriptions. To cut through much of this verbiage and confusion, I would like to offer my own definition of this important term.

TQM is:

A cooperative form of doing business that relies on the talents and capabilities of both labor and management to continually improve quality and productivity using teams.

Joseph R. Jablonski

Embodied in this definition are the three ingredients necessary for TQM to flourish in any company: (1) participative management; (2) continuous process improvement; and (3) the use of teams.

Participative management comes about by practicing TQM. Arming your people with the skills and support to better understand how they do business, identifying opportunities for improvement, and making change happen will allow participative management to flourish. Recognizing the capabilities and contributions employees can make to improve business will begin to chip away at the traditional barriers that separate management and labor. This does not happen overnight and will only occur if management listens and the workforce
For example, before TQM, supervisors receiving new company guidance on material management would probably go into their office, close the door and begin writing the new procedures to implement this guidance. After TQM, however, supervisors would invite the clerical, administrative, and support personnel who will eventually implement the new method to read the new company guidance, interpret it, and develop the procedures.

Participative management, unlike a light switch, cannot simply be turned on. It is an evolutionary process of trust and feedback which develops over time. Those first few steps toward participative management are slow; momentum builds gradually. Traditional barriers between management and labor must be breached by that entity willing to take the plunge and offer a show of faith. That is management’s responsibility.

Continuous process improvement (CPI) means accepting small, incremental gains as a step in the right direction toward Total Quality. It recognizes that substantial gains can be achieved by the accumulation of many seemingly minor improvements whose synergies yield tremendous gains over the long run. Continuous process improvement reinforces a basic tenant of TQM—long-term focus. Corporate leaders must be willing to make an investment in Total Quality today, recognizing that big gains may lie in their future. In fact, the implementation approach described later recommends employees practice their newfound skills on small, achievable victories to improve processes. This approach not only allows employees to develop confidence in the TQM process, but also provides management with many opportunities to show support and encouragement.

Let me offer one example of continuous process improvement. When I first went to work for the government, it took about six weeks to process a travel claim. After returning from a trip, I would complete a travel claim and submit it for payment. Six weeks later I would have a check in hand. Through a series of CPIs this six-week cycle time became two weeks—a substantial improvement. I told that story to a group in Rosslyn, Virginia in the summer of 1991, and a woman from
Headquarters Defense Nuclear Agency in Alexandria said that if you submit a
travel claim to her branch by 10:30 AM, your check would be ready for pick-
up by 4:00 PM. Imagine my surprise!

During a subsequent presentation to a group of government personnel, I told
the story about the one-day turn around as the benchmark, the one to beat.
A man in the audience said that his finance center processes travel claims
and prepares the checks within 20 minutes—the administrative equivalent of
Just-In-Time. The check is prepared while you wait. Even good processes
can be improved.

Finally, TQM involves teams. Each team includes a cross-section of
members who represent some part of the process under study: the individu-
als who work within the process; the suppliers of services and materials
brought into the process; and its beneficiaries, the customers. We groom our
people to recognize opportunities for improvement within our corporation,
understand our business practices, apply a structured approach to problem
solving, and offer management recommendations on where to apply scarce
resources first, so as to realize the greatest gains. This approach empowers
the people directly involved in the day-to-day operations of the corporation
to improve their work environment. The employees are aligned with the
corporation’s goals for improvement. This personal commitment is achieved
in exchange for individual and team rewards, recognition, and job security.

TQM employs many varieties of teams. Most often people think of the
cross-functional type of team which has representation throughout the
various department or groups within the organization. But as we’ll see in
Chapter 8, this is just one type of team.

**The Six Principles of TQM**

At the conclusion of Chapter 1, I described the tell-tale signs of un-quality.
Let us now focus our attention on those positive characteristics that will
allow you to implement TQM in your company successfully. I call these
attributes the principles of Total Quality Management.
EXHIBIT 2-1
Principles of TQM

1. Customer Focus
2. A Focus on Process as Well as the Results
3. Prevention versus Inspection
4. Mobilize Expertise of Workforce
5. Fact-Based Decision Making
6. Feedback

(1) A Customer Focus - We all recognize that our time on the job is spent performing tasks that will somehow support a sale. Corporations are in business to provide goods and services in exchange for revenue. Although this concept is neither new nor surprising to us, we must regularly reinforce it at all levels within our organization. In moving toward TQM, we acknowledge the existence of many customers we may have overlooked in the past. This includes the customer outside an organization, who places orders with us. I refer to this customer as the big “C.” In addition, there is a little “c,” the customers within our company with whom we work on a daily basis. Little “c’s” include graphics departments providing visual aid support, payroll processing bi-weekly employee checks, finance generating advances for corporate travelers, etc. We relate well to the big “C,” but our support and enthusiasm often times wane when we support the little “c’s.” This frequently results from our indirect compensation for these services. Because we do not exchange funds for these internal services, it is difficult to draw a connection between the services the little “c” provides and the revenue it receives. As we implement TQM, we shift to a heightened awareness of all our customers, both the big “C” and the little “c.”

One of the best examples I’ve heard of the concept of big “C’s” and little “c’s” came from Rochelle Igersjan, Associate Administrator of Perinatal Nursing at Sinai Hospital in Detroit. When this 615-bed major medical facility started a TQM initiative, the staff had trouble defining the “customer.”
Traditionally, the patients are the hospital’s customer, since they receive the services. But the Sinai staff realized that physicians are also big “C’s,” because they usually select the hospital for the patient.

Serving the patient well requires teamwork and cooperation among many departments. The nursing staff can’t care for patients properly unless the pharmacy provides the medication, the lab performs the tests, and so forth. In essence, each department is a little “c” to every other department in the hospital. Recognizing this interdependence, the Sinai staff formed committees with members of various departments to study areas needing improvement.

When these committees examined the process of patient care—rather than the process of an individual department—they gained a new perspective. For example, the discharge staff pointed out that sometimes a patient’s release was delayed by having to wait for lab test results. So the lab personnel modified their routine and scheduled the tests for early morning, rather than late afternoon. This change in the work flow of one department’s internal process improved the over-all process of patient care.

In such a large organization, employees are usually surprised to be asked to contribute their knowledge and ideas. But the seeds for process improvement lie within every individual involved in the effort. Every little “c” understands the needs and expectations of the big “C’s” from a different point of view. Working together, the little “c’s” can find new ways to solve problems and improve processes—both for the big “C’s” and the little “c’s” alike.

One company with a long history of commitment to the customer is Hershey Foods Corporation, the leading chocolate and confectionery manufacturer in North America. This Fortune 500 company employs 13,000 people on several continents. In the late 1980s, Hershey had been experimenting with the production of a heat-resistant chocolate bar, examining scientific literature and evaluating new technologies. But Saddam Hussein’s invasion of Kuwait in August 1990 shifted the course of events for Hershey. Suddenly, the military was actively seeking a heat-resistant chocolate bar, made with real milk chocolate, that could withstand the temperatures of the Persian Gulf.

Of all the things to do in preparing for war, why focus on a chocolate bar? The military wanted to give our soldiers a familiar taste from home. Traditionally, chocolate has served as a morale booster, a pleasurable food...
that leaves people with psychological and sensual satisfaction. Further, the U.S. Military Forces fielded in the Persian Gulf represented one of the youngest armies in the nation’s history. Given this new customer demand, Hershey shifted into high gear. Producing a good heat-resistant chocolate bar was no longer an academic exercise—it was an emergency!

Hershey’s R&D people reiterated the fact that an Army marches on its stomach. They wanted to provide something special for our troops, something that hadn’t been sealed in a can or a pouch for a decade or so. With new-found commitment, various groups within the corporation formed teams, working long hours, weekends, and holidays. Despite the haste, Hershey never sacrificed quality. They adhered to their Product Excellence Program, maintaining the same standards for ingredients and processes involved in every Hershey’s product. The packaging suppliers put forth a superb effort, too. Normal six-month delivery times dropped to eight weeks. No one worried about profit margins; everyone wanted to support the soldiers. And on December 4, 1991, the first shipment of Hershey’s new one-ounce Desert Bars® headed toward Saudi Arabia. Our troops enjoyed chocolate for Christmas.

Hershey Foods Corporation has a rich history in working with the military. In fact, the first heat-resistant chocolate bar ever sold to the military, the Field Ration D bar, was produced by Hershey prior to World War II. And roughly 30 years later, Hershey refined and improved this product for our troops in Vietnam. Hershey will celebrate its 100-year anniversary in 1994, and a large measure of this corporation’s success can be attributed to the founder, Milton S. Hershey, who wanted to provide a quality chocolate to the masses at an affordable price.

In 1991 these “masses” once again included the U.S. troops on foreign soil, young men and women longing for a familiar flavor. The company that bears the name of Milton S. Hershey once again met America’s needs in the Persian Gulf with a quality chocolate product—The Desert Bar®.

(2) A Focus on the Process as Well as the Results - We are the customer for goods and services both from within and outside our company. When we receive a product that does not meet or exceed our expectations, we traditionally go to a competitor or complain if we think it might get results. Under TQM, we use these deficient results or unmet expectations as symptoms—indications that something is amiss with the process that produced them. Later in the second phase of this implementation methodology,
(Chapter 7), we will see how these symptoms result in action to correct the deficiencies and continually move to improve the quality of goods and services, using a structured approach to problem solving.

(3) Prevention versus Inspection - Having placed attention on the process as well as the results in Principle #2, the application of Principle #3, Prevention versus Inspection, becomes readily achievable. Before TQM, managers believed they could inspect quality in. When something went wrong in the production of goods and services, as a knee-jerk reaction they provided more inspectors. Not so with TQM. Here we apply a structured approach to problem solving and make the necessary investment to understand the process and sources of process variation. We then provide process controls to ensure every product and service meets an acceptable, predictable quality. TQM Principle #3 directs attention toward the prevention of defective products and services, rather than the discovery of defects and deficiencies after resources have been spent.

(4) Mobilizing Expertise of the Workforce - A traditional management atmosphere assumes the workforce consists of mindless individuals wanting nothing more than a paycheck. TQM changes this manner of thinking profoundly. First, we recognize that we can compensate individuals for their efforts in many ways; financial compensation is only one method. Studies have shown that individuals hire on and stay with a corporation for various reasons. The salary or wage is not the only reason, nor is it first and foremost. People like to feel appreciated, and TQM creates new, innovative ways to recognize individuals for their efforts. Second, your workforce represents a tremendous wealth of knowledge and opportunity to improve the way you do business, increase profits, and reduce costs. A movement toward TQM mobilizes the expertise of the workforce in a very positive way for the mutual benefit of everyone involved.

When employees begin to buy into the improvement processes, new ideas spring from a variety of sources. For example, Servicemaster, a national corporation handling the housekeeping for Sinai Hospital, observed that another local hospital provided a flower in a small vase in each patient’s room, with a “Welcome to our hospital!” card signed by the housekeeper. Upon hearing about it, Sinai’s housekeeping staff liked the idea and wanted to try something similar.

Around the same time, the head of Sinai’s dietary department visited a different hospital when his wife had a baby. Here he noticed a little flower
on each tray—a pink rose for those with a newborn girl, and a white rose for those with boys. The Sinai dietary staff became enthused with this idea, so suddenly, there was competition between the departments over who would give the patient a flower. They solved the problem by expanding the idea. New mothers receive a flower on their dietary tray, and other patients receive a flower from the housekeeping department.

(5) Fact-Based Decision Making - An un-quality organization relies on finger-pointing and blame to shift responsibility for unsuccessful deeds. A Total Quality organization applies a structured approach to problem solving as “opportunities to improve.” The “TQM approach” recognizes everyone involved in the process including executive, management, workforce, suppliers, and customers, and acknowledges that they can contribute to a mutually-beneficial solution. It means understanding the processes you work in and around every day, understanding the cause of your problems, and gathering information, data on which you can base decisions for improving the process. It relies heavily on excellent team-building, communication, and interpersonal skills to develop and yield the best your people can offer. Personality conflicts and personal biases are overcome with one common focus—process improvement—with everyone lending a helping hand and no one being blamed.

The importance of planning in fact-based decision making was already clear to Larry Cox when he became Director of Material Management for St. Anthony Hospital, a 684-bed facility in Oklahoma City. As a retired Air Force officer, he had three years of direct TQM involvement with the Air Force Logistics Command, which went on to win the 1991 President’s Quality Award—the federal equivalent to the Malcolm Baldrige Award.

Through various assessments, Larry found the hospital’s manual material management system overtaxed and in need of process improvement. Since effective material management depends upon good databases, the first step of their strategic plan consisted of installing a computer system. To select that system, St. Anthony consulted the 14 other hospitals in their health care system. Working together in a TQM mode, they determined the requirements needed for the system. Meanwhile, teams visited the hospitals and studied their practices to help develop a “best practices” process. As Larry explains, “The idea is not to bring in a computer to automate a bad process, but to improve the process, then automate it.”
Although it will take about five years for the entire strategic plan to be carried out, Larry has seen encouraging results in a very short time. The process improvements, combined with a customer-oriented approach to serving the departments, have already helped integrate the departments of the hospital, increase efficiency, and reduce material costs.

(6) Feedback - The sixth and final principle of TQM is feedback. This one principle allows the other five principles to flourish. Here, communications is key. To an engineer, it would be unthinkable to design hardware without some element of feedback. For an automobile going down the highway, feedback may be as simple as a speedometer indicating the speed at which the vehicle is moving. For a spacecraft traveling through space, unaided by man for instantaneous decision-making, feedback comes through an assortment of sensors which allow it to make decisions on its own. In manufacturing, feedback may take the form of a graph that flags the operator so a tool can be changed out, preventing production of an out-of-tolerance part. In an administrative function, feedback may take the form of a supervisor sitting next to a valued employee reviewing his annual evaluation. This one-on-one, or person-to-person, feedback is probably the most important, but seemingly the most difficult for line supervisors to accomplish.

The Albuquerque Marriott Hotel uses a Gemstone Program to provide positive feedback to its staff. Employees receive a $25.00 bonus and a blue gemstone for reducing costs or improving the way the hotel does business; pink gemstones are awarded for commendable performance, such as a lifesaving act or going above the call of duty. Anyone who earns three gemstones of the same color qualifies for a reward or pay raise.

The greatest responsibility and challenge for a supervisor comes about not from managing money, facilities, or schedules, but rather from leading people to grow. Providing honest feedback, with an obvious, sincere desire to help your people improve their performance, will make you the employer of choice.

It should be noted that in many respects, TQM is nothing more than a reemphasis of basic personnel management practices. Working with employees one-on-one to develop performance goals, providing regular feedback, and offering encouragement are fundamental skills that allow managers to successfully climb the corporate ladder. At the foundation of
all these skills is the ability to lead, to get people to do what they ordinarily would not have done on their own. But they do it because you lead them in a manner that inspires them to be creative and to take a chance. They view you as fair, as someone who will acknowledge their efforts and their success. Of all the departments a new employee might work for, yours becomes the one of choice.

You can accomplish anything you want as long as you let someone else take the credit.

Dr. Joe Mullins

Philosophy versus Tools

When speaking to laypeople on the subject of TQM, a picture forms in my mind as to what they think TQM really is. Generally, their perceptions take on one of two forms. First, they may consider it a philosophy of management, or a guiding set of principles that allows someone to manage better. Or they may believe it to be an assortment of sophisticated statistical and measurement tools which few people use in their daily worklife, and fewer still understand. Both points of view are partially correct. There are two distinct elements to TQM—the principles of TQM and the tools.

The philosophy of Total Quality Management allows us to break the traditional barriers that restrain executives and managers from utilizing the tremendous potential stored in each and every one of their people. This new philosophy emphasizes a few guiding principles and applies to both large and small organizations.

Following the examples of those who have implemented TQM and succeeded, one can better understand how it is possible. The essence of TQM allows us to set our expectations higher than we have in the past, to recognize and remove barriers to change, and to enable high-level managers to solicit the opinions and ideas of their associates and do something with those good ideas. To support the philosophy of TQM, we have a set of tools. These qualitative and quantitative tools allow us to better understand the way we do business. They allow us to measure improved quality along the way toward continuous improvement and recognize when we are achieving our goals of improved productivity, performance, efficiency, workforce, and eventually, improved quality. Many of these tools have existed for decades, possibly even centuries, but what makes them unique today is the recognition that they allow us to focus on and measure what is important for
In manufacturing, we can easily measure a quality parameter, such as a fraction of nonconforming product that is discarded prior to customer shipping. In service companies or administrative functions, however, we cannot define the quality parameter as clearly. Applying these tools to service and administrative processes allows us to improve the majority of the work processes around us every day. We recognize quality in this new environment in reduced customer complaints and reduced reprocessing of administrative paperwork. In some instances, the simple modification of an administrative form can facilitate its use and reduce data-entry errors. In all cases, whether manufacturing or administrative/service applications of TQM, the goal is the same: "Get it right the first time."

Even excellent organizations discover the power of this philosophy and set of tools for improvement when employees are empowered to initiate change. The Albuquerque Marriott, a 410-room hotel, earned recognition as the top hotel for guest satisfaction in 1988 and 1989. Nonetheless, in 1989 the hotel started a TQM program. Shortly after attending a “quality fair,” a kitchen supervisor, Anna Casau, observed that the customary breakfast garnish, a small cherry cobbler with whipped cream, frequently returned to the kitchen untouched.

Anna approached the executive chef, who asked her to track the garnish for one month to determine the cost. Anna did so, using TQM tools. The following month, Anna changed the garnish to strawberries with whipped cream and again measured the returns to the kitchen. The amount of uneaten breakfast garnish dropped dramatically—from 70 percent to less than 10 percent. Because of the price of strawberries, the process improvement didn’t result in cost savings. But it did reduce waste and increase customer satisfaction—two supremely important factors in the hospitality industry.

TQM includes molding individual behavior and imparting a feeling to the employee that something positive is taking place and progress is being made. So, in contrast to philosophy driving the organization toward change, the tools often times drive the philosophy at management and workforce levels within the corporation. As Schonberger explains, “regardless of the culture, techniques can mold behavior” (Schonberger, 1986). Yes, before propagating the philosophy of TQM through the organization, the application of a few simple tools at the working level can influence behavior. An example of this technique is how responsibilities previously reserved for managers are now being handled by regular employees. In TQM we call it participative management.
What Is a Process?

*Webster’s* defines a process as a series of actions or operations that leads to a particular result. Similarly, in TQM we define a process as a series of operations linked together to provide a result that has increased value. Exhibit 2-2 illustrates a process. To the left, we put something into the process and to the right, we have an output, or a result with increased value. This increased value emerges from an exchange for resources. We most often include as resources people, equipment, material, money, and/or time. In a service company, we may have a purchase order entering a process that results in dispatching a team to repair a computer in the field. The process itself uses a person’s time to review the incoming purchase order, analyze the skills needed to address this particular problem, assign the work, and then dispatch the team to do its job. This one example demonstrates how an apparently simple, routine function plays an integral role in the performance of a computer-services department.

Prior to the computer repair ever being accomplished, a multitude of processes had to take place. A marketing department spread the word—advertising to inform potential consumers about the business. In addition, the staff maintains qualified personnel to accomplish the actual repair.
Therefore, before dispatching a team, the personnel department must identify the necessary qualifications for this person, advertise the position, schedule interviews, and accomplish all of the necessary paperwork. So the selected candidate can become an associate of the company. Likewise, some processes are performed after the team has returned from successfully repairing the computer. These processes include invoicing the customer, posting revenues in accounting, and of course, providing feedback to the team on its performance.

So, as you can see, one single process within an organization does not function alone. Rather, it interconnects many different processes, allowing you to earn a reputation for excellent service. Factors that reinforce this view from the customer's perspective include courteous and efficient telephone personnel to receive the order, qualified and efficient repair personnel to resolve the problem, and timely invoicing with appropriate follow-up and accounting. Clearly, providing excellent customer service goes far beyond the individual in the field turning the wrench or installing a new printed circuit board. It is the smooth operation of many corporate relationships between the big "C's" and lots of little "c's" that allows the customer to conclude that you offer excellent service.

I wanted to walk through a service example here specifically because so many books on this subject focus on manufacturing examples. In manufacturing, we routinely think of the time it takes to perform an individual operation, such as installing a screw. This time, the operation-cycle time, is the accumulation and interrelationship of many steps involved in a process. These very same principles and concepts that allow us to streamline, optimize, and understand manufacturing processes apply directly to administrative and service processes as well.

To reiterate, a process is a series of operations linked together to provide a result that has increased value. We achieve this increased value in exchange for the expenditure of resources. What processes in your company add value and allow you to stay in business?

Before closing this section, I would like to mention one very important point. All processes have constraints. When designing a new process from scratch, we immediately form an impression of how to carry out this process. Then we encounter the process constraints. When performing a process, such as moving a department from one building to another, you may be asked to
perform the same or improved services with fewer resources. Fewer resources may mean less floor space. If your company recently cut back personnel, your constraint may be to perform the same job with fewer people, or a reduced budget. Regardless of the reason, you confront some constraints—challenges to do more with less. Understanding the processes and successfully applying the principles and tools of TQM allows you to respond to and successfully accommodate these new challenges.

Service versus Manufacturing Companies

One aspect of quality that has always intrigued me is the lack of attention to the subject in the service arena. When recognized gurus on the topic refer to the application of quality in service companies, they typically deal with it in the following way.

They consume one hundred pages or so using case studies, hard-hitting examples, and personal experiences showing how they have helped a manufacturing company improve. Without elaboration, they go on to describe, usually in a page or so, how the same principles and tools also apply to service companies. They routinely overlook two key points, which I would like to cover here.

First, when describing process improvement we must recognize the fact that many processes typically associated with these successes are not manufacturing-related at all. Yes, statistical process control was probably used to ensure the production of a quality part on the shop floor. But other administrative and support functions are typically overlooked. Some administrative functions that immediately come to mind include contracts, personnel, and maintenance. Administrative functions that always seem to lend themselves to improvement are procurement and the processing of Engineering Change Proposals (ECPs). There, the "boiler plate" has always prompted quality professionals to unlimited opportunities for process improvement. One of the most enlightening examples I have seen is in streamlining the processing of ECPs at the U.S. Air Force Aeronautical Systems Division (ASD). There, using some simple tools of TQM (i.e. flow-charting), they reduced the time required to process ECPs by 40 percent, with the added benefit of saving 20 percent of the man-hours to accomplish the task.
“Boiler plate” usually means cutting and splicing from past contracts to yield a “standard” contract, with outdated requirements producing standardized results that are consistent with history. Inevitably, this leads to a tangled mass of verbiage. In contrast, under TQM each contractual requirement is scrutinized for quality. Genuine requirements, those insuring a certain quality product or service, must be specified and the non-requirements deleted. The best example I can think of in this area applies to government contracts. It seems so easy to add additional requirements to each new contract to overcome a fluke, or one-of-a-kind occurrence that caused problems in the past. This management-by-exception has no place in a Total Quality organization and is presently being overcome by the government’s own quality initiative.

The personnel department is another support function that allows manufacturing operations to run smoothly. We have all heard the term “garbage in - garbage out” as it applies to computers. We must have good information entering the machine to produce quality results. This concept also applies to the corporate personnel function. In deploying Total Quality throughout, the personnel department becomes aware of its key role—insuring that personnel, our greatest resource, meet the quality level we desire from team members. Total Quality companies recognize that hiring a new person is a long-term investment. The company maintains the responsibility of selling that individual on the long-term promise of his or her affiliation. As a company moves toward Total Quality, it begins to earn a reputation for excellence and can choose from the best employee prospects. When I think of companies that have already earned such a reputation, certain names come to mind including Electronic Data Systems (EDS) in the computer services area, Sandia National Laboratories in research and development, and of course, the good name of IBM. Many people would like to work for these excellent companies or companies like them, but not everyone can. Is it your goal to work for an excellent company? Will you aid the process of transforming your company into an EDS or an IBM?

Second, manufacturing companies have a mix of service and administrative functions that allows them to produce a quality product. The orchestration of all these functions, not just the shop floor functions themselves, enables them to produce quality. I once visited a manufacturing company in Ei
Monte, California, where they produce electronic boxes, primarily for Department of Defense customers. After a brief introduction to their company and product line, I concluded their manufacturing operation was a "quality" operation. So what could they do next to improve their quality? Well, their accounting books disclosed that only about fifteen percent of their expenses were incurred in traditional manufacturing, shop floor activities. The balance was spent on various functions which supported manufacturing such as finance, marketing, sales, personnel, purchasing, etc. So where does this company go to improve its operations? Obviously, to where it spends 85% of its money. Manufacturing and service companies do share common service functions, but differences exist as well. These key points follow below in Exhibit 2-3 (DiPrimo). 1987.

EXHIBIT 2-3
Service versus Manufacturing Organizations

☐ No Product with Exact Specifications
☐ Services Are Perishable
☐ Strong Customer/Client Presence
☐ Delivery System

First, service companies have no product with exact specifications. Yes, they probably use some metric to tell them when they are on track, but this differs considerably from a manufactured product with critical dimensions and close tolerances. One example comes to mind from my own experience in technical consulting services, while with Booz Allen and Hamilton.

When selling a potential client on our services, we used "The Booz Allen Approach." It comprised our best effort to offer a structured methodology for problem solving. In the high technology arena, it is frequently difficult to predict what form the final product might take. So instead, we sold the client on our approach to the problem—identifying sources of information, critical decision points, etc. In doing so, we created an appreciation in the mind of our client that this was a new problem, one that had never been dealt with before. We had our arms around an approach to deal with the situation.
and communicated our understanding of it. The Booz Allen Approach. This is in sharp contrast to a manufacturing problem, where the results appear in a drawing beforehand and the quality of the final product is measured with calipers.

Second, services are perishable. This became quite apparent when President Reagan called for the technical expertise of this nation to be directed toward the Strategic Defense Initiative. As government research dollars shifted, the skills required for meeting the challenge changed as well. The unavailability of the technical skills necessary to build this system soon became evident; bomb designers for terrestrial systems aren’t the same as the bomb designers for space systems. Special people had to be groomed to meet the technical services required for the conception and design of the new system. Today we see another shift taking place. Technical specialists who just a few years ago were immersed in defense problems are now applying their skills to environmental issues. Technical skills are perishable and not readily transferable to what may appear to be a similar problem.

The third difference applies to the area of client/customer presence. In manufacturing, we see a crate with a packing slip and invoice being received by the loading dock. Sometimes all producer/customer interaction takes place via letter and telephone with little or no direct, face-to-face contact. This differs considerably from a service organization.

Let me continue the computer service example from earlier in the book. A repair person arrives at your facility, opens the machine, evaluates the problem, proceeds to open a tool case and goes to work. All along, office personnel watch, wondering how the repair person can solve the problem so quickly, with such a complicated device. For some reason, a certain curiosity arises when equipment is opened, creating a one-on-one interaction between the service person and the customer.

This is also true if you offer a specialized technical service. Everyone in the meeting gathers around the consultant to gaze at the intricate drawings, understand every detail on the flow chart, and scrutinize every line of the computer print-out. In the services area, a real person stops by to deliver that service. The client/customer usually seizes the opportunity to ask questions, to better understand what is going on...to communicate.
The fourth contrasting factor between service and manufacturing is the delivery system involved. This extends from the discussion above on strong customer/client presence. Manufacturers commonly rely on a common carrier as the delivery system for a component. Again, this differs from the delivery of a service, where a company representative usually does the delivering. This holds true whether it involves the delivery of a computer repair service, or the presentation of a methodology for solving a complex technological problem using the Booz Allen Approach.

In conclusion, differences do exist between service and manufacturing companies. However, the same features that make the delivery of services to the client/customer something special can be applied to manufacturing projects as well. Also, it should be evident that many of the things traditionally associated with service companies are embodied within manufacturing companies, in what we call “administrative functions.” Both differences and similarities exist. The understanding of these similarities and differences can help your organization apply TQM more successfully.
AN EXAMPLE OF CULTURE

Thor Freyer, of the Trollund company, was looking forward to his first meeting with Fernando Avocena of the Ibanez Corporation. Fernando, for his part, was excited. Both men had international reputations in biotechnology, each was, professionally speaking, well known to the other. Trollund was market leader in Norway; Ibanez enjoyed similar status in Spain. Moond of defecan, tentative overtures had resulted in a mooted joint venture which might, just might, lead towards common European dominance. Now Fernando and Thor were to conduct somewhat tougher negotiations—a necessary next step in their companies’ courtship ritual. The venue chosen was the small, historic and beautiful English town of Chester. For Trollund and Ibanez, it had two crucial advantages: it was discreet and it was neutral.

Unfortunately for both individuals and companies, Thor and Fernando quickly found that they simply couldn’t work effectively together. Thor was discomfited by Fernando’s habit of standing close to him and gesticulating excitedly. Each time this happened, Thor would instinctively draw back. When he replied to Fernando, it was always in a calm, unemotional manner. This was exasperating for Fernando. He would lean forward in another attempt to engage Thor in passionate debate. Equally finally, Thor would again draw back. Thor started to regard Fernando as pushy and argumentative; Fernando, for his part, began to view Thor as cold and aloof. The gap between them widened dramatically. The joint realization that their negotiations were going nowhere was viewed with gloomy satisfaction by cynics in both companies. If such senior people as Fernando and Thor couldn’t work together, then what chance was there for Trollund and Ibanez? Perhaps it was better to suspend their joint venture for the time being. After all, they could always return to it later ... couldn’t they?

In this brief and simple example of culture at work on an interpersonal level, what has happened? Thor and Fernando found they couldn’t work together and because of this it was inferred that their respective companies couldn’t work together. The proposed joint venture was indefinitely postponed. A strategic alliance never happened. Considerable commercial opportunities were lost.

But why couldn’t Thor and Fernando work together? It’s tempting to shrug one’s shoulders and cite ‘cultural differences’ but this is as potentially misleading as it is imprecise. The real reason why they couldn’t work together was simply body distance. The right body distance for Fernando was too close for Thor; the right body distance for Thor was too far for Fernando. As a result of this behavioural imbalance, other behavioural differences such as speed and delivery of speech became magnified and distorted. The next step was stereotyping, with such notions as ‘pushiness’ and ‘aloofness’. From there, it’s only one more short step to cultural stereotyping—‘Mediterranean’ versus ‘Nordic types’.

The imbalance was psychological. But why did this imbalance exist? It existed because both parties had (conflicting) assumptions about the correct body distance.
maintain. Both sets of assumptions were implicit in their respective behaviours. Neither Fernando nor Thor had ever questioned whether their assumptions on this matter were correct; still less had they considered that people of different nationalities might have different and potentially conflicting ideas about what constituted correct body distance. All they knew was that they could not work together; they did not know why. And because they never knew why, they were wholly unable to learn from their experience. Sadly, this happens all the time.

A DEFINITION OF CULTURE

In recent years there have been many less than adequate definitions of organizational culture – particularly in management books about change. A widely touted definition of organizational culture is 'the way we do things here'. However, the most cursory inspection of this definition shows that it is seriously lacking. 'The way we do things here' refers, literally, to behaviour. Certainly, Thor and Fernando had behavioural problems but they were caused by cultural differences, and because the problems were cultural in origin both Fernando and Thor were unaware of their true source.

My definition of culture is simple. Culture is, in general, implicit assumption, in particular, the set of assumptions implicit in behaviour. Thor and Fernando held different assumptions about correct body distance. It was precisely because these were assumptions that neither person was aware of them. And yet these assumptions had the power to create immense behavioural problems. To a large extent, the power of culture is derived from its implicit aspect. In order to change culture, the implicit must be made explicit – and resolved. This is particularly difficult due to the obvious problem of identifying what is implicit in the first place.

HOW CULTURE IS FORMED

How does culture – particularly corporate culture – arise? Let's take a hypothetical example. Imagine a company beginning operations on a greenfield site. It matters not a jot what the company does or where it is. All we need to know is that, each day, people come in to work. Products are made and sold; the company operates in a traditional business manner. Because the company started on a greenfield site, there was no existing tradition, history or culture. All these had to be created. Of the people who came to work on the site, some knew each other previously; many were unacquainted.

Within days of the site opening, quite distinct behavioural norms began to be developed. People called each other Jim or Bella, as distinct from Mr Smith or Mrs Thompson. Generally speaking, people came to work and left on time; punctuality was valued. Meal breaks, however, were rarely adhered to and workers routinely asserted themselves from the shop floor without consulting supervision. From the outset,
production was uneven; there was a pronounced month-end syndrome as people frenetically struggled to catch up on their output targets.

These behavioural norms of formality, punctuality, discipline and output were accompanied by similar norms relating to almost every other type of behaviour. To a certain extent these behavioural norms were specific to particular departments and work groups, but to a large extent they were company-wide. It was frustratingly difficult, for example, for the technical librarians to become known as Mrs Thornton when the managing director was known to all and sundry as plain 'Jim'.

There are two highly interesting points about behavioural norms. The first point is that they arise relatively quickly - in hours and days, rather than weeks or months. The second point is that people are highly aware of them.

Think back to your first days at a new school. You very rapidly (and often painfully) learned specific behavioural norms. You learned - literally - what was expected of you. Graphically, this is depicted by Figure 1. 'If I do this (behaviour), then the consequent effect (result) will follow. I now expect this to happen (expectation).'

![Diagram](#)

**FIGURE 1 THE DEVELOPMENT OF EXPECTATION**

Thus, at our greenfield site, if I start to ask what are regarded as awkward questions (behaviour), social disapproval quickly follows (result). I now expect this to happen (expectation). So I learn not to ask awkward questions. My learning is at the level of expectation. I've learned - quickly and consciously. Ouch!

Now, let's imagine that many months, perhaps even a year, have passed. With each behavioural norm, we have gone through the behaviour/result/expectation loop many times. We now find that a new factor has emerged - one which we call 'attitude'. We may depict this as Figure 2. Whereas expectation formed part of a first order loop, attitude is part of a second order loop.

How then does attitude differ from expectation? Well, let's reconsider the two key points about expectation. Whereas expectation arose relatively quickly (hours/day), attitude took much longer to form (months/years). Whereas we are highly aware of
expectation, we are much less aware of attitude. With attitude, we are starting to take things for granted.

Let’s go back to our greenfield site. Now, many, many years have passed. Everybody has gone through the first-order loop (behaviour/result/expectation) innumerable times. They have also gone through the second-order loop (behaviour/result/attitude) innumerable times. The behaviour which was enshrined in behavioural norms has now become enshrined in attitudinal norms — of which people are but dimly aware.

Without noticing it, another element has emerged. This we call culture. It is illustrated in Figure 3.

How does culture differ from attitude? Again, let’s reconsider the two key points relating to time and awareness. Attitude arose over months/a year, culture arose over many years. And whereas we are dimly aware of attitude, we are almost entirely unaware of culture.

Let’s go back to a piece of original behaviour — the asking of awkward questions. At the expectation level, we were highly aware that we shouldn’t ask them. At the attitude level, we were only dimly aware that we shouldn’t ask them — we just didn’t, that’s all. But at the culture level, it wouldn’t even occur to us to ask awkward questions. We would have implicitly assumed that they should not be asked (as did Thor and Fernando). And if we encountered someone such as a newcomer to the company who did not share our implicit assumptions, we would probably be deeply offended — without quite knowing why.
And those other behavioural norms? Yes, they're all enshrined in our culture. Everybody is routinely called by their first name. (That spook, Mrs. Thompson, never did fit in and left a long time ago.) People come and go according to the clock. Unfortunately, they do little else but clock-watch when they are at work. Meal breaks are never that little bit too short, always that little bit too long. It always takes three girls for one to go to the toilets. These month-end syndromes create output curves steeper than the north face of the Eiger.

And what can be done? Just in and change any of these cultural norms and see what happens — like the twisted Mr. Thompson, you too may find that you're no longer around.
What we have learned so far can be summarized by reference to Table 1.

**TABLE 1  THE DIMENSIONS OF EXPECTATION, ATTITUDE AND CULTURE**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Timescale</th>
<th>Awareness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expectation</td>
<td>Hours/ days</td>
<td>Highly aware</td>
</tr>
<tr>
<td>Attitude</td>
<td>Months/ year</td>
<td>Dimly aware</td>
</tr>
<tr>
<td>Culture</td>
<td>Many years</td>
<td>Unaware</td>
</tr>
</tbody>
</table>

Having defined culture and shown how it arises, we now need to consider the concept of change.

**THE CONCEPT OF CHANGE**

As stated in the Preface, change is simultaneously one of the great themes and clichés of our time. Pick up a newspaper or magazine and you read about change. Switch on the television and you hear about change. But, for me, there is always a little problem associated with change. We use the word all the time without ever thinking about what it means, which is why it’s a cliché. I have never heard anyone successfully define it. Have you?

My chosen profession is management consultancy. Many, if not most, management consultants blandly describe themselves as agents of change, but when I ask them to define what they mean by change, they tend to exhibit one of two reactions. Either they become highly uncomfortable and overtly defensive or they wax lyrically and verbosely on the subject. Both reactions seem very much like avoidance of reality.

Change is an uncomfortable reality – make no mistake about that. For a start, there are no obvious synonyms of change which do justice to the concept. When a word has no obvious synonyms, it is likely that the word is a pivotal concept. This is the case with change. It is a pivotal concept which is greatly misunderstood and which is of immense importance in our world. Let’s take a practical example of change and see whether we can arrive at a sound working definition.

**AN EXAMPLE OF CHANGE**

Nearly everybody has heard of the Leaning Tower of Pisa. Very few of us know who built it or what the circumstances were. Equally few of us have any idea as to why it is
leaning. All we know is that it does lean – and at a considerable angle. In fact, it leans more than any other building we could mention.

Let's assume (and, for all I know, this may be the case) that each year the Leaning Tower of Pisa leans just a little bit more – perhaps a tenth of an inch. The naked eye cannot discern any difference but relevant instrumentation tells us that the angle of tilt has definitely increased this year.

Is this change? Well, we could probably have a lengthy and highly unproductive debate on the subject. A few people might argue that it was change. Most people, I suspect, would say it wasn't.

Now let's take another scenario. The tower is sitting there as before, tilting away much as it has always tilted (oh, all right then, just a little bit more). Is this change? Forget it! Suddenly, out of the dark of night, comes a terrible storm, a storm such as has not been seen before and will not be seen again. The storm strikes the great Tower of Pisa. And, lo and behold, it collapses.

Instantly the Leaning Tower of Pisa is world news. It is flashed on to hundreds of millions of television screens from Seattle to Mongolia. Households in Dingle, in Aix-en-Provence, in Iquitos, are invaded by its image. At the press of a button we learn who built the tower and why it tilted. Histories of the tower are hurriedly reissued; new ones are rushed into print. Soon, it seems, practically everybody on the planet knows about the tower and what has happened.

A DEFINITION OF CHANGE

Is this change? Certainly it is. But why is it change? After all, the tower was already in a state of transition. It was already tilting when the storm struck it.

Clearly, change is about difference, specifically difference through time. For each of the preceding years, the tower was different from the year before. But the difference wasn't significant. Now the difference is significant and so we have what we call change.

Thus a technical definition of change might be significant difference. That certainly works in the example above and, if you think of a few examples yourself, I think you'll find that it works in them too. However, if we left the definition there, we would have missed half of it, and, I believe, the more important half. For which are more important – technical definitions or those which are applicable to our everyday world?

The real power of change is that it is the experience of significant difference. Consider, for a moment, about the feelings of shock, of outrage, of dismay felt by all those people watching their television screens. Before, they hadn't given a thought about the Leaning Tower of Pisa for years; now each of them feels that he or she has personally lost something of value, irrational maybe. But true, none the less.

Think of a change in your own life – the death of a loved one, the end of a relationship. Recall the turmoil in your mind and body. Remember how you weren't yourself, how many weeks and months went by before you really came to terms with it.
These were sad changes, yet you also feel turmoil at happy changes in your life. Remember the terrible excitement as a child when you won a worthwhile prize. Recall the power and intensity of your feelings when your first child was born. Suddenly the world seemed a different place. There were no words which could adequately describe your experience.

Change is the experience of significant difference. It is, above all else, experience. Experiences are personal, individual. My experience of the same event may be wildly different from yours. For example, you may find a radical comedienne deeply offensive, whereas I, with admittedly lower tastes, think she is absolutely hilarious.

Thus, people's responses to what is supposed to be the same change may be very different. For one person, redundancy may be the chance to do what they have always wanted; for many others, it is the entrance ticket to a living hell. It is fatal to assume that people's experiences of the same event are identical. Unfortunately that tends to be exactly what is assumed when it comes to corporate culture change. By denying the validity of personal experience, dragon's teeth are sown. Their bitter harvest is that well-known phenomenon - resistance to change.

But why do organizations need to change at all?

ORGANIZATIONS AS CLOSED SYSTEMS

A useful approach to organizations is to consider them as closed systems. This approach applies to all organizations whether private companies, public bureaucracies, profit making or non-profit making. This approach is shown in Figure 4.

![Figure 4: An Organizational Closed System](image-url)
The example shown in Figure 4 obviously relates to a profit-making organization. Here the goal of the company is to use money to make more money. The initial investment is converted into factors of production, specific inputs, such as raw materials. These inputs are then transformed into outputs which are worth more, i.e. *value has been added* as, for instance, when raw materials become finished goods. Obviously the goods have to be sold so, even in the closed system, there is life beyond the factory. In the past, however, particularly in niche markets with a few favoured customers, this model of a company was a fairly accurate one. There was a comforting sense of security amid the workforce. You knew what your company stood for, and why you were there. You were a shipbuilder, an airline worker, a baker. Working life may not have been easy (it rarely is) but at least the parameters were known. For many people in many industries life simply went on as before. Next year would be similar to last year and change was for someone else.

The model is as easily applicable to the public sector as it is to the private sector. Here though, the simple goal of using money to make more money would probably be unsuitable. Instead, the process of transformation would most likely be one of *added social value* such as helping drug users to change their habits for more productive and happier lives.

A closed system model of an organization is simple, rational and highly useful. However, it is also utterly inadequate. It is inadequate because the workings of a modern organization are not self-contained in the way that the workings of a central heating system are self-contained. They are not sealed. They interact with the outside world.

Thus we need to consider organizations in terms of open systems. This approach is shown in Figure 5.

Ironically, the open systems view of organizations encompasses the closed system view. As before, the company is transforming inputs into outputs at an operational level but, at a strategic level, the organization is merely one planet among many in a potentially vast universe. In this universe, however, the planets are free to interact with each other.

This may sound terribly theoretical, yet several years ago, a then household name British airline was hit in the same year by three separate global disasters, none of which it had anticipated. First it lost money in Africa. Second it was adversely affected by currency exchange rates, and third the Chernobyl disaster removed its transatlantic tourist trade. Lady Bracknell memorably remarked that, while to lose one parent could be regarded as a misfortune, to lose both looked like carelessness. Similarly very few organizations are prepared to regard themselves in terms of open systems and ask such anxiety-provoking questions as ‘Our business depends upon factors X, Y and Z. What could affect these factors, when, how and by how much? What would we do then? What could we do now, to avoid such situations in the first place?’ To ignore strategy is to be a gambler. The abovesaid airline, sadly, was weakened, taken over and lost its distinctive identity. Many of its employees, whom I had known and liked, lost their jobs.
FIGURE 5 ORGANIZATIONS AS OPEN SYSTEMS

Similarly, the company secretary of a leading British printing concern was settling down to his coffee one morning several years ago, when his equanimity was disturbed by the brusque intrusion of an unexpected visitor.

‘Look here, I’m terribly sorry to barge in on you like this,’ the newcomer began, civilly enough. ‘I know we’ve not met, but ... my company’s just put in a bid for yours.’
With that, he pushed some documentation into the startled executive’s hand and departed whence he came.

Thus started one of the most bitter takeover battles in British industrial history. All the more surprising then that the name of the aggressor company (a bitter rival) was totally unknown to the company secretary. Ignore open systems for long enough and you too will become history.

And yet people do ignore open systems – and for compelling reasons. For a start, most of the workforce (managers included) spend much of their working lives deep within closed systems, concerned with the problems of their department, their work group, their shift, their little part of the factory. And to hell with the rest!

While one might wish that each member of an organization would be concerned with the greater good of the organization, in reality, considerable sub-optimization usually happens. At director level, the break between closed and open systems is supposed to occur, directors being specifically charged with the greater good of the organization. How many directors truly fulfill this role? In my experience, very, very few. Most operate as glorified department heads. After all, their departments (and the closed system) are where they have come from. Also, many managers operate at one or more levels below their supposed capacity, i.e. they continue to do what they were once good at. At managing director/chairman level, the situation is usually rather better. Nevertheless it is tempting easy to be dragged down to an operational level (closed system) rather than remain at a strategic level (open system). Even when chairmen and managing directors are alert, to make progress requires alertness on a team basis rather than an individual one.

A classic way to analyse a company is in terms of a SWOT (Strengths/Weaknesses/Opportunities/Threats) analysis. Strengths and weaknesses belong to the organization itself, the closed system; opportunities and threats belong to the environment, the open system. The promise of the open system is that the greatest chances for success will come from it; the downside is that from the same open system will come unseen, unsuspected forces which, if undetected for long enough, will put you out of business.

People ignore the open system because they were brought up in the closed system. They continue to ignore the open system because their power base is in the closed system. They also ignore the open system because it requires the creativity of divergent thinking – and most managers are sharply convergent thinkers. They ignore the open system because time spent ‘just thinking’ is difficult to justify to themselves and others. And, most of all, they ignore the open system because it is so frightening.

It’s frightening to realize that you’re just one tiny planet in a vast universe, which most of the time, looks as if it’s trying to punish you personally. It’s frightening to know that, much as you might like to, you have little control over events in that universe. It’s frightening to feel that somewhere out there, beyond your ken, hostile powers are watching your every move while plotting their own.

It is a strange fact of life that opportunities in the open system are far outweighed by threats. Many of the examples given above of open system elements such as...
legislation, pressure groups and terrorism, are rarely revenue generating. Usually they consume revenue. However, if you ignore them, you’re not being a gambler (which is what all true businesspeople are), you’re being a punter. Sooner or later, your time too will be up.

Corporate heads often become fixated on one or two elements of the open system, to the detriment of others. In recent years, we have seen considerable attention paid to elements such as quality and environmentalism by companies who formerly couldn’t give a damn about either. The more your attention span is filled, the greater the blind spot being developed and that blind spot is potentially fatal.

While all companies inhabit a global village which is itself part of a greater open system, what matters for each company is that it identifies its personal open system. Each personal open system will be as unique as an individual’s fingerprint or genetic code. This is why corporate success factors need to be individually determined.

The hard part of strategic analysis lies in the identification of which elements of the open system are truly significant. This is a slippery business which is all too easy to misjudge. But, if the assessment is correct and the truly significant elements have been identified, then the easy part of change management is over. Each significant element in the open system is an equally significant imperative for change.

We can now return to our original question and answer it. Organizations need to change because elements in the open system force them to change – or else play Russian roulette.

THE LEAD TIME OF CULTURE CHANGE

We defined change as ‘the experience of significant difference’. Strategic analysis is not change management. Change cannot be achieved by merely talking about it any more than oral sex is talking about sex. Thus the vital ingredient of change is action. Without action, there is no change. Without sustained action, there is no sustainable change. Without action which is progress, there is no worthwhile change. These are simple truths which many ignore.

A useful model of organization which neatly dovetails with the systems models is shown in Figure 5. The operational level encompasses all of an organization’s operations, not just production, i.e. marketing, technical, finance, etc. – whatever people work at. In a private sector company, this level is engaged in wealth creation. In fact, only a subset of that level – direct labour – is making money. The rest of us are overheads. That doesn’t matter as long as we genuinely earn our keep. If we do not genuinely earn our keep then it does matter, for we are being kept by our fellow-workers and/or our customers. Inevitably, this applies to the next two levels which are also overheads.

The organizational level encompasses all managers from frontline supervisor to department head. Their collective role is to manage the closed system.
The strategic level is, in the private sector, company directors, managing directors and company chairmen, together with certain of their advisers. Their collective role is to balance the closed system with the open system so that continued profitability is achieved.

Let’s imagine that a particular element in the open system is acting as an imperative for change. For example, due to deregulation, a company has lost its favoured niche market status. The good days are over. Now it must dramatically improve efficiency to survive.

The company will probably have to decrease overheads and increase productivity throughout the closed system. Without strong leadership from the top, it may well do neither. Instead, people may talk about change rather than make it. This is a classic first line of defence.

However, if strong leadership from the top exists, there is a strategic choice of change implementation. Should it be top-down or bottom-up? If it’s top-down then like trickle-down economics, what trickles down into operational benefit is likely to be scanty. If it’s bottom-up, then it is usually comparatively easy to achieve, or appear to achieve, operational change at or around the shop floor where people are conditioned to do what they’re told. But change here is apt to be short-lived. It is often frustrated by the organizational level, which typically feels that it is under fire from above and below.

In enabling change to happen, the vital skills, as many functional specialists can tell, are organizational, not operational. Top-down change will be obviated and organization bottom-up change will be stifled by it. The most enthusiastic pushing

![Diagram: Levels of Organization]

**Figure 6: Levels of Organization**
circle, team leaders become the most disillusioned when they progress from minor operational change to more significant operational changes which affect the organizational level. Ouch! Those glass ceilings really hurt!

At a conscious level, people in organizations act to retain the status quo and thus avoid change; at an unconscious cultural level, they also do so. The unconscious level is, by far, the more powerful. At the conscious level, people are protecting rational interests like status and job security; at the unconscious level, they are protecting their psyches. People will die to protect their psyches.

Remember our fictitious organization, the one in which behaviour and results began expectation, attitude and culture: Corporate change, if it is to mean anything of value, must involve sustained action, i.e. altered behaviour and results. The whole point of change is to achieve progress, i.e. better results. As Marlene Dietrich remarked to Ernest Hemingway, ‘Never confuse action with progress.’

The problem is that when you try to change behaviour to obtain different results, it seems that the entire culture acts to frustrate your efforts. People who have been in this situation will readily testify to the mind-numbing qualities of frustration which lie in wait for the inexperienced. You plough on, trying your best to ensure that what you regard as right actually happens. But it’s like floundering in thick mud; with each step taken it seems as if you’ve slipped three-quarters of a step back. The harder you try, the heavier are the forces of inertia against which you have to push. The personal cost in expended energy becomes enormous. Now it’s like swimming the butterfly stroke through treacle. Culture seems to be acting as a vast, ponderous counterweight, making a mockery of all your efforts.

In truth, culture does act as a counterweight which continually operates to keep the organization in a state of equilibrium — the status quo. This makes very good sense. Without this mechanism to protect organizations, they would be in such a state of constant flux that purposeful work or even psychological existence would be impossible. Each novel stimulus would drive them off course.

Have you ever met a person with a butterfly mind, who never seems to start or finish anything? Instead they leap from subject to subject in a constant search for novelty and distraction. After ten minutes with them you feel that you too no longer know what you’re doing. You need to get away from them, sit down and work out what you were supposed to be doing in the first place. Only then do you feel that you’re back on an even keel. Without culture, organizational life would be like that, only worse. It would be a perpetual madhouse. Culture preserves the status quo, psychological and otherwise, and that is an indispensable function.

Inevitably, however, in preserving the status quo, culture acts to negate change. The more one tries to accomplish change the greater the opposing forces of inertia. This will happen partly at a conscious level but to a large extent it will also happen at a subconscious level. And it is the subconscious level which, as the example of Thor and Fernando revealed, has such power.

If an element in the open system is acting as an imperative for change, only when there is a genuine, sustained difference in behaviour and results can change be said to
have occurred. The potentially awesome power of culture will act to frustrate change. And, from whatever direction change comes, the organizational level will almost certainly block progress.

For such an organization, the lead time of cultural change will be all important. This is the time from emergence of the force for change in the environment through to detection and successful implementation of new behaviour and results. If this lead time is too long then the organization is in trouble. If the change is vital, the organization may not survive.

WAYS OF ATTEMPTING TO BRING ABOUT CHANGE

There are three traditional ways of attempting to bring about change:

- Rational discussion
- Power
- Hearts and minds

Their respective strengths and weaknesses will be examined in turn.

RATIONAL DISCUSSION

If there is an imperative for change and the organization needs to respond then surely there will be a valid, rational argument for change? Why not communicate this argument, formulate suitable plans and then implement them? Change will occur.

This may be what should happen but in practice it never does happen – at work or elsewhere. Think of the last time you persuaded your partner or children to change after exposure to your oh, so rational arguments? Think of the last time you permanently lost weight, drank less and exercised because there was a good reason, a rational argument for so doing?

At work, rational argument for change usually ignores two key factors. One factor, politics, is at least semi-conscious and thus semi-visible (although beware being too sure of yourself here, lest you share the fate of Caesar). Always there will be a political status quo of vested interest. Somebody’s power and status will be threatened as, for instance, when operational power is devolved to the shop floor. Potentially worse, differentials may be threatened. (‘If you’ve made them stronger and we’re unchanged, then we’re weaker.’ Well, relatively... But, for many people, differentials are more important than absolutes.) Political interest operates on a rather different level from rational discussion. Rational discussion may elicit what appears to be best for the company. Political interest deals with what you and I selfishly perceive to be best for us. Our perceptions may be quite misguided. I may be utterly incompetent and a liability to the company. My political views may suffer from short-termism, and self-preservation, yours may be no better. Acquiring what we want may involve illegal
disadvantages for other colleagues and work groups. So what? As long as our best interests are served...

Organizational policies, which is inevitable and omnipresent, is power without responsibility, the prerogative of the harlot. Whatever else it does, it does not add value. Unless managed, it will effortlessly block, side, circumvent, or negate rational discussion.

The other factor, if it were needed, which has the power to reduce rational discussion to mush is culture. Culture acts to preserve psychological survival via maintenance of the status quo and thus, regardless of whether the proposed change is good or bad, culture will automatically seek to negate it. Because culture is largely unconscious and unseen, most people don’t, as with politics, have to choose sides; they are automatically on the opposing side.

Change via rational discussion? Forget it! The chance would be a fine thing. Try again.

POWER

Few of us are megalomaniacs who enjoy wielding power for the sheer fun of it. Most of us expect to achieve what we want through providing good reasons why we should have it, i.e. rational discussion. But, if rational discussion doesn’t do the trick, what then?

This situation is particularly applicable to people brought in to change companies and other organizations. If they have had previous experience of change management then, if nothing else, they will know that rational discussion will not of itself work. There is an almost overwhelming temptation simply to use power. This can vary from the strikingly unsophisticated autocratic management which formerly characterized British management to ‘the honey tongue and weasel words’ which a client of mine once mentioned. (I’m sure he was referring to somebody else!)

Once more, however, the twin devils of politics and culture turn up irritatingly to frustrate. Power certainly carries more political clout than rationality. (It should do, as attainment of power is the aim of politics.) However, many chief executives have discovered to their horror that supposedly absolute power seems to enable them to achieve absolutely nothing of value.

This is unsurprising. Although a new chief executive may have considerable authority (legitimate power), other people in the organization may have far more clout in practice. Worse, in collusion, the synergy of other people’s power may far outweigh that of the new chief executive. After all, they have had years in which to undertake their horse-trading, forge their alliances and form their power blocs. However talented, the new entrant is probably stepping into an established situation about which everyone else knows, but of which he or she is ignorant. And, of course, any battles will be conducted on their home turf.

Even in highly autocratic situations, the chief executive’s authority may be insufficient. The colonial district commissioner often found that his godlike authority was no
match for the wily natives. The prison governor of today may find, to his or her
chagrin, that a particular inmate holds the aces in what is supposed to be the govern-
or's prison.

Lacking an equivalent power base, the agent of change will often be struggling. The
longer the honeymoon period, the greater the chance that she or he may be co-opted,
made to go native, or shown up as incompetent and thus fit only for removal. Beware
honeymoon periods! Time is on the side of the natives, or at least they will so assume.
Therefore why provoke a conflict; why refuse to do your bidding? They don't need to
say no; they can get away quite nicely with saying yes and making damn sure it never
happens.

One of the classic ways of ensuring that what should happen doesn't is the with-
holding of information. Another client of mine once remarked, 'The whole manage-
ment structure in this company acts as a giant, inverted sieve. It's got only one
purpose—to filter out information and make sure it never reaches Bob. He thinks he
knows what's going on but he doesn't know the half of it.' (Sad to say, my client occu-
pied a key position in this very structure.)

Without information, it is impossible for a chief executive to find out what's happen-
ing. Equally, being swamped in routine information (another popular ploy) has the
same effect. What our incumbent chief executive desperately needs is management
control information, as distinct from mere management information.

The terms MCS (Management Control Systems) and MIS (Management Information
Systems) tend to be used interchangeably. Not surprisingly, much confusion ensues
and thus it is worth dwelling upon the difference between the two.

As noted earlier, all organizations exist to sustain operations which cannot be
sustained by an individual. All operations can be characterized by closed system ac-
tivity. Thus all operations are processes of conversion of inputs to outputs. This was first
shown in Figure 4. An abbreviated form is shown in Figure 7.

\[
\begin{array}{ccc}
  & \text{INPUT} & \rightarrow \text{PROCESS} \rightarrow \text{OUTPUT} \\
\end{array}
\]

**FIGURE 7  MANAGEMENT INFORMATION SYSTEMS**

Anyone who has performed clerical work in an office will testify to the vast amount
of documentation that most organizations seemingly need in order to conduct their
business. Jokes are routinely made about cutting down Amazonian rainforest. Usually
there is a partly manual, largely automated paper trail from first input to final output.
This is a management information system. Although it stretches from first input to final output, most of it will, in practice, deal with minute subdivisions of the process. As such, although it may be interesting to someone involved in such a subdivision, it tends to be uninteresting to anyone else. It's the sort of information which, when it spews out of the computer and lands on your desk (because, through status, you're on a circulation list), prompts the reaction, 'So what?' To the chap in the subdivision, it's information; to you, it's data — boring data at that.

The situation in Figure 8, however, is somewhat different. This tells us rather different stories. If the input is time, it tells us how many widgets were made in a shift, how many orders were despatched on schedule, how many customers have paid within the agreed credit period. The press of a button can give us the converse — how many (and what proportion) of widgets are we behind on, how many (and what proportion) of orders were despatched late, how many (and what proportion) of customers are tardy in paying.

\[
\text{Operational index} = \frac{\text{OUTPUT}}{\text{INPUT}}
\]

**FIGURE 8 MANAGEMENT CONTROL SYSTEMS**

Inspection of other outputs against inputs may reveal actual spend compared with budget (thus prompting investigation of variance), actual sales versus planned sales, and yearly return on capital versus target. Here we are obviously comparing actual results with planned results.

Management information is data to the non-specialist — boring data to be passively recorded. Management control information, however, always prompts — or should prompt — a decision. Are people satisfied with a particular situation? If not, what are they going to do about it? Management control information is the precursor to management decision and resulting action.

Usually organizations have a mixture of MIS and MCS. Almost always this leads to overproduction of MIS and gaps in the MCS. Thus, as a manager, I may receive volumes of outputs of MIS which I do not need and yet ironically fail to receive the relatively few MCS operational indices which I do need.

MCS operates at a higher order level than MIS. Whereas MIS only provides information to the specialist, MCS gives information to everyone. It is imperative that people receive MCS. It is also imperative that MCS is a true system, holistically encompassing every part of an organization, from bottom to top. MCS architecture can look formidable. In essence, what it seeks to do can be shown in Figure 9.

Interposing MCS between behaviour and results in an organization is one of only two ways to determine what is really going on. The other way is physically to go out
and see for yourself. Complete understanding is only possible with personal experience of what is happening with the process, allied to possession of MCS operational indices of output/input. Figure 10 illustrates this fact.

Unfortunately, a chief executive or any other newcomer will find it difficult to discover what is happening in an organization through personal experience. Simple logistics dictate otherwise. After all, they are but one among very many. Indeed and in practice, they will be forced into the alternative - numerical information.

Management control systems will therefore need to be interspersed between behaviour and results at an operational level in the company. All problems can be solved except those which suffer from data unreliability. The integrity of the numerical information
FIGURE 10  COMPLETE UNDERSTANDING OF A PROCESS

needs to be validated against relevant experience. On Shift 3, for example, the figures say we made X with Y and achieved a performance rating of Z. Is this what actually happened? If not, then what did happen, and why did it happen, and how was something else reported? If it did happen, then was it as good or as bad a result as the numbers suggest? Should X, Y or Z have been higher or lower? What were the real problems? How were they dealt with?

Installing management control systems is the best way that I know of getting a grip on what is happening in a company. However, there are two caveats. Initially, systems will inevitably suffer from data unreliability. It is also essential to consider the way in which they are introduced - for this is a change in itself. If they are forced into place, they will be resented, strenuously opposed and will require rigorous policing to keep them intact. This is hardly a sound state of affairs. The prevailing management style cannot then be other than autocratic and people will become obsessive about covering up real or imagined mistakes.

If management control systems are developed by the users instead of foisted upon them, a different story will ensue. But this requires an incoming change agent to display trust in people, which few do.

The physicist Heisenberg noted that we affect what we study. In creating systems to find out what is occurring, we run the risk of causing immense resistance. This resistance will inhibit future change. The organization's flexibility in response to its environment will thus be severely diminished. Is that what we really want?

So, without information, we don't know what is really happening. Therefore we cannot make a proper assessment. In order to obtain information we have to assemble a management control system and in so doing we shall be heading straight into change - without assessment. A damned if you do it, damned if you don't situation.

Because culture acts to preserve the status quo, arrivals are often viewed as culture smashers. They are then sternly resisted by culture defenders. Stereotypical accusations will flow. These people aren't living in the real world'; 'What does she know about running a television station?'; 'He's just a glorified accountant'; 'Cost savings must be made'; 'Quality... what do those people care about quality?' The situation is shown in Figure 11.
In no way do I wish to suggest that it is impossible to create change through the deployment of power. It is possible to create change through power, as the experiences of many organizations will testify. The catch is this: because resistance to change will be at its maximum, it is highly likely that the change which comes about will not be the change which you want, and/or the side-effects will be adverse. The organization may have been 'restructured' but your workforce may be thoroughly demoralized. Costs may be cut but so may initiative. Procedures may be in place but people may not give a damn about them.

In recessionary times, power-driven change is much in vogue and people accept it because they have mouths to feed and mortgages to pay. When they can vote with their feet, they will. Psychologically, they have probably already voted with their feet. You’ve lost them and they won’t be back. Power-driven change rarely works.

HEARTS AND MINDS

We have good reasons for change. We know that rational discussion will not achieve it. We also know that power is apt to give rise to unpleasant side-effects. So we have to win people over – persuade them of our point of view.

This is how programmes of education begin. Employees whose exposure to management communication has hitherto been scanty are invited to communication sessions, briefings, seminars, workshops. The list seems endless, and it is. This is communication with a capital C. However, there’s also a small c – a catch. People are not merely being invited to attend these sessions, they’re expected to attend. We beg them if they do not. The invisible hand of power is still present but in a covert form. Instead of being told ‘Do this’, the message now is ‘Come to my seminar’.

People are not fools. They may sometimes behave like fools, but believe me, they are not. They’ll come to your seminar if they think they stand to gain and they’ll listen to you if they think you’re being honest with them. Otherwise – forget it.

If you set out to win people’s hearts and minds, there are only two routes. The first is manipulation and, sadly, that is the route most frequently chosen. People will do i
be aware of it although, for personal protection, many will accept a temporary degree of self-illusion. Few will be convinced. Certainly, the Korean War demonstrated that people could be 're-educated' through brainwashing. Brainwashing, however, is scarcely a viable option in modern organizations.

The other way to win people's hearts and minds is for them to be freely given. This is genuine leadership. While leadership is often treated as a Holy Grail of management, few professional managers display convincing powers of leadership – at least the charismatic type of leadership which is necessary for people to give freely of their hearts and minds. Ironically, some unmitigated scoundrels display formidable levels of charismatic leadership. Well, at least they're human.

It's not impossible to win people's hearts and minds but true industrial leaders are few and far between. The forces of culture which shape our expectations and attitudes, which affect our conscious and unconscious minds, may be susceptible to an individual's leadership. It is, however, a slender chance.

WAYS OF ATTEMPTING TO BRING ABOUT CHANGE: AN ASSESSMENT

The three most widely used methods of attempting to bring about change all have serious limitations. Rational discussion will rarely get very far. The winning of hearts and minds is only possible for the very few. The use of power will, almost inevitably, create undesirable side-effects. In addition, there is no guarantee that the changes which result are those which were originally envisaged.

By this point, it is probably impossible not to feel considerable discouragement. Many management books seem to suggest that there is an easy way to achieve results; this book emphatically does not. Rather, it suggests that there is no easy way for organizational culture to change. The sheer power of culture as a counterbalance against change is one opposing factor. There is another: too often, when we consider organizations, we view them in a way which is partly appropriate – and largely inappropriate.

THE SOCIAL REALITY OF ORGANIZATIONS

Sit down with any chief executive to discuss their organization and, sooner or later, she or he will pick up the telephone and ask their secretary to bring in a copy of the family tree – the organization chart. The top layer of a typical organization chart is shown in Figure 12.

Organization charts look reassuringly logical and sensible. If there is one word which, more than any other, sums up the attributes of an organization chart it is the word 'rational'.

What the chart does is split the organization into parts and arrange them in a linear hierarchy. It is thus a reductionist device which views the whole as the sum of its parts.
Naturally, organizations cannot be left to operate as vast amorphous masses, they need to be split into parts — usually in terms of function, occasionally in terms of product groupings.

But there are at least two dangers. The first is that, when you split an organization into parts, there are inevitable frictional differences between these parts. The potential for conflict is always present. It is like dividing a country into a number of constituent states. As many members of organizations will testify, the ‘them and us’ battles which ensue can be particularly bloody.

The first difficulty with differentiation — splitting an organization into its constituent parts — is therefore integration. Often, the parts stubbornly refuse to fit neatly together. This is puzzling. We nervously laugh it off with phrases like ‘Well, that’s people for you’, but it’s still puzzling because the family tree — the organization chart — looks eminently rational. It explodes an organization into its parts, much as an engineering drawing explodes an internal combustion engine or a grandfather clock into parts and they certainly fit back together again with few problems of integration.

Let’s imagine that we have a company, say a manufacturing site in the Midlands, split into the functional areas shown in Figure 12. Let’s further imagine that the site is neatly divided into five geographical areas, each corresponding to a functional discipline. Suppose we colour code — one colour per function/geographical area. Finance is yellow, technical is green, marketing is blue, production is beige and personnel is pink. If we look at a model of the site, it is nicely subdivided into constituent coloured areas.

Now let’s imagine that we have a computer graphics package which shows the site in terms of the colours which are present. Thus, when people come into work in the morning, production fills up with beige, as the early shift gets under way. Next there is a single speck of green in the technical area, the technical director comes in early. Soon, he’s joined by three of his project engineers — more green. By half past eight, almost all of the functions/areas are glowing with their constituent colours.
With our package, each time a person from one function interacts with a person from another function, one colour is superimposed on another. Thus, when the sales manager talks with the production controller about disrupting his schedule to expedite a special, we have blue on beige. When the personnel officer meets with a works accountant to query an employee's tax coding, we have pink on yellow. An interdisciplinary quality circle has beige, green, blue and yellow— all superimposed.

At half past eight, our model of the factory will look like a coloured version of the organization chart. But by nine o'clock, the colours will have begun to run. By twenty to ten, the running will be pronounced. By half past eleven our graphics model of the organization will be unrecognizable from the half-past-eight model. Instead of neatly colour-coded functions, we will have a horrid mess of colours running into each other. Hundreds of interactions will have taken place. Deals will have been agreed, alliances formed, rumours invented, prized titbits of gossip exchanged. To chart these interactions behaviourally would be a task of extreme complexity. And, remember, this is only three hours in the life of an average organization.

So the second difficulty with our organization chart is that the very way in which we view organizations is partly appropriate and partly inappropriate. Certainly, we have to divide them into parts. There is no question about that. And it is easier to split them up than to put the pieces back together into an integrated whole which is working to the same end. At the superficial level of the organization chart, everything appears rational, like an engineering diagram of the interior of a grandfather clock. But the important difference is that the parts of a grandfather clock make relatively few, distinctly rational, interactions with other parts. The parts of an organization—people—interact with each other on a frequent if not intermittent basis which may be spontaneous, even random. At an organizational level, it seems the very opposite of rational.

Of course, at an individual level, there are always motives behind our actions. For example, there was a definite reason for that quality group meeting—to reduce scrap in metalwork. But Jane and Geoffrey enjoy flirting with each other as much as they like discussing the introduction of merit pay. And Charlie and Will have an understanding which comes from being members of the same Lodge. Phil and Arthur are on the committee of the local pigeon fanciers club. Dorothy and Peter have common academic contacts from their respective MBA days. Eddie, Henry and George used to work for an engineering firm in Wolverhampton. Jimmy, Fred, Agnes and Billy never forget when they used to work down at 'the substation'. 'You couldn't believe what it was like in the winter. The drips on the end of your nose would freeze solid,' Billy still claims.

So the formal groupings of the organization chart do not take account of the informal groupings which always exist. The informal groupings, based upon shared meanings, rituals and values, are highly tribal and therefore powerful. We rarely take them into account. The complexity of these psychological networks is frightening.

This then is the social reality of life within any company or organization. Please note that I am not employing any supposedly arcane sociological devices. I am merely describing what really happens. Anyone who has worked in an organization will agree that my description is accurate.
An organization is not a piece of machinery to be taken apart and put together again. It does not have a culture which requires merely a few pokes with a screwdriver and a quick test with a micrometer screw gauge. It does have functional realities such as production which are supposedly rational but it also has social realities which are far less susceptible to rational understanding. Neither are they irrational although at times they may seem so. They might more properly be described as arational - not susceptible to conventional rational analysis and certainly not irrational. The true reasons behind social realities often remain frustratingly elusive. Jane, Charlie, Dorothy, Fred and Billy are understandable individually and collectively, but probably only by someone who can combine in-depth knowledge of social science with considerable understanding of the world. Is it necessary to understand this famous five? Yes - if they're part of a caucus which will act to ensure that your carefully drafted plans for change end up where they are deemed rightfully to belong - in the dustbin.

THE STAGES OF ORGANIZATIONAL LIFE

We have considered organizations in terms of open and closed systems. In terms of open systems, they must maintain a dynamic balance with their environment. In terms of closed systems, they must win the war of added value in transforming raw inputs into coveted outputs. Very often, in order to maintain the correct dynamic balance, they must react to forces for change in the environment. As we have seen, this is no easy business, for the culture will tend to act as a vast counterbalancing mechanism. But organizations can face forces for change from within as well as from outside. One of the greatest potential forces for change is size itself.

Let's imagine an organization starting up. What do we need? The very least that we need is an entrepreneur. Let's imagine we have such an entrepreneur. He works in conventional employment but he has spied (he thinks) a market niche. In this case, his market niche is making and fitting window blinds to order. So he moonlights. He obtains orders from housewives, makes the blinds himself in a rented garage which he uses as a workshop, and also fits them himself. He keeps his own books and he uses an old van for sales visits and delivery of raw materials and finished goods. So far so good.

A couple of years pass. The business is thriving. A market niche has been identified and is being exploited. Our entrepreneur is now working full time. His wife does the books, his father-in-law makes the blinds along with two lads, one of whom is a nephew. Our entrepreneur is sales- and customer-oriented, so he continues to deal with the housewives. He procures orders and he installs the blinds.

Five years later, there are eighty people operating from new premises in a development area. The business is now a limited company, with four directors; all started out on the shop floor.

This is a typical example of a pioneer company. Our pioneer is a man or a woman with a vision. In this case, the vision is to become the best blindmaker in Europe. The
Marks & Spencer of blinds' as the pioneer puts it. Managers are jack of all trades. There is no nonsense about professional managers, all are prepared to pitch in and make blinds when necessary. Management control is interpersonal, because there are only a few managers, everyone knows who is pulling their weight and who isn't. Slackers get short shrift, for the business cannot afford slackers. So, in practice, management control is via either trust or fear. It's a web. At the centre of the web is the pioneer. Members of the web or inner circle are likely to be family or friends - people who knew the pioneer in his early days and were induced or cajoled into the business.

The pioneer organization is relatively simple with few overheads. Its strength is in its operational flexibility. It can rapidly change direction in response to market demand. Pioneer organizations can turn around much faster than General Motors. Also, there is a sense of life, of emotion about the business, sometimes even of passion - the passion of dreams which come true.

Of course, pioneer organizations have drawbacks. They cannot afford mistakes, so control is autocratic. Beware the fate of those who fall foul of pioneers! Thin-skinned souls may leave, preferring to work in less of a madhouse. The pioneer may, in Huxleyan manner, drive the whole organization to ruin when stubbornness becomes obsession. There are no capital reserves and therefore one mistake may leave you in trouble with the banks. Two mistakes and it's serious trouble. Three mistakes and it's all over.

The sober fact is that most pioneer organizations fail. There is a legion of individual reasons - overrating, bad timing, poor cost control, lost contracts. Capital would have given them another chance, but pioneer businesses are usually starved of capital.

Let's assume an organization has survived to the next stage. We now have a brickworks with two hundred and eighty people on the same site. Now there are fifteen managers - not four. The role has become more important than the job holder. What this means is that the present production director will tend to act in the same way as the previous production director. Neither will go what old Joe, the original production director, did during the good old pioneer days. The era of the professional manager has arrived.

Management is now by memo (far too many of 'em' say the old timers). There are computer-printed production schedules where there used to be the backs of envelopes. There are rules and regulations and procedures. Above all, there are systems. It is for this reason that the second stage of organizational life is called the systems stage.

Systems are needed because the business is now of such a size that, without systems, chaos will result. The character of a systems organization is dissimilar to a pioneer organization. It is not just that the business has quantitatively changed, has merely got bigger. It has qualitatively changed also. There is less emotion and more reasoned argument. There is less fun but also less terror. In a pioneer organization, everybody came to know each other. In a systems organization, this is rarely possible.
Where is the point of transition between a pioneer organization and a systems organization? One cannot specify in terms of turnover because different industries have different levels of turnover, but because there is no turnover of people. A one-man company, for instance, a company that has one person, can have a turnover of several millions — the same as an eighty-person manufacturing plant. But, very roughly speaking, when sales between one hundred and one thousand and fifty people, an organization tends to enter the systems phase.

Whereas in the pioneer phase managers stuck to the same company, if not the same industry, in the systems phase there is a much greater degree of managerial mobility. For instance, the production director of our brick works was once the general manager of a foundry. The personnel officer (we never needed them before!) has experience of local government and the Milk Marketing Board. The freelance PR consultant who contracts to do eight days' work a year has dozens of other clients, spread across the industrial and commercial spectrum.

The systems organization is a much less parochial and insular place than the pioneer organization. This may be both good and bad. Before there was no doubt that people's loyalties lay with the company, if not with the founder personally. Now their loyalties may primarily be to their professions if not themselves. They are more likely to think, 'I'm a management accountant, first and foremost,' rather than, 'I'm a brickworks man, first and foremost.'

With the systems phase, we leave good old 'seat of the pants' management behind and enter a world where power belongs to the role ('the sales manager'), not the job holder (Fred). Rationality has replaced emotion. The headiness of organizational youth has been replaced by sober middle age. Each day, life, slowly, imperceptibly, begins to resemble a bureaucracy.

With the next stage of organizational life — the integrated phase — bureaucracy has firmly arrived. Now we have, for example, a large financial services company, a household name, operating out of a prominent British town which it dominates. Like Ancient Rome, it has an empire of colonies (in this case, subsidiaries) and outposts (branch offices). Again, like Ancient Rome, it has an emperor, senators, acolytes, courtiers and, yes, courtesans also.

Our integrated organization is a leading national company, a utility, a public sector domain. It employs thousands if not tens of thousands of workers. Now authority is almost entirely vested in role. The senators, inside their organization, appear omnipotent. Outside their organization they are grey men in grey suits. Organizational old age is near at hand; the pension schemes can be fabulous.

These three stages of organizational life are shown in Figure 13. Some typical characteristics of these three stages are shown in Table 2.

Obviously all organizations do not fit neatly into this model. Models, as tentative maps of reality, are useful up to a point. At the point where we begin perceptually to distort reality to fit the maps, they become counterproductive. However, these three stages of organizational life, like Shakespeare's seven ages of man, are general. It will
FIGURE 13 THE STAGES OF ORGANIZATIONAL LIFE

be surprising if there is not a significant degree of fit between your organization and one of these three life stages.

The point of this seeming digression into organizational growth is that, although imperatives for change will wing their way in from the environment, many organizations already face one of two possible crises of transition. When such transition is badly managed (and it usually is), the organization will be gravely weakened in the face of external threats.

The first crisis of transition is the change from pioneer to systems organization. Very often, this will have been delayed for many years because of a pioneer refusing to retire. It is easy to be disparaging about pioneers, forgetting that, without pioneers, we

TABLE 2 CHARACTERISTICS OF ORGANIZATIONAL LIFE

<table>
<thead>
<tr>
<th>Stage</th>
<th>Management</th>
<th>Control</th>
<th>Motivation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pioneer</td>
<td>Ad hoc</td>
<td>Interpersonal</td>
<td>Entrepreneurial</td>
</tr>
<tr>
<td></td>
<td>Home grown</td>
<td>(Trust/Peer)</td>
<td></td>
</tr>
<tr>
<td>Systems</td>
<td>Professional</td>
<td>Systems and procedures</td>
<td>Job satisfaction/ Security</td>
</tr>
<tr>
<td>Integrated</td>
<td>Bureaucratic</td>
<td>Committee</td>
<td>Political</td>
</tr>
</tbody>
</table>
would still be living in caves. Their followers, rough diamonds many of them, would be
loyal to their leader, would call it by name. But an organization which, by virtue of size or complexity, belongs in the systems phase, yet is staffed by pioneers, is an organization which will have acute problems of change. There will be a pronounced culture lag between business needs and people's values. There will be a culture of accountability. There will be an atmosphere of smooth execution. In short, there will be rowdy adolescence where there needs to be responsible adulthood. Changing from pioneer to systems is a difficult task. The substance of the enterprise must alter and the spirit must be transformed, not stifled. Culture change must come about through delicacy and skill — not common brutality.

Often, a company's triumphant entrance into the systems phase is entry to a killing ground. Pioneer companies often have enviable flexibility. Markets change; they can change. Integrated organizations act to dominate the infrastructure and guarantee their continued existence by political means — PR, pressure groups, trade associations, etc. Systems organizations are too big to be small and too small to be big. With contracting markets and fewer players, the choice may be stark: gobble up smaller fry or be swallowed up yourself.

Integrated organizations, like empires of old, are apt to sink under the collective weight of their own inertia. There are too many bright young things, too many MBAs, too many task forces, working parties, committee meetings. Above all, there are too many meetings. Panel interviews mean that we recruit people like us and promote only those whom we deem to be 'a safe pair of hands'. Is it really any wonder that we end up with people who are disparagingly referred to as 'empty suits'?

As the great oligopolies of yesterday fray and tear at the edges, there is a remorseless trend towards decentralization. The talk now is of devolving into business units, of a leaner, meaner head office, with fewer managerial layers and fewer divisions. (The not so secret agenda here is reduced overhead. Unless the organization sheds weight, it will go the way of the dinosaurs.)

Devolution into business units certainly seems to make sense. A site with three hundred people is apt to have much more flexibility than a site with fifteen hundred people. It can be more customer focused, perhaps even as customer focused as the pioneer organizations against which it may be competing. Unlike them, it has a corporate umbrella, is known to the public and has cachet. As a customer, you may be paying a little more, but you are probably receiving a much higher level of professionalism. Business units, as parts of integrated organizations, do not fly by the seat of their pants. They have systems; they also have flexibility.

In many ways, the truly devolved business unit is ideal for business effectiveness and managerial satisfaction. The joy of being a manager is freedom multiplied by resources. If I work for a vast monolith which is not properly devolved, then I may have a budget of millions yet very little freedom in how I can use it. The result is not much job satisfaction. If I resign in disgust and start up a corner sweet shop, I may have great operational freedom (which should it be this week — lollipops or goodnights!), but very few resources (usually an unsympathetic bank manager). The result —
not much more job satisfaction. But, as MD of a devolved business, with a budget of several millions and the simple (?) requirement to turn in a return on capital of 17 per cent, I may discover enormous fulfilment.

The problem is that the people who run devolved business units are usually the same people who served their time with the vast monopolists which spawn devolved business units. They joined the company because they wanted security. They were accepted and favoured over less tame colleagues. Creativity ebbed from them as they groomed and were groomed for highly political senior management roles, where pleasing not to lose was far more important than playing to win. Executive perks and the glorious pension scheme acted as bromide to already flagging managerial libidos. And now, to cut loose as the MD of a business unit? ‘Super idea, Giles.’ (‘But, my God, it’s everything I’ve fought to avoid.’)

The development of truly devolved, integrated organizations requires replacing low-risk, medium-reward norms by high-risk, high-reward ones. Whatever the nature of individual cultures, there will be huge cultural shifts involved, shifts which will be fought tooth and nail by powerful groups of threatened employees. Culture attack and defence will be very much in play. The new hard man or woman who has been brought in for ‘restructuring’ will have notable enemies.

Many organizations in Britain and abroad are struggling and will continue to struggle with the transformation between pioneer and systems or between systems and integrated. The commonly used, absurdly short-term, ‘change programmes’ tend to be simplistic solutions to complex problems. Fifty years of history cannot be conveniently dismissed with a few briefing seminars and workshops. Would that life were so simple. And, while you painfully struggle to put your house in order, ravenous wolves are already howling at the gates.

CULTURE AND CHANGE: A SUMMARY

We have defined culture and we have defined change. We have learned that neither is straightforward. We have further learned that changing culture is fraught with difficulty. Yet, many organizations have cultures which are acutely dysfunctional. Often, culture change is not merely desirable but indeed vital for survival.

It is now time to consider some of the practical difficulties experienced by organizations on the fraught journey to corporate culture change.
PART II

THE METHODOLOGY OF CHANGE
INTRODUCTION

Broadly speaking, change programmes can be divided into two phases. The first phase is considering change, diagnosing the situation and its resulting needs, and planning what is to happen. Here one needs to go from thinking about change in general to planning for change in particular. As Part II makes clear, this phase is often skimmed — with subsequent disastrous results.

The proof of the pudding is, of course, in the eating. Rigorous diagnostics and elegant plans may yet turn out to be irrelevant in that hideous jungle which we laughingly call the real world. Change is ultimately about implementation. With methodology, one is still in the staff college; with implementation, one is on the battlefield.

The following case studies recount experiences on that battlefield. While errors of methodology cost relatively little to correct, errors of implementation cost considerable amounts of time, effort and money to put right. In quality terms, it's the cost of prevention versus the cost of rework.

So enjoy these case studies. Vicarious experience is less powerful than real experience — but it doesn't hurt half as much! Taking heed of these errors of judgement now may help you to avoid them later on. Let's hope so.
When TCP, the international conglomerate, acquired Vector Chemicals, the general impression among the business community was that they had paid well over the odds. 'A deal too far,' the financial press fulminated. TCP remained undaunted.

'Vector's underperforming in its sector,' Laura March, of TCP, informed her board. 'Sure, we don't know anything about chemicals. But we don't have to. There's lots of knowledge about chemicals in Vector itself. Perhaps too much.'

She paused a moment, for maximum effect. 'What we do know about, gentlemen, is management. And what we will bring to Vector is professional management.'

Within days, TCP's financial forecasters had reassessed Vector's business accounts. Ample evidence existed that poor use was being made of fixed assets, the business was too liquid, the age of debt was uncontrolled, working capital was too high.

'We're going to make those assets work,' Laura promised. 'You wait and see.'

The first casualties, inevitably, were the directors of Vector who had thoughtfully provided themselves with three-year service contracts. Assessment interviews were then held with all managers, down to and including supervisory level. A third of the managers were deemed unsatisfactory and promptly departed with singularly unlavish compensation. 'One for them and one for us,' a department head bitterly commented.

The next casualties were the workforce. Personnel levels in indirect areas were reduced by 40 per cent, those in direct areas by 20 per cent. 'And that's just for starters,' one old hand commented. 'This lot will cut and scrape away at fat and muscle until they're down to the bare bone.'

Events proved him right. Vector's break-even was driven down, its profitability improved, there was a generous dividend. The P/E benefited. The second tranche of redundancies, however, reinforced the impression that TCP was out for every penny it could get.

To the outside world, the takeover of Vector by TCP was a success from the
type of success story that comes second only in the public eye to dramatic collapse. No public eye, however, was present to see that if things had been bad in Vector under the old management, in many ways they had scarcely improved.

'Sure, the other lot were a bunch of carpetbaggers, fleecing this company for all it was worth,' Simon Smedley, a production supervisor, confided to his fiancée. 'but TCP try to run it as though it's a bloody machine.' He laughed bitterly. 'Not that they know the half of it.'

'What's to be done?' Sandra asked. Simon shrugged. 'Not a lot,' he retorted. 'We're traumatized.'

DISCUSSION

As Simon has noted, people at Vector are traumatized. Years of lackluster management have demoralized them. The aggressive takeover by TCP has turned their world upside down. Certainly they have seen change; equally certainly, they are dissatisfied with it. The mergers and acquisitions boom in the 1980s saw many takeover operations of this type. What has happened at Vector is more typical than rare.

What has happened at Vector? Simply put, TCP has regarded Vector as a piece of plant or machinery – an asset which must be sweated. But Vector is more than an asset or even a collection of physical assets; it is also an organization of people.

When one company takes over another, it is rare for there not to be almost tribal experiences of victory and defeat. Almost always, members of the winning company feel aggressive and victorious. Conversely, members of the losing company tend to feel beaten and subdued. Does this matter? Morally it should matter, and, from a business point of view, a demoralized workforce is hardly the most worth-while asset.

What could TCP have done? It could have treated people at Vector as equals. It could have begun a series of regular employee meetings with the people of Vector. It could probably have provided much more reassurance than it did.

Is this realistic, one might ask? If the management at Vector was of poor quality then a tough issue needed to be addressed. But was it really necessary to replace rather than redevelop so many managers? Might the new brooms have been overzealous in their sweeping?

Another tough issue was overstaffing. Again it might have been possible to redeploy people rather than simply get rid of them. (Could new markets and business opportunities be explored?) Even if the worst is truly unavoidable, the way in which it is handled is of paramount importance. People are not fools. If a business is overstaffed, they will be fully aware of it. A clearly unavoidable rationalization process where people are treated with dignity and helped to find other work will be deemed unacceptable but fair. Throwing people on the scrap heap will ensure bitterness on the part of the victims and invoke acute self-preservation on the part of the survivors.

The latter is exactly what has happened at Vector. Financial results have improved but with a highly motivated workforce, they might improve much more.
Greater weight needs to be given to the integration of people within Vector/TCP. The assimilation of Vector should be treated as a planned change process in its own right. A psychologist could be seconded to Vector to help people cope with experiences of defeat, loss, anguish and trauma. Secondment of Vector people to TCP and vice versa would help mutual understanding. Communication, empathy and humanity are essentials. As is often the case when people are concerned, what is morally right also makes sound business sense.

**KEY POINTS**

- A takeover is a particular type of change process. Most takeovers are poorly managed.
- Whatever the degree of integration, people at both companies need to be informed of it as soon as possible.
- Magnanimity needs to be displayed. Creating ‘winners and losers’ is bad for business.
- If harsh changes are unavoidable, they should be made as quickly and humanely as possible – not in tranches.
- Outside professional help should be sought.

**PRINCIPLE**

Successful change requires superlative people skills.
Adele Fisher, the Chairwoman of Gaia, swivelled in her seat and transfixed Joe New with her beady gaze. Joe groaned inwardly. Another awkward question.

'Joe, we love your approach ... She's softening me up, Joe decided. 'But I've got a few careers I'd like to put to you.' Oh no, he thought. Here it comes.

'Despite our name and despite our highly environmentalist image, we have, in many ways, a very traditional company,' Adele shrugged. 'Cards on the table - the name change was my doing - and it had to be forced through. Many would argue that our environmentalism arrived with me also.

'My instinct, our bottom line and your conclusions all say the same thing. We've got to change. I fully agree with you - we haven't got a proper infrastructure for innovation. And I like your team development approach to problem diagnosis and design.'

She hesitated. 'I'm not trying to sell you your business. But I think you may find that resistance to change is more considerable than currently appears.'

'Resistance to change?' Joe practically beamed. 'But that's our forte.'

Four months passed. Diagnosis was over. Design was over. The honeymoon was quite definitely over. True to what Joe called his methodology, teams had been formed at each level of the organization and across different levels. Each team had well-defined roles, tasks and terms of reference; the teams fitted together into a corporate rationale. Everything looked wonderful - on paper.

Back in the real world, everything was far from wonderful. Trying to integrate the teams was disastrously akin to bringing warring tribes together. Intra-team conflict was as pronounced as inter-team conflict. The directors sniped at each other. Middle managers felt trapped between those above and those below.

With a substantial devolution of autonomy to the shop floor, supervisors felt similarly trapped. It was, in the considered opinion of Fred Lawson, the shop steward, 'a right bloody muddle and make no mistake'. Things finally came to a head when the
D factory action team reported to Syd Barrett, the production manager. He sat through their presentation with mounting resentment. As diagnosis followed idea and proposal followed diagnosis, he grew progressively angrier. Finally he exploded.

"I suppose you think you're being very clever about all this - you and those bloody consultants! You've taken over my area without so much as a by your leave. Well, if you think you can run it better than I can then good luck to you. But right now I'm in power. And what I'm saying to you is this - get your tanks off my lawn!"

In vain, members of the action team protested that there had never been any attempt to usurp Syd's authority. "And we did consult with you at the beginning," he was reminded. This was akin to dowsing Syd's fire with petrol.

**DISCUSSION**

Resistance to change is a cliche; we talk about it too much and think about it too little. Then we become embroiled in it.

Change, by its very nature, brings uncertainty of process and outcome. What is happening and what is it leading to? How will it (selfishly) affect me? If push comes to shove, will I be all right?

Resistance to change should always be considered in detail at the beginning of a project. To some degree, it can be anticipated. As prevention is better than rework, it's better to elicit issues of resistance, conflict and politics at the beginning and work on them. The fact is that they will have to be worked at during every stage of a project and especially in the implementation phase.

The notion that individuals and teams will somehow get on with developing improvements for the greater good of the company is a strikingly naive one. They won't.

People need education about resistance, conflict and politics - long before tanks end up on lawns. They need to know that resistance, conflict and politics are thoroughly normal and, indeed, inevitable. They need concepts to work with, to understand such notions at a better level than cliches. And they need forums where such notions can legitimately be discussed.

Great care needs to be taken to ensure that there are not winners and losers. Everyone needs to be a winner. Conflicts at all levels must be resolved, especially conflicts at senior levels. Improvements generated by project teams need to be well integrated into the management structure. Such improvements need to derive from internal client needs and wants - not be imposed. There is a constant need for tact, diplomacy, sensitivity and vigilance.

Change is the pathway from the past to the future. As Bob Marley sang, it must be in that great future we can forget the past. Creating such a future requires rare and precious skills.
KEY POINTS

- Resistance to change is normal and inevitable. People need to understand this.
- Prevention is better than cure. Resistance to change thrives in darkness. Openness and education can help to dissolve it.
- People need appropriately skilled help in resolving the myriad issues thrown up by change.

PRINCIPLE

Much of the challenge of successfully managing change lies in helping people overcome their resistance to it.
'It's industrial anarchy...'

Quite clearly, we need to change our management style,' Matthew Greenwood summarized. 'This place has had years and years of autocratic management. Let's face it — it was run practically as a military institution.'

'Well, it was successful, Matt,' Roger Feely interpolated. 'But that's my whole point,' Matthew shot back. 'It was successful in spite of itself, not because of itself.'

'What did we have? Layer upon layer of managers, a chain of command for the simplest decision. A managing director who used to come down on the shop floor and fix machines himself. And a cosy commercial situation of near monopoly and cost-plus pricing which meant that just about any management style would work.'

'And what have we got today? No monopoly, no cost-plus, a radically decentralised management structure and the worst recession of this century.' We can't afford a passive workforce to come in, slavely away on the tools and generally act as the morons that we've conditioned them to be. The future's a simple either/or. Either we make drastic improvements to become competitive in a horrendous market or we all go out of business. As simple as that.'

The following months saw frenetic activity as Matthew struggled to explain why routine decision-making had to be devolved to the shop floor, why improvements were no longer desirable but mandatory and why they had to fight their way through the recession together. As might be expected, after forty years of autocratic management, Matthew's message sounded strange to many.

'It's almost like prison reform,' he said wearily one evening. 'Our chaps are like prisoners who have been told to do this and do that for years. Now we're asking them for constructive input and they're not interested. They want to remain prisoners; we can't afford that.'

Shortly afterwards, he asked a management development expert to run a series of sessions on communication. Great emphasis was placed on the virtues of openness and trust. 'If we're not open-
with each other,' she pointed out. 'We're holding back what's most important. And that will block progress.'

Emboldened by this message, Matthew retained her services and made sure that everyone on site, without exception, went through two days of training.

Six months later, the plant was in a state of disarray. The former autocracy had been replaced by a consensus management which meant that the slightest initiative had to be seemingly endlessly debated. Matthew was livid. 'It's crazy,' he said to Roger. 'What we've got is industrial anarchy. The improvements aren't coming through fast enough to save us. I'm in a cleft stick. Either we carry on with an increasingly permissive style of management — or lack of it — and somehow make things work or we revert to autocracy — which can't work. Heads we won't win; tails we lose.'

**DISCUSSION**

Openness and trust are indeed important, but the simple fact is that we rarely totally trust another person and we are equally rarely completely open with them. All of us have parts of ourselves which we do not wish to share with others. We all fear vulnerability because we all fear hurt. In most organizations, there is considerable interpersonal blockage which results in communication breakdown and lack of progress. Change initiatives must address such issues if they are to be successful.

Instead of attempting total openness — which will never happen anyway — it's best to opt for 'tactical openness', a limited increase in openness which is in everyone's interest. When people derive benefits and avoid penalties through being encouraged to be tactically open about mutual problems, they will be prepared to be more readily open the next time around. Success, however small, needs to be built upon success and communicated. Nothing succeeds quite like a record of success.

Quite obviously, Matthew and his fellow directors have opted for openness in communication and management style without sufficiently thinking it through. Tactical openness is the way forward in communication. Controlled devolution of power is the way forward in terms of management style. New roles must be carefully negotiated so that autocracy is not replaced by anarchy. Interestingly, Matthew was strikingly autocratic about the training sessions. Has he reflected upon this?

The training sessions are utterly inadequate and are pitched at a symptom level rather than a causal level. There are much deeper problems which need to be worked through before operational improvements are here to stay.
KEY POINTS

- Most, if not all, organizations are composed of people who are interpersonally blocked through unresolved conflict.
- Such interpersonal blockage generates lack of openness and trust. These, in turn, inhibit change.
- Encouraging limited tactical increases in openness and trust is a better way forward than saindy pretenses of complete openness. Mutual success is the best encouragement.
- Roles and changes in roles need to be carefully negotiated. Controlled change, not anarchy, is needed.
- Where significant interpersonal blockage remains, it must be resolved.

PRINCIPLE

Tactical openness is almost always necessary for successful change.
'We told them all right – we just didn’t communicate…'

Above the doorway of the boardroom of Plexus Engineering, the clock stood at five minutes to one. Unanimously the board approved ‘the introduction of new working practices designed to foster a more proactive culture’. Relieved, they trooped out in search of lunch. The clock stood at one…

Industry specialists had emphasized the importance of keeping the employees of Plexus fully informed as to what such new working practices might entail. Open communication was anathema to many in Plexus, who tended to operate on the old military adage of ‘tell ’em only what (we think) they need to know’.

However, in an effort to be fair to all concerned, the board, after due union consultation, issued a letter to each employee, apprising them of the proposed changes. This was backed up by sessions with ‘the troops’ in the works canteen. Again an old military maxim was employed: Tell ’em what you’re going to say. Say it. Then tell ’em what you’ve said. Naturally there was an opportunity for questions from the floor. Several audiences proved embarrassingly silent. A few people asked rather obvious questions. One doughty individual, upon questioning whether the proposed changes really were the best way forward for the company, was tersely advised to ‘Do your job and leave our’s to us.’

On the agreed dates, the changes in working practices were duly implemented. While everybody expected some disruption, few were prepared for the wholesale upheaval which resulted. One old-timer, of unquestionable loyalty, bitterly reflected: ‘These changes in working practices have set us back ten years.’

Management was affronted. ‘It just goes to show,’ remarked one board member, ‘You try to do your best for people, you put them in the picture. You tell them what’s going on. And do they support you? Do they hell! We might as well have not bothered telling them in the first place.’

‘It’s a bad business,’ a fellow board member agreed. ‘I well remember the day we made the initial decision. I had my doubts then but of course I didn’t want to appear negative.’
DISCUSSION

The best definition of communication is ‘mutual understanding’. Telling people something is no guarantee of communication. For a start, it is one way. Furthermore, it ignores checking to see whether they’ve understood. And even if they have understood, do you know what they’re thinking? Not unless they tell you.

Communication – as mutual understanding – inevitably requires discussion. Discussion of such an important issue as changes in working practices will always take place. One cannot stop people thinking (internal discussion) or talking. By giving employees ample opportunity for public discussion in structured sessions, many of the more pernicious effects of the grapevine can be avoided.

The silent audiences, however, testify to the lack of history of productive dialogue between management and workforce at Flexus. Mutually productive discussion of such an important issue as changes in working practices requires established avenues of communication – which clearly do not yet exist.

The directors of Flexus are not convinced of the importance of communication. Therefore they have merely been going through the motions. And it shows. My, how it shows. They are actually communicating a very powerful message indeed, one which says, ‘We’re pretending to have an open communication session. In reality, we’re telling you. We’re not really interested in your views.’ Such non-verbal messages are very well understood. They invite silences which contain counter-messages, such as, ‘We think that this communication session is a confidence trick,’ or even, ‘We don’t care about our company.’

We live in an era of ever more open communication. Generally, people want free and frank discussion. The industrial passivity of earlier generations has largely vanished. While ‘need to know’ may be applicable in the military, in civilian organizations ‘want to know’ is usually more apt. The sessions with ‘the troops’ were an early indication that all was not as it should be. The board of Flexus would have done well to heed such an ill omen.

The board should have started with itself. Has it communicated (mutually understood) the nature of the proposed changes? Not on the evidence of at least one member who had (justified?) doubts and yet held back. Perhaps the poor chap who spoke out had some relevant points to make. Maybe he was simply trying to be pertinent – not impertinent, after all.

KEY POINTS

- Communication as mutual understanding means much more than merely telling people.
- Change requires commitment, not just passive agreement. This means considerable discussion.
Such discussion tends to be time-consuming. Busy managers have the choice: take the time now or lose it later.

If there are no mechanisms for discussion, they will have to be created — again time-consuming, again necessary.

**PRINCIPLE**

Successful change requires superlative communication.
There aren't any measurable improvements...

We Don't Have Customers — We Have Clients' — the desktop- published document from central marketing services obviously viewed the parks department in a somewhat different light than did Joe Winserspoon, the Margaroyd supervisor. Crouched over an oil fire in the cabin he shared with his five lads, he spied dourly and with considerable accuracy: 'Customers! Don't make me laugh!' he scoffed, before slamming the offending publication into the bin. His lads — the eldest of whom was over forty — looked on with scant interest. Presently a pack of cards was produced.

Events assumed a more sinister turn, however, when Joe's presence was requested on what turned out to be a series of weekend sessions with 'the top brass and their flunkets'. Joe's first reaction was swift and to the point: 'What's it for? you demanded of his union rep. On hearing that he would be paid overtime and that the food was good, he reluctantly agreed to go.

'Gams,' he sneered, the following Monday. 'Crann men playing bloody games. "Design Your New Organisation," he brutally mimicked. "Seven Exercises To Tell Whether Your Culture's Right".'

'Culture, Joe?' one of the lads queried.

'Vee, lad — culture!' was the dismissive reply. 'Tha' knows — brass bands and string quartets.'

The year wore on much as the previous year had done and the one before that. Joe attended more 'important events', as he grew to call them. Once the director of recreation herself came down to the park on an unofficial visit. 'Best make the most of it, lads,' Joe chided. 'We've not seen her before and we'll not see her again.'

'Obviously, we've got a long way to go,' Paul Simpkins, of Policy Development, carefully remarked, shortly after Christmas. 'Some of these characters have been with the parks department for all of their working lives. They're not going to come round to our way of thinking, just like that.'

'So what's your policy?' interrupted Hugo Riley, a prominent local academic.

'Hearts and minds,' he elliptically suggested. Simpkins affected expansion...
Hearths and minds... I suppose you might call it that,' he carefully acknowledged. He frowned. 'We regard it as an educational process — a continuing dialogue between ourselves, our staff and our clients.' 'Clients?' Riley queried, much as Witherspoon had before him. 'Cheers,' Simpkins firmly replied, although he flushed mildly.

'And your clients? Have they obtained improvements since this process began?' 'Yes, I rather fancy they have.'

'Measurable improvements?' Riley swiftly interposed. 'No, not measurable,' Simpkins conceded. 'Well, what about your staff? Are they starting to deliver such improvements?' 'Not yet,' Simpkins snapped. 'We think it's a little early.'

Meanwhile, back in the cabin, Witherspoon chortled at the latest handout: A weekend at Charlton Grange. The grub there was reputed to be excellent. He could really get to like this change of tack.

DISCUSSION

To date, there have not been any measurable improvements. Nor, if Joe has his way, will there ever be.

There have been no measurable improvements because the parks department has neglected the importance of measurable improvements. Rather, it has continued its existing programme as being primarily educational.

In adopting such a stance, it has succeeded in ensuring that the necessary expenditure will be viewed as cost, not investment. When the finance committee impose the next round of spending cuts, it is highly likely that this change process will be one of the casualties. Its premature demise will destroy even the possibility of change in the parks department. It may be many years before progress is again attempted.

Why has the parks department not focused upon measurable improvements? There are several likely answers. One is sheer naivety on the part of those who should know better. There is probably also a fear that to specify measurable improvements will lay people open to charges of incompetence should these improvements not appear. Finally, there may be genuine ignorance in defining operational measures which can be improved.

Highlighting worthwhile results is apt to be a fraught affair. The management by objectives movement in the 1960s focused upon the achievement of measurable improvements. Unfortunately the movement was discredited by massaged measures being achieved in a massaged manner. Most companies' appraisal schemes are similarly flawed to this day.

People need to consider what the parks department actually does, why it does it and what — if anything — it seeks to achieve. This would generate the parks department's mission in general terms and its goals in specific measures. The goals would themselves break down into contributory operational targets. It could then be considered how these targets might be improved and to what extent.
Ironically, such language, while probably not universally welcomed, would be readily understood by Joe and his lads. There would still be a need for an educational process to broaden people’s horizons. In fact, it would be highly desirable if the parks department staff themselves worked out their mission, goals and targets. The end result would be both tangible and relevant. And one can focus upon tangibles in a way that one cannot focus on generalities.

Along the way, Joe’s cynicism and self-interest would have to be tackled. How many Joes are there? Why are they so cynical? Is it all their own doing or might the parks department foster cynicism? How much do they and it need to change?

The cosmetic shift to ‘clients’ is all very well, but raise these clients’ expectations and there will be vociferous cries for improved delivery. The parks department had better make sure that it can and does deliver.

KEY POINTS

- A well-designed change process will necessarily be educational and developmental.
- If, however, such a process does not also focus upon operational improvement then why go through it?
- If such improvement is not measurable, then how can anyone know if and when it has occurred?
- Mission, goals and targets are best decided by the people within an organization (with outside facilitation). They, after all, are the people who will have to deliver the results.

PRINCIPLE

Change without results is no change at all.
Positron Equipment made electronic components for industrial users.
The main manufacturing plant had grown like Topsy in the boom years. Now,
with the spectre of recession hanging over the country, parts of the rabbit
warren were conspicuously silent.
"We thought the downturn would at least help us rationalize our manufactur-
ing process," Gwen Masters, the works manager, explained to Alice Young of
Youngblood Consulting. "But I'm afraid that doesn't seem to have been the case.
It's just as hard getting orders through the plant as it's ever been." She hesitated.
"We've got a good product; everybody acknowledges that. But our lead times
have historically been poor. We've always had difficulty meeting due dates. Now,
she shrugged ruefully, 'we can't afford late deliveries. Not with possible over-
supply in the market. If we can't produce the goods in time, someone else will.'

The Youngblood analysis of Positron began that week. It rapidly became apap-
ent that production planning was ad hoc and ill-informed. Production control was
noticeable by its absence. If fact, as one of the Youngblood consultants pointed out
to Alice, when she came on site to find out how the analysis was progressing, "The
only way to get product across this factory floor and out the door is to expedite it."
"The trouble is, of course," he continued, "that's exactly what everyone does.
Machine centres start processing an order which they know will well be inter-
rupted time and again as other, more favoured orders are slipped in ahead of it.
Extra machine set-up times, multiple handling, inventory, work in progress and
finished stock all over the place. It's a regular cat's cradle."

'Systems,' Alice told Gwen at the analy-
sis presentation. "This place needs systems. Forecasting, planning and
control systems. Systems to bring order
into chaos."
"Yes, I dare say you're right," Gwen
agreed, "but we've had systems before
and I'm bound to say, they haven't worked." 'Believe me, Alice assured her,
'this time they will.'

Thursday afternoon, the project began.
The first phase of system design involved the consultants asking a great many more questions from a wide variety of personnel. On the shop floor, life continued as before, product was still being expedited. When the project moved into its next phase, however, disruption was planned for all to see. Productivity nose-dived, lead times got even longer, key shipments were missed. Finally Gwen telephoned Alice. "I'll come straight to the point, Alice," she said. "We started all this in good faith. But things are getting worse, not better."

**DISCUSSION**

It is an old truism that things get worse before they get better, unfortunately in change projects, this is almost always the case.

Positron has a cultural value which says, 'expedite product'. People have been doing it for years and it has become an accepted way of life. It will certainly take more than a few weeks for people to stop one way of working and adopt another.

The choice at Positron is plain. People can continue their historical approach of ad hoc planning and management. If they do this, they run a high chance of losing market share, with dramatic consequences in a downturn. This is not a viable option. Alternatively, people can begin to work in a more systematic and professional manner. This requires discipline - and the best discipline is self-discipline.

Quite evidently, people at Positron have lacked self-discipline in the past. By Gwen's own admission, there have been previous systems installations which have failed. Unless something radically different happens this time, the present approach will also fail.

By adopting systems, Positron is curtailing flexibility (which in truth is near anarchy) for the greater good. In effect, this means that an overall production plan is too important to be sacrificed for any order, no matter how urgent it might be. Imposing a production plan and slipping in specials is a recipe for disaster. Yet this is exactly what is happening - resulting in the worst of all possible worlds. Of course salespeople will come into the factory and try to get their special orders slipped through. Of course the sales director will argue at the weekly production meeting that the system is too rigid and should be altered to cater to the demands of a key customer - a different one each week.

Two elements are lacking. There is a lack of appreciation of how this cultural value of expediting has arisen historically - and what its consequences are. There is also a lack of an educational process whereby people can understand that continually expediting product has an adverse impact on job satisfaction, resource usage and working capital. In short, it is a way of working which Positron can no longer afford.

People also need to understand that no matter what the case for a new model operation, behavioural change is going to be the hard part. Unlearning old habits while learning new ones is likely to result in even worse performance in the short term. People must be consulted, allowances must be made - between production
staff, with other departments, especially with customers. If discipline is maintained, the short-term dip in performance will be vindicated by diminished lead times, better productivity and increased job satisfaction. Then, and not before, will the hard work be worth it.

KEY POINTS

- Change needs an educational platform. People must understand why change is necessary, both in broad terms and in specific terms.
- Change must ultimately become behavioural. People must begin to behave differently.
- Behaving differently means unlearning old habits while learning new ones. Performance will initially drop; with success, it will dramatically improve.

PRINCIPLE

Performance drops with change; with successful change, it dramatically improves.
Pete Crewe arrived at Alpha Financial Services with one aim in mind—improved performance in as short a space of time as humanly possible. That’s my job and, by golly, I’m going to do it,” he said. His previous career had been in marketing— he had launched the biggest unit trust ever, unfortunately coinciding with the 1987 stock market crash. “There’s timing for you,” he had confessed himself without remorse; then moved on.

Pete had always worked in marketing and saw his general managership as the vital rung on a promotional ladder which would propel him into the ranks of senior management within the financial services industry. His approach to working life was simple: “Work hard and play hard.” Stock market crashes excepted, it had served him well.

Pete had been brought into the corporate products division on a change order. “The place needs changing; you seem the sort of chap to get it,” he’d been informed at interview. Pete’s first act was formally to address all of his staff. “I’m a simple sort of chap,” he mumbled to them. “I work hard and play hard. If we all do the same, then we can really make this place zing!”

And “zing” it did, in the months to come. People responded to Pete’s infectious enthusiasm. An element came back into their work which had been absent for longer than they could remember—fun.

However, Pete’s antics were regarded as anything but funny at head office, inconveniently situated just across the road. “He’s setting precedents over there, dangerous precedents.” Pete, for his part, refused to lunch in any of the seven hierarchically arranged management dining rooms. “I haven’t got time for any of that nonsense,” he maintained.

“A friendly word in your ear, Pete,” Roy Harper, his deputy, suggested one evening, after their twice-weekly workout at the local gym. “Tone it down, for heaven’s sake. This latest move towards profit-related pay is really shaking them up across the road.” “Huh! That’s because we’re making profits and they’re not,” Pete scoffed. “Maybe so,” Roy concurred, “but they’re saying that we’re declaring UDI.”

“Maybe we should at that,” replied Pete.
Pete was not aware that Roy had been promised the general managership before him. Roy dutifully, and with immense concealed glee, reported back to his political masters across the road. They were unanimous in their verdict. 'The chap's got one last chance and then that's it. UDI indeed!' Pete's last chance came and went. When he was given twenty minutes to clear his desk, it surprised no one except him. A pity, everyone said. Such a pleasant fellow.

DISCUSSION

Pete, to his credit, knew what he came to do and had the integrity to get on with it. He had come from the 'work hard, play hard' atmosphere of successful, self-contained marketing departments and had yet to realize that being a general manager means coming into contact with a much wider range of motivations and temperaments. In time, he might have learned.

Pete's approach to change was equally unsophisticated, but his friendliness, accessibility and devotion won him many allies. Bringing fun back into people's working lives is no mean achievement.

Pete's highly task-oriented nature, which was his strength, was also his weakness. A wiser person would, from the outset, have queried whether he was being set up. Was Pete being set up? He will never know, but it's a distinct possibility. Many organizations send out mixed messages. 'Yes, we want change but we also want the status quo. We want innovation but we also want a safe pair of hands.'

Pete certainly dramatically mismanaged the political nature of his role. He mismanaged it because he despised organizational politics. Whatever one feels about such politics, the plain fact is that they always exist. The more senior the position, the more likely it is that one will have to spend a significant amount of one's time dealing with politics.

If change has not happened in the past, it's always wise to question why it hasn't happened, i.e. what forces may be ranged against it? Had Pete more nous, he might have uncovered a wide array of forces ranged against the very kind of change that he was brought in to implement. Along the way, he might have developed his suspicions about other people, perhaps even his close cohort and training buddy, Roy.

Instead of being labelled with UDI, Pete should have negotiated a role for corporate products vis-a-vis head office - a role which would have balanced the conflicting needs for autonomy and control. Within this role, he could have mobilized a team who would inspire change within corporate products. As well as escaping the UDI tag, he would have also have avoided the one-man-band tag.

To negotiate such a role would have meant continued dialogue with his senior managers at head office. Whatever Pete felt about them, they were the people in post and the people with whom he needed to deal. To remove the dining rooms would require power. Ironically, Pete needed to use them in the first place to acquire such power.
As it is, Pete's progress to senior management has received a severe setback and a potentially sound piece of development work has been terminated. (Watch what happens to fun when Roy takes over.)

KEY POINTS

- Organizational politics is a reality in every organization, at every time, ignore it at your peril.
- The more senior your position, the more your need to learn to manage politics.
- The process of change is irretrievably political; it must therefore be politically managed.

PRINCIPLE

Management is political; change is much more so.
What I'd like you to do,' Sylvia McElroy said, 'list all the factors which could put you out of business.' 'That's easy,' replied Ben Moon, the site general manager. 'Pollution.' 'Pollution?' Sylvia queried. 'Pollution,' Ben replied. 'If we don't get our act together, we'll be out of business in five years.'

'All right then,' Sylvia replied, writing on the communal flip chart. 'So what else is there?' she prompted. Ben frowned. 'Pollution. No, honestly, Sylvia, that really is our prime concern.'

Externally calm, Sylvia inwardly sighed. Oh yes, just about anyone can be a process consultant, she mordantly reflected.

"A way of seeing is a way of not seeing," she quoted. 'Oh, Sylvia, you're getting all philosophical on us again,' Graeme wincingly protested. Sylvia gazed. 'Maybe I am. But as long as we're thinking about pollution, we're probably missing a host of other factors which could equally put us out of business. For instance -- she listed three, anyone of which might have finished the plant overnight. And, you know your business. I don't. There have got to be other factors. And we'd better identify them.' Ben and Graeme looked at each other, light dawning, all levity suddenly gone. 'I ... see what you mean,' Ben slowly admitted. It was half acknowledgement, half apology.

They ended up with 'Six factors that could kill us' on the flip chart. Prematurely satisfied, they leaned back to ponder solutions. 'Hang on a moment,' Sylvia protested. Slowly, carefully, she wrote one more word on the flip chart, one more potential killer. The room became silent.

'Insiders.'

'You're a local site with a great deal of local autonomy,' she explained, 'but you're also part of a conglomerate. We're talking serious culture change here. People out there -- powerful people -- mightn't like it, mightn't understand it, might feel directly or indirectly threatened by it. That's something else for you to manage. If we don't get the results they'll put a stop to this change process and probably mothball the site into the bargain. But when we do get the results..."
there will be a lot of so-called sceptics out there who will suddenly want to be associated with them. You don’t need an airline ticket to get hijacked,” she dryly observed.

Ben never forgot that workshop. “It changed my life,” he said, long afterwards. “It really did.” The three-year change programme restored the plant to profitability; saved hundreds of jobs in a depressed region, and transformed dozens of lives.

It was nearly five years before Sylvia’s grim warning came true. In a boardroom in Milan, she was passed a note with Ben’s terse message. “We should have listened harder. You were right. Somebody mugged our baby.”

**DISCUSSION**

Organizations are political places. Like it or not, enemies and predators are not all outside; invariably some of them are within. A few will not intend to be enemies or predators; usually, however, they will have sharply divergent views which need to be integrated and which often can yield considerable value. Some will be jungle creatures which need to be captured and tamed. Others need to be exterminated.

Organizations are political places....

Managers are paid to manage. Senior managers are paid to manage not a particular function but whatever comes along. The existence of politics means that they need to manage politics also.

Nowhere is is more important than in change processes which, by their very nature, involve political shifts. Backing is always needed from the board of directors, from above the board and from below the board. Typically, change processes involve a laying down of arms between warring factions. This requires neutral zones whose neutrality must be rigorously protected through ceaseless vigilance.

Ben heeded Sylvia’s warning, but he didn’t heed it well enough. For three years, she kept him vigilant, but even she couldn’t keep him vigilant for ever. He relaxed his guard. And, as Sylvia subsequently discovered, a wheeler-dealer from the parent company, in the process of being booted sideways, has become chairman.

Paradoxically, while claiming all the credit for the results, he will attempt to implement countermeasures to negate the shift in management philosophy and thus, ironically, imperil those very results. By the time the results collapse, he will be on his way again, nimbly hopping from ice floe to ice floe, each one sinking behind him.

Ben and his companions have a fight on their hands. Their baby has been mugged. Unless appropriate protective action is implemented, a far worse fate awaits it.
KEY POINTS

- Organizations are political places. Predators and enemies can lurk on the inside as well as the outside.
- Senior managers are paid to manage politics, enemies from within or without, and whatever else may emerge.
- Change processes involve highly sophisticated political skills—not for engaging in spurious politics but for creating appropriate conditions for peace and progress.
- Change is a delicate flower which often needs protection to bloom.
- It's better to be unceasingly vigilant than to suffer a hijack.

PRINCIPLE

Management is political; change is much, much more so.
Gentlemen, the good days are gone. Insurance claims have rocketed in the last three years. Premiums have gone up; volume has gone down. Public faith in financial institutions is at an all-time low. The public used to view us as basins of probity. Now at best they regard us as supermarkets of financial services, at worst, well...!

David Jenkins, the new broom, looked around him at the other members of his top team. Fear. The room reeked of fear. Well, so be it.

The competition's increasing. Our costs are too high. We need to restructure. At mention of the dreaded 'R' word, a collective sigh of acquiescence was exhaled. Well, at least now they knew. The axe would fall; probably it would fall on some of them. In the depths of recession, there was no hope of golden handshakes. But, perhaps, bronze handshakes?

The months to come were traumatic. A big-name management consultancy went through the organisation 'like a dose of salts', as one middle manager ruefully put it. Too many layers of management, too many staff canteens, too much duplication of internal services. Yesterday's seeming necessities were today's unaffordable luxuries.

Costs went down; losses dwindled. Slowly, the long climb to break-even began. But operations didn't improve; if anything, they got worse.

'Never seen it so bad,' Bill Marley confided to Ron Baslow, one evening after work as they stopped for a quick pint in the pub opposite the railway station. 'Morale's rock bottom as you might expect. But it's not just that. We've restructured but now nobody knows what they should be doing. The old chain of command was so long that people just saw a tiny piece of the action. Now people have to take a broader view. But I don't think they can. Either they focus on a tiny piece, as before, and let all the other pieces run rampant, or they try to juggle all of them.' He sighed heavily. 'It's the devil and the deep blue sea. I'm not saying that we didn't have to restructure. I'm not saying that at all. But...
DISCUSSION

There are few organizations which have not been 'restructured' in the 1980s and early 1990s; many of them will have been through the experience repeatedly.

Restructuring tends to be a euphemism for cost-cutting via people reduction. Many organizations are under severe pressure to reduce variable costs. A classic cost to pounce on is people costs. An analogy can be drawn with dieting. Many organizations, like many people, are or were overweight. Going on a diet loses weight; not changing one's eating habits ensures that the weight comes straight back on again afterwards. So is it with cost reduction. Fat goes; often muscle goes also. Health and fitness may suffer. But have eating habits changed?

People who know little about organizational change and development compulsively talk about organizational structure. They imply that if you get the structure right then everything else will somehow come right too. This is rarely so.

Changing the structure will not automatically change the process, i.e. what people actually do. Simply promoting the top salesperson to sales manager will not necessarily make that person behave any differently. They now occupy a different place in the structure, but a different process? Change! Far more likely that they will carry on behaving in super-salesperson mode.

The middle manager who has been promoted to department head and company director may confuse the two roles and retain a parochialism which negates both. A different place in the structure, yes, change, no.

Similarly, a whole organization can be restructured and the only change may be numerical (fewer people) and negative (less being done). Those who have been restructured may not have changed their processes. Their job titles are different but they don't understand their roles (their functional relationships with others) and their skills refer to the past. This is a recipe for operational disaster. Unfortunately, it is a common situation among organizations of all types, who confuse qualitative change with qualitative change. Unless people are encouraged to develop, they will become incompetent in their new functions.

In companies such as our finance organization, where people's spheres of responsibility are much wider, there is even more need for development. The roles must be clarified - preferably by the people occupying them. Accountabilities must be set; people must be able to evaluate their performance, and they should be given help to do all of these things.
Changing the structure may or may not be part of a change process. By itself, it will achieve little of value.

**KEY POINTS**

- Structure is where people are in the organization; process is what they do and how they do it. The two should never be confused.
- The key to both structure and process is role. Role defines people in terms of their functional relationships. This is a pragmatic approach rather than a theoretical one.
- Change always involves process (behaviour). It may, or may not, involve structure.
- Process change is developmental. People need suitable professional help.

**PRINCIPLE**

True change is about reprocessing (new behaviour), rather than merely restructuring (different jobs).
'You don't know shit from Shinola!'

A smokesack industry... I suppose we are, really,' Simon Beaumont reflected. 'And one of the few of this size still left in private hands. But we'd better put our house in order while we've still got a house at all.'

Federia was a heavy engineering company based in Doncaster. Family-owned, it had prospered, declined, staged an all too brief recovery and declined once more. The imperatives were simple—reduce costs, improve quality, shorten lead times. Achieving them was hard.

Acting on an impulse (some might say whim), Simon invited over Laura Harding, the CEO of their American operation, Laura was one of the few of her Harvard MBA year who had come into manufacturing as her dad had and grandad had before her. Hell, she loved production!

She did not love what she found at Federia. Antiquated systems, behind the times, working practices, busy, busy people. Laura's lip curled and she fought not to say it: 'Firefighting.'

'Start with the people, not the process,' she said. They did. 'Get someone good in to help you,' she said. They did.

Six months later, a company-wide change programme was under way. A task force reported to the main board and moved into action teams. The task force highlighted improvements; the action teams implemented them. Progress was being made; people were beginning to sound enthusiastic.

So it came as quite a surprise when Laura next visited the site. 'Fine,' what you guys are doing is fine. You're getting improvements. But what you're not doing is managing the core business. And you need to do that as well—in fact, more so.'

'I'm sorry Laura,' Simon admitted. 'I'm afraid you've rather lost me.' There was a murmur of assent round the boardroom table. Laura sighed, breathed deeply. 'Hell, it's my fault. Should have seen it before. You haven't got the information to manage the business. You've got three accountancy-based computer systems which don't talk to each other. They're as irrelevant as they're incompatible.'
need management control information - the right information, for the right people at the right time. That way, they can make the right decisions - and thereby develop.

"Laura, you seem to be suggesting that we're not in control, that we don't know what's going on," Frank Willoughby, the production director, testily responded. Laura looked at him coolly, levelly. "Frank," she said softly, "the information simply isn't there. Therefore the control can't be there either. So don't try to con me. You don't know shit from Shinola!"

DISCUSSION

It looks as though World War III is ready to begin! But, seriously, Laura's point is entirely valid. Many companies who want improvements think that such improvements can somehow be grafted on to normal day-to-day operations. To some extent, they can. But, if the operations aren't being effectively managed in the first place, then the improvements aren't or shouldn't be the first priority. They may even be irrelevant, a red herring distracting attention from the main issue. And, if operations aren't being managed properly, then the benefits of any improvements tend to be diluted, if not indeed lost.

All operations require control. Control is only possible with information - the right information. Management information should show output against input (and thus performance) for every person, machine centre, work area, department. For people to improve, they need to be able to measure their performance. As Laura says, for the right decisions to be made, you need the right information at the right time.

The IT infrastructure is poor, so business information is lacking. That is a problem; but it's a different problem. A management control system can be designed and installed in a fraction of the time needed for revision and upgrading of the manufacturing systems.

Management information systems (MIS) are about the process. Management control systems (MCS) are about outputs and inputs. Get MIS right and life is certainly easier. Get MCS right and you have a vehicle to develop people to get better day-to-day operations and much-needed improvements.

KEY POINTS

- Operational improvement requires better control of day-to-day business as well as specific ad hoc improvement.
- To get better control of day-to-day business, management control systems (MCS) are needed.
- MCS should not be confused with MIS.
- MCS design and development should go hand in hand with people development.
PRINCIPLE

The right change requires the right information for the right people at the right time.
One action we will not take, ladies and gentlemen, is to go into this venture with our eyes closed. I am determined that we shall take a strategic view not only of our businesses but also of this change process to which we have committed ourselves today. Ivan First, the Chairman of Common Ceramics, raised his glass of champagne. As one, the serried rows of executives did likewise. 'A toast! A toast, ladies and gentlemen ... to our new future!' 'To our new future!' they dutifully chorused.

Attaining that future, however, was more easily said than done. In the months which followed Ivan’s inaugural speech, a change committee was formed, reporting to the main board and comprising the heads of the operating businesses. This committee was charged with the task of designing and implementing a change programme which would restore Common to profitability in the near future.

Almost from the beginning, the process seemed to run into difficulties. The main board members themselves were far from unanimous about the need for a change committee. Some saw it as an example of good delegation, others felt that, 'as the buck stops with us, we should be the change committee'. Painstakingly, Ivan explained that the change committee was an 'enabling mechanism' to make changes happen in the core businesses. 'Our role in the centre is more strategic. We need to assess which innovations best fit with the long-term future of the businesses.' 'You mean, they’re like the House of Commons and we’re like the House of Lords,' suggested one board member. 'You could put it like that,’ Ivan doubtfully agreed.

It was readily apparent that the House of Commons and the House of Lords rarely saw eye to eye on which aspects of the businesses should be ‘first in the firing line for change’. The change committee suggested a product rationalization which was promptly vetoed by the main board. The main board then suggested a productivity drive which was strenuously resisted by the change committee. ‘You’re in effect telling us that we’re not running our own businesses properly,’ they accused the
main board. 'No, we're not,' the main board vigorously retorted. 'We're just telling you that productivity improvements are perfectly possible and highly desirable in your businesses.'

'There you go again,' was the inevitable reply, while one bluff Yorkshireman bluntly retorted, 'If you think there are productivity improvements to be had in my business, then bloody well go and get them yourself!' To which the prim response was, 'That's not our job.' 'Aye, well then, leave me alone to get on with mine!'

The main board and the change committee were deadlocked — much to Ivan's chagrin. In vain, the heads of the operating businesses tried to drive change beneath them: 'Impossible when nobody's sure what's going on,' one confided. 'Let's face it — the strategy was great, but...'

DISCUSSION

The strategy was anything but great. True, the strategic intent was present, but strategic intents do not, of themselves, constitute strategies. This seems to be a law of life which has so far escaped Ivan.

Ivan's choice of a change committee as a mechanism for change was sound. What he lacked both with strategy and the change committee was any kind of follow-through. In each case, he seemed to think that if he merely set things up, they would run of their own volition.

Obviously both the main board and the change committee are unsure of their own and each other's roles. The main board should be charged with the overall strategic direction of the businesses. That direction, which will be dynamic, not static, needs to be fully understood by the change committee.

Against the strategic backdrop, the operating businesses must be viewed and the questions asked — why, where and how should change occur? Once these questions have been answered, the real effort can begin — in the operating businesses where industrial battles are won and lost.

The whole adds up to a large-scale, company-wide process of understanding. There will necessarily be conflict. What is best for one particular business may impact unfavourably upon group policy. Tensions always exist between group and operating levels, head offices and divisions. Nowhere is this more apparent than in the perennial struggle between operational autonomy and tight financial control.

The change committee has certainly got a difficult job on its hands. It needs to conduct a useful dialogue with the main board — and ensure it receives much-needed support. It needs to communicate, analyse and implement within businesses, and it needs to integrate efforts so that change succeeds at an individual business level and also at a company-wide level.

The present confusion needs sharp resolution before the change process is irrevocably doomed. Ivan himself must put through his own intellectual fog and understand that words are no substitute for deeds.
KEY POINTS

- Change is best viewed in terms of the overall strategic direction of a company.
- Inevitable mechanisms for change need to be created. Often these will complement the existing management structure.
- Integration between enabling mechanisms and the management structure at all levels must be achieved.
- Where there are conflicts or ambiguities of role, they must resolutely be clarified.

PRINCIPLE

Change requires well-considered, integrated enabling mechanisms.
‘They talk a good fight...’

Ralph Dangerfield might not have been everyone’s cup of tea but you certainly could not accuse him of being reactionary. He had been brought in from outside as CEO of Vella TV, one of the newest and most innovative franchisees. Considering the somewhat abrupt departure of his predecessor (locks changed on the office door, five minutes to leave the building with a phalanx of security men), one might have expected a certain amount of resentment, if not amour propre. And, as Ralph himself admitted, ‘What the hell do I know about running a TV station?’

A view with which many of his employees heartily concurred.

‘We’re not the Beeb, so let’s not even try,’ he bluntly told them. ‘Culture. You guys know about culture.... Well, it’s got to change. Like fast. You want to see the numbers? I’ll show you the numbers!’

Vella’s overheads called for dramatic change. Not one to skimp, Ralph asked around. ‘Emera,’ they said. ‘Bunch of psychologists. Yeah, I know, I know... sure, it sounds off the wall. But they’re who you want... Go for them.’

Ralph did. ‘Raise awareness,’ they said. Seminars on this, seminars on that. ‘Get people together,’ they said. Joint sessions on this, joint sessions on that. ‘The power of synergy,’ they said. But synergy was synergy and Ralph’s cost structure remained unchanged. ‘What the hell’s going on?’ he said. ‘They talk a good fight,’ he was told.

DISCUSSION

What is lacking here in two words is project management. Emera was, or may not be good; Ralph’s people are certainly good. And yet it’s not happening. There is no operational benefit. Different realities may or may not be being negotiated. In the meantime, Vella is going bust.
Change is organic, not mechanistic. But change projects need a mechanistic structure. Getting the balance right is as difficult as it is vital. With mechanistic people, the emphasis is usually quantitative; with creative people, it's usually qualitative. Emers appears to fall into the latter category.

Without project management, there is no framework for progress and improved results. Change is change ... rather than specific change, with whom, by when. Project management applies a pragmatic rigour to conceptual thought. This means zero slippage: project management, rather than sloppy overruns. Ralph has to pay the bills; he needs results. He doesn't want promises of eternal tomorrows. He wants delivery. It's high time he got it.

KEY POINTS

- Culture change is organic and developmental, not mechanistic.
- Creativity needs to be balanced by control, otherwise there is only a forever journey to a non-existent destination.
- Project management is de rigueur in change projects.
- Proper project management means zero slippage, not perennial excuses.

PRINCIPLE

Change requires superlative project management.
"We just ran out of steam..."

High hopes... we started this thing with high hopes. And look what's come to pass. But why? Why? I've asked myself that question a thousand times. And there's always a different answer. Maybe my answers are too complicated; maybe the truth's simpler. Maybe we just ran out of steam.

'Everything seemed different then. You can't begin to imagine the excitement we used to feel. It really did seem to course through our veins. There was a sense that the whole future was up for grabs. I used to wake up each morning dying to come to work. And now... now we're all living from term to term.'

'We were young then. Well, late thirties... but old enough to have done things in life and young enough to still care about doing them properly. We'd grown up with terribly traditional experiences in education, experiences which had left us dramatically unprepared for the wider world. And then we'd found ourselves back in education again, running courses in management - the ultimate pragmatism - and being lumbered with these same old timeworn dogmas. We knew it wasn't right but we didn't dare challenge the prevailing orthodoxy.

'Until Paul came in as head of department. Like us, he'd been in the middle echelons of British industry. Started life as a consulting engineer, did some good work in developing countries, before it was the done thing. He'd been around; he knew management practice through and through.

'So when he saw this drivel we were teaching, he said, 'That's exactly what it is... drivel.' And then, with a sort of apologetic half-smile, 'But what do you chaps think? Perhaps you can convince me otherwise.'

'Of course we couldn't. And when we admitted we couldn't, he threw it straight back at us. 'Then let's rip the syllabus up and rewrite it. Let's give our students management education which will transform their careers. And their lives.'

'Naturally all hell broke loose. The academic authorities were outraged. There was talk of both accreditation and funding being withdrawn. Some of the students..."
hated it. They just wanted to pass the exams, get their little scraps of paper and continue being mediocre - but with pieces of paper. But the better students loved it. Like us, it was what they'd been longing for - management education which was about real life, not make-believe.

"We fought our battles and we won them - because we were determined enough and we were right. We rewrote management education in this country. A generation of managers was affected for the better."

"And yet, in the end, it just faded. The dream died. Paul moved on, we all got older. Somehow it just didn't seem so important any more. Maybe we're the reactionaries now..."

**DISCUSSION**

The revolutionaries of yesterday are the reactionaries of today. The revolutionaries of today are the reactionaries of tomorrow. People are children of their time. However, alert one is to the shortcomings of a previous age, it's rare to preserve such perspicacity when it's your time, your traditions which are in question.

In this case, a cadre of committed people has determinedly set out to change the status quo. Their subculture has successfully challenged the prevailing culture. And because their subculture has delivered better results, it has triumphed.

But mistakes have been made. How has the bubble of subculture been viewed by people outside? What negative forces have been unleashed by these middle-aged, once angry men? Might evolution, not revolution, have been a better policy? Revolutions tend to have bad track records....

The harbingers of change have come from the same age group and background. As a cohort group, they have aged together - seemingly with little notion of succession or renewal. Dependence upon the presence of a charismatic leader has exacerbated these weaknesses. Initiators of change, like good managers everywhere, should act to make themselves dispensable. They must positively seek out their successors.

Typically, culture change is thought of in terms of no more than a few years. While dramatic cultural shifts can be achieved in this timeframe, merely to think in terms of a few years is myopic. Culture change is, above all, a political process, and some political processes are unending.

Again, change is often construed as being discrete, a one-off occurrence. But the notion that organizations can somehow be put right is a startlingly naive one, a sort of medical metaphor of a company doctor performing surgery on a tumour.

Organizations must be effective in their responses to the environment. Today's economic and political environment is in a state of flux where, as Heraclitus once remarked, the only constant is change itself. Organizational change must be a dynamic, never-ending process of evolution where the dinosaur award goes to those who stand still long enough.

Those who initiate change must create infrastructures by which the change process of adaptation, survival and success may be perpetuated. Often this means the original
pioneers standing aside as their ideas and influence become redundant, if not thoroughly counterproductive. In the long term, they may be more respected for giving away power than hanging on to it. They will certainly be behaving more responsibly.

**KEY POINTS**

- Change is a dynamic act of adaptation essential for the perpetuation of life itself.
- Evolutionary change is almost always better than revolutionary change.
- Change is a political process; like all political processes, it must be well managed.
- Inspirers of change must always be aware of the dangers of short-termism and the possible limitations of their thought.
- There is a time to take power and a time to relinquish it. These times should not be confused.

**PRINCIPLE**

Change will require renewal. Prepare for it.
PART IV

SUCCESSFUL CULTURE CHANGE
AN EXAMPLE OF LEARNING

When I was very young I taught myself to ride a bike by the simple expedient of surreptitiously abstracting one from its environment and getting on it. A good heave got me started. The bike was far too big for me but I ignored that and simply pedalled away, for all I was worth. Obediently the bike wobbled off down the road. Hurrah! I was in business....

Not for long, however; Encountering my first bend, the wobble turned into a pronounced tilt. I tried to rectify it but to no avail. To my dismay, the bike tottered drunkenly and keeled over into the ditch, taking me with it. As I recall, there was an almighty crash.

At this point I had a choice. One option was clearly to give up and write off cycling as a nasty experience. If I did that, then all I would learn about cycling would be to avoid it — although I would begin to learn about failure. A second option was to get back on the bike and strive to repeat the experience — probably with the same results. Again, I would be learning nothing more about cycling, although I would be learning about persistence. The third option was to find out what the hell had happened — so that I could ensure it wouldn’t happen again.

Instinctively I chose the latter option. I knew nothing about centres of gravity but I postulated a wobble factor. The bike had wobbled on the straight; this had involved loss of control. However, wobbling around bends seemed to involve further loss of control to the point of a crash. Ergo — wobble less on bends. How do I do that? Hold on tight to the handlebars and pedal faster. This took some nerve for I was now risking a much worse crash, but I quickly found that it worked. As Nietzsche said, ‘He who survives is in the right.’

Thus emboldened, I headed forth into a childhood full of crashes, bruises and scrapes of every hue and description.

A MODEL OF LEARNING

In the example above, I learned to ride a bike — no great feat in itself but interesting as an early experience of learning. What had I done? Unwittingly, I had followed the learning cycle shown in Figure 14.

This learning cycle is based upon the work of the psychologists Piaget and Kolb. Let’s follow it and see how it does justice to my experience of learning to ride a bike.

I started with behaviour. I did something — rode the bike. This led to a result — ending up in the ditch. If I had abandoned all further notions of riding a bike then I would have advanced no further on this cycle. If I had simply repeated the experience then the result would, most likely, have been replicated. Again, I would not have advanced. I would have been trapped in my experience.
To progress further — to learn to learn — I had to move to the next stage of learning which was reflection — sitting in the ditch thinking about what happened — as we would say today, replaying the video. This stage is a necessary precursor to the vital third stage — developing a concept or concepts to explain what happened. Armed with concepts, one can hypothesize and experiment; without concepts, we are trapped in our experience. In my case, the concept was a crude wobble factor. But crude or not, it worked.

My new behaviour led to a new and better result. Now, I could directly compare the new result with the old one. Successfully rounding the bend was immeasurably more fulfilling than miserably ending up in the ditch. Naturally, the new behaviour was quickly conditioned so that, in no time, I was whizzing around bends at high speed with nary a wobble.

So the learning cycle works. The learning cycle is itself a concept, a model of learning. Many managers are deeply suspicious of concepts. Their educations may be mine
once was, have been in so-called ‘hard’ subjects such as accountancy or engineering. They may have
images of themselves as practical people with no time for mere theo-
ring. And, not least, they may have had bad experiences of concretual sleight-of
hand. But not to have concepts is to remain trapped in experience. And to remain
trapped in experience is to learn nothing. If we learn nothing, then we are
condemned endlessly to repeat the same mistakes while simultaneously lagging
further and further behind as the world changes around us. Learning is vital to our
survival, as individuals, groups, organizations, even species. Concepts are the prime
instruments of learning, with them we can structure knowledge from raw experi-
ence. We should treasure concepts because of their power to help us learn. And one of the
most fundamental and useful of concepts is the one above which gives us a model of
learning itself.

LEARNING FROM EXPERIENCE

When you were at school, most of your learning was by instruction, but the really
important lessons in life are learned through personal experience — losing your virgni-
ity, falling in love, seeing your mother die, holding your newborn baby in your arms.
Learning here was with the most precious currency of all — your personal experience,
your sweat and tears. The real lessons in life are not learned at normal school; they are
learned in what Frank Sinatra laughingly calls the school of hard knocks.

Management is nothing if not pragmatic. Managers, thus, are arch-pragmatists —
because they need to be. Although many managers think of learning in terms of
instruction, ironically, most managers learn best from experience. Case studies are
vicarious experience, as close to the real thing as you can get. And, of course, far more
is learned from failure than success. Success tells us only that we have succeeded; it
doesn’t necessarily tell us why. (Countless entrepreneurs have succeeded, in spite of
themselves, only to lose it all in harsher trading conditions.) But to try, fail, learn and
then succeed, that is learning!

This book has one purpose: to aid your learning. The case studies are vicarious
experience. They deal with failure because most change initiatives do fail, and because
we learn best and most from failure, painful though it undoubtedly is. The concepts
which I introduce are to help you make sense of your real and vicarious experience of
change so that you use a different approach in future and gain better results.

Let’s briefly review our vicarious experience and, at least, learn what not to do.

THE LESSONS OF METHODOLOGY

The principles derived from the relevant case studies are as follows:
"We're getting ready to get ready..."

Procrastination and change
Procrastination is a waste of everyone's time.

'Just stirring things up...'

Provocation and change
Seeking to provoke change is unprofessional, irresponsible and counterproductive.

'We bought the dream...'

Realistic change
Change objectives must be realistic.

'It's divergent...'

Focused change
Change must ultimately focus upon improved results.

'It's going to be top-down...'

Top-down change
Change needs to be both top-down and bottom-up.

'It's bottom-up...'

Bottom-up change
Change needs to be both bottom-up and top-down.

'We need an attitude change around here!'

Attitude change
Trying to change behaviour by changing attitude is approaching the problem from the wrong direction. It will fail.

'One hell of a culture problem...'

Culture change
Trying to change behaviour by changing culture is approaching the problem from the wrong direction. It will fail.

'We got the package'

Packaged change
Packaged solutions don't work.

'We've tried it...'

Experimenting with change
With change, don't try it. Do it.
"We’re doing it ourselves..."

DIY change
DIY culture change doesn’t work. It can’t.

"We’ve got these hot-shot consultants!"
Consultancy and change
Process consultancy is vital for culture change.

"We’ve got too much change!"
Too much change
People’s capacity to handle change is potentially infinite.

But like this, the principles appear disarmingly simplistic. In every case, however, they were drawn from change experiences which had gone awry. All of the blunders could have been avoided by learning about change before embarking upon it. The arrogant will remain unconvinced and mutter, ‘It’s only common sense.’ To which I would reply – common sense is notoriously uncommon. By avoiding such traps, you would be doing better than hundreds of organizations which have spent millions of pounds in futile and misguided change imperatives.

THE LESSONS OF IMPLEMENTATION

The principles derived from the relevant case studies are as follows:

"We’re traumatized..."

People and change
Successful change requires superlative people skills.

"Get your hands off my lawn..."

Resistance and change
Much of the challenge of successfully managing change lies in helping people overcome their resistance to it.

"It’s industrial anarchy..."

Openness and change
Tactical openness is almost always necessary for successful change.

"We told them all right – we just didn’t communicate..."

Communication and change
Successful change requires superlative communication.
These aren’t any measurable improvements...
Results and change
Change without results is no change at all.

Things are getting worse, not better...
Performance and change
Performance drops with change, with successful change, it dramatically improves.

We declared UDI...
Politics and change
Management is political; change is much more so.

Somebody mugged our baby...
More politics and change
Management is political; change is much, much more so.

We’ve restructured...
Structure and change
True change is about reprocessing (new behaviour), rather than merely restructuring (different jobs)

You don’t know shit from Shinolz!
Information and change
The right change requires the right information for the right people at the right time.

The strategy was great, but...
Mechanisms for change
Change requires well-considered, integrated enabling mechanisms.

They talk a good fight...
Project management and change
Change requires superlative project management.

We just ran out of steam...
Change and renewal
Change will require renewal. Prepare for it.

Again the principles appear simple. Like the wheel, or gravity, or the benzene ring structure, they are simple in retrospect. If I set out to learn the piano by myself, I would make lots of mistakes. Similarly, these are the sort of mistakes which organizations make when learning about change. Arrogance is the root cause of every one of them, arrogance which states that the natural world is a serious subject for study.
(physic, engineering) but that the social world is an area about which everybody
mysteriously just knows.

It's worth noting that although these lessons are simple enough, they are also
difficult. How can this be? Saying that superlative people skills are necessary for change is
simple. Actually developing and correctly deploying such skills is extremely difficult.
How many managers have superlative people skills? Very, very few, and if you still talk
about 'man management' then it's a surety that your people skills fall well short. Even
if you have such skills, a change project will leave you drained and haggard with the
effort of resolving people issues.

A CRITICAL NOTE

To date, we have largely been dealing with what goes wrong, because, empirically,
most change initiatives do go wrong. We have identified many of the more common
factors which, singly or in unison, scupper change. There are undoubtedly other
factors which we have not identified.

But in the exercises of working through what goes wrong, we have probably become
much more aware of the sort of clues and signs for which to watch out. Obviously it's
far better to note problems in the methodological stage rather than the implementa-
tion stage. Skilled professionals in the discipline of change develop an almost uncanny
sixth sense for the right and wrong paths to follow.

The downside is that we've been working through negatives. Sorry! And we need to
recognize that not acting wrongly will not guarantee that we are acting correctly. In
other words, not making the mistakes listed above will not necessarily lead to a
successful change project. What we need to do now is return to the original problems
of culture and change with the eyes of experience and consider what sort of approach
needs to be taken.

AN EXAMPLE OF CULTURE CHANGE

Let's go back to where we started – with Fernando and Thor. They found they simply
couldn't work together; thus it was inferred that their companies couldn't work
together. Consequently, their proposed joint venture was indefinitely postponed and
their strategic alliance never happened.

Both companies accepted this state of affairs. In effect, the Trollkind/Ibanez bicycle
had landed in the ditch with a resounding crash. And because both companies
accepted such a dismal state of affairs, no more was going to be learned about joint
ventures; people were only going to learn about failure.

But let's suppose someone in, say, Trollkind, simply hadn't accepted this state of
affairs. Suppose they argued that abandoning joint ventures and possible alliances
because of personal incompatibility just wasn't good enough. Suppose they said, This
is crazy. If senior managers in our respective companies can't work together, we've got a real problem – and one which we need to sort out right now. Both companies need their people to work with such outsiders. If we have to abandon this joint venture, then let's do so for a good reason. This is not a good reason.

Suppose they contacted someone in Ibanez and talked the problem through with them until they had reached mutual agreement. Suppose they then (and this is by fax and phone, remember, with no body distance) said, 'Well, we seem to be able to work together, so why the hell can't our people?' Suppose they agreed that they would send Thor and Fernando back to the negotiating table but, this time, they would have an Organization Development (OD) consultant with them.

Two weeks later, Thor and Fernando reluctantly sat down in a rented conference room in Great Dunmow, Essex. With them was their OD consultant, who, as it happened, did not work for either Trollund or Ibanez.

Although Fernando and Thor tried their utmost to get down to business, if only out of professional pique, soon they got caught up once more in their vicious spiral. This time, however, it was even worse. (Once you start to learn about failure, each bad experience sets you up for the next one.) Quite soon, they were at each other's throats.

Choking off an expletive because there was a woman in the room, Fernando looked across at Carla, their OD consultant. 'What the hell are you here for anyway?' he demanded. 'And why don't you stop this - this farce?' 'Yes, why are you here?' Thor concurred.

'To answer your second question first - I have no mandate to, as you say, stop this farce,' Carla replied. 'Anyway, don't you think that it's rather unbecoming for you to be engaged in such a farce?' she added. Without waiting for his reply she continued. 'Do you realize that you have both agreed on something? You want to know why I am here. But you already know why I am here.' She gestured towards a fax on the table and quoted verbatim, "to assist in the resolution of interpersonal differences..." That, gentlemen, is why I am here.'

'And how do you propose to do that?' Thor queried, intriguely by her calmness. Carla stared levelly at him. 'First, by agreeing a contract with both of you.' 'A contract?' Fernando said. 'You mean a legal contract?' 'No, Fernando,' Carla told him. 'A psychological contract.'

'You are grown men behaving like boys. You are senior managers, behaving in a thoroughly unprofessional manner. This has grave consequences for both of your companies. Both of your companies have asked you to come back to try again - and succeed this time. I am here to help you do this. But I cannot help you unless all three of us agree that we will work together to resolve these differences.' She paused and looked unwaveringly at each of them with calm, grey eyes. 'That is what I mean by a psychological contract. It is not to do with law; it is to do with integrity.'

Thor stared at her. 'I do not know what you can do but, for my part, I am willing to enter into this. What do you call it: this psychological contract?' He glanced at Fernando. 'You right them, me too.' Carla surveyed them. 'Good. This is the first stage.
We are agreed that you have a problem in working together. And we are agreed that all of us will work on this problem. Let us now do so. 'One question,' Carla said. 'Why did you not make this clear at the beginning?' Again, Carla gestured towards the fax. 'It was clear at the beginning. But you were not looking at it. You were too busy fighting your personal war. So my mandate had to come direct from the rigorous of war. There was no other way.' Thor nodded thoughtfully.

In the following days, Carla fed back to them their stereotypes of each other: Fernando, the fiery Latin, Thor, the gloomy Scandinavian. This is soap opera, I think, perhaps we need Carla, the Italian, singing an aria!' At this, they looked at her shamefacedly.

Working back from stereotypes to first impressions, she quickly pinpointed body distance: 'My goodness, so that's all it was,' Thor exclaimed. 'Yes and no,' Carla replied. 'Body distance, it would appear, became your cause of war. But if it had not been body distance, it would probably have been something else. The real power at work was the power of culture, of which both of you were unaware.'

Carla explained how culture is formed, using the same model which we developed in Part 1 (illustrated by Figures 1, 2 and 3 which are shown again here). She explained the difficulty in moving beyond our cultural frames of reference. She explained the importance of so doing by what she called 'the management of difference'.

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**FIGURE 1** THE DEVELOPMENT OF EXPECTATION

A great deal of human behaviour is tribal. We most easily relate to people from the same background, the same sort of school, the same social class. But if we do not take great care, we live in cultural prisons. We do not realize they are prisons because we can see out, but we cannot see the glass which prevents us getting out.

Today we can no longer afford to live in cultural prisons. Business is truly international, multicultural, multilingual. Look at us three ... Fernando, you are Spanish working for a Spanish company, Thor, you are a Dane working for a Norwegian
company. I am an Italian, working for a French company.' She laughed. 'And here we are, in Essex, England.

'We must learn to work with people who are very different from us. We must learn about cultural influences and imperatives - ours and theirs. We must learn to change our behaviour, our expectations and, in time, our attitudes and culture, if it is necessary. We must learn about change. We must learn to learn.'

She looked at them. 'Otherwise, we remain as frightened little boys, throwing stones.' Fernando and Thor glanced at each other, abashed.

Carla was present at all of their meetings that summer. Thor looked back on their time in Apt, Orleans and Dublin with a sort of stunned amazement, 'I never knew how much there was to learn.' Thor admitted, 'about myself, about other people.' He wrote a paper on the need for what he called 'cultural renegotiation' and presented it to the president of Trollund. It came as no surprise to find that Fernando had suggested a similar initiative in Ibanez. On the day when the contract for the Trollund/Ibanez joint venture was signed, Thor clinked champagne glasses with Carla on the terrace at Berne. 'So, now we have a legal contract, not just a psychological one,' he joked. Carla nodded, looking thoughtfully at him. 'I think you have developed a taste for learning. Thor, for personal discovery. You will be following the learning cycle for many a long year to come.'
A MODEL OF CULTURE CHANGE

In helping Thor and Fernando to escape from their cultural prisons and manage their differences, what, in essence, has Carla done? She has taken them along a learning cycle such as that shown in Figure 14. Thor and Fernando have been learning from experience; Carla’s role has been to enable them to learn from experience.

The learning cycle which Carla initiated and which Thor and Fernando follow is shown in Figure 15. Let us examine each stage in turn.
Meanwhile, beneath the surface of awareness, lies culture – vast, amorphous, possessed of illimitable power. What will happen to the newcomers? What will happen to the iceberg? Who can tell?

TOWARDS THE FUTURE

An ancient Chinese curse runs, 'May you live in interesting times.' We do live in interesting times – information explosion and market contraction in terms of key players, global consumerism and global recession; social and political unrest; the harsh imperative of a primordial drive which states that we must have more than our parents and that our children must have more than us; mass expectations that economies, of whatever political ideology, should deliver, bitter resentment when they don't.

As we approach the end of the millennium, will life somehow quieten down? Will the business, social, political and economic environments become more or less turbulent?

I think the answer will be 'more turbulent'. You probably feel likewise. Certainly we would want long odds to bet on the answer being 'less'. More turbulence, more complexity, more change. More change in the rate of change. It's frightening.

Organizations are the crucial interface between the micro and the macro. If we fail at an organizational level then we fail at every level. This is such an appalling prospect that we dare not even contemplate it. We must make organizations work.

Culture and change are the dominant themes of organizations today. If we manage them successfully then our tomorrows can be immeasurably better. I hope that we do.
I am writing during the most long-lived recession of this century. In the UK some three million people are out of work, many of them have been thrown on to the proverbial scrap heap. Do they still regard themselves as their company’s greatest assets? Pause for hollow laughter....

We need less empty rhetoric, more good practice. There are no jobs for life for any of us. The passive process worker who just came in, did his work and knew his place is an industrial dinosaur. So is the company director who shuffled papers, played games in boardrooms and lived the good life. Somebody always paid for this; usually it was the customer. Now nobody will. It’s over.

There is no more room for mediocrity, for treating people like monkeys and paying them peanuts, for sloppy management. Now it really is do or die.

People are a company’s greatest asset; they’ve got to be. A machine is finite; people aren’t. People are capable of infinite development, of massive gains in productivity, in quality. In our global village, the chances are that your competitors have access to the same information, the same technology. Your competitive edge is people.

At the turn of the century, F.W. Taylor, the father of work study and one of the most misunderstood men in the history of management, said that more important than his work was what he called “a mental revolution”. That mental revolution has come of age. It is called culture change.

**THE CULTURE ICEBERG**

Figure 20 illustrates the perennial situation. The new boys — and girls — draw near to the iceberg. They are not fools; they know that the future is fraught with peril. They can see behaviour and results; they are aware of expectation. They can even make a good guess at attitude.

![Culture Iceberg Diagram](image-url)
SHORTENING THE LEAD TIME

In Part I the point was made that for many organizations the lead time of culture change was vital for their survival. More precisely, shortening the lead time is vital. On a practical level, this book is aimed at helping people to shorten the lead time. There are many seductive and misleading pathways, many blind alleys. And there is much to be done.

It is erroneously assumed that change is commonplace, and because of this many managers' conceptions of change are naive, limiting and ultimately self-defeating. Change is often construed as something which is poured into people as water is poured into a jar. On this basis, statements will be made such as, "Our people can't handle any more change at present. We've got a three-year IT development programme and we're setting up modules for managerial training. So we're working on transforming our culture. Yes, of course, we accept that operational improvement is there to be gained. But we can't risk overloading our people."

Overloading is a genuine fear. When people are overloaded, useful learning ceases. But this approach assumes that people are only learning about change in terms of the content of this change and the content of that change.

The road to real progress does not lie in passively learning about the content of specific changes. It lies in learning about the process of change itself. The process of change is far more important than the content. Get the process wrong and the content may well be brilliant but it will also be useless.

So, if you learn about the process of change and utilize this learning in terms of specific contents, progress will not be linear; it will be exponential. Think what this could mean for your survival; think what it could do to your competition.

Learning about change will involve learning to learn. When I was a student, I could read (and understand?) perhaps a chapter of a textbook in one study session. Now I routinely read and understand whole books at a sitting. More importantly, before, the knowledge was passive; now it is dynamic. I'm cross-referencing it to everything else I know which is remotely relevant. And most importantly of all, I'm transforming the knowledge into practical use.

If I can improve my ability to learn by a multiple of ten (probably much more), then so can you – and so can your people. For all of us, the real classroom is the real world. Don't give your people boring instruction. Bring out the knowledge, the maturity, the need, the desire. And then stand well back!

Shortening the lead time of change – any change – will probably determine whether you're around in a few years' time. Enough said.

PEOPLE POWER

We've heard it before and we'll hear it again. 'People are this company's greatest asset.' Show me the evidence! Oh, I'm sorry... There isn't any.
Information is value free; information is apolitical. Our use of information is everything. Change initiatives which do not have an information infrastructure will miss their focus. We all need the necessary information in order to improve our performance. Culture change is ultimately about sustained improved performance. The right information for the right people at the right time is mandatory.

DEVELOPMENTAL CHANGE AND PROJECT MANAGEMENT

Earlier I noted that you cannot reasonably make people culturally change. You can only help them culturally to change. Change is organic, creative. The great danger here is that change initiatives diverge, become open-ended. This is professionally unacceptable - because it means that the focus on particular behaviour and results is lost. It is also commercially unacceptable for two reasons. There is no end date to aim at and it presupposes a blank cheque for financing the entire process.

Change needs to be organic. Often one is working with energy in the informal organization. Change also needs to occur under conditions of strict project management, otherwise it will not succeed.

These two approaches may seem to contradict each other. One is organic, and the other is mechanistic. On the face of it, they do contradict each other. But that's tough. Both are necessary.

I have spoken to managers who have proudly told me that they have spent years facilitating culture change - and they are still doing so. When will they finish? And how would they know if they had finished? What is their methodology, which are their methods, where is their information, where, above all, are the enhanced results? Of course, on questioning, none of these appear. So what have these managers been doing? Probably talking a good fight and feeling proud of it.

The fact is that change needs superlative project management skills. It does not need projects which are ill-conceived - as are the projects in Part II. It does not need projects which go off the rails, as do the projects in Part III. It does not need projects which suffer from slippage.

Change means a different reality. It is a game of reality, it is not a game of fantasy, or make-believe. Change programmes should come in on time and to cost. Show me a good change agent and I’ll show you an excellent people developer and a superb project manager. Again they’re rare; again they exist. To manage the subtle, the creative, the nebulous, the unknown - by superlative process consultancy - yet within the context of zero slippage project management, this truly is the realm of the sorcerer.
inevitable and legitimate. It also regards resolution of such conflict as utterly necessary. On this basis, the path of progress is issue by issue.

The old, simple notion of conflict between workers and management is absolutely simplistic today. Today there are few free lunches for anyone. Only direct labour is wealth-producing; the rest of us are overheads who must prove ourselves by increasing the wealth (or, in a non-profit-making organization, the social added value) process. All of us will have our own agendas; we must work through these agendas to issue resolution, or we will all fail together.

The negotiative paradigm sounds like a bland middle-class term. It isn’t. It simply recognizes that different people have different viewpoints. Such differences need resolving. In the past, many companies could afford passive workforces who came to work, sweated their labour and were told to shut up. In today’s climate of relentless, continuous improvement, the late operator as well as the company director must be motivated and involved. This being the case, he or she must be a valued partner. The negotiative paradigm is the only responsible approach.

THE MANAGEMENT OF DIFFERENCE

Again, this approach recognizes that we are different, with different histories, personalities, agendas. Unitary approaches to organizational change management will fail because they do not take account of reality. Ironically, through managing difference, one will create a far more focused organization. Differences between individuals, in groups and between groups must all be managed. It’s difficult but it can be done, it needs to be done.

THE POWER OF INFORMATION

The role of information was considered in Part 1. To improve performance in organizations, to create new behaviour and new results, one needs MCS – management control systems. Few organizations have them; all organizations need them. They can be imposed on control people, in which case, as far as change is concerned, they are counterproductive. Alternatively, they can be developed by the people themselves, primarily for their own use. Management control systems engender discipline. The best discipline and the only one ultimately worth having is self-discipline.

Management control systems need to go from the bottom to the top of management hierarchies, however flat, and back down again. They encourage top-down and bottom-up change. They help define role. They do not of themselves progress change but their use can progress change. Similarly, they should never be passively followed; they should always be created hand in hand with people development. By helping people to create and use management control systems, the act of creation can itself be developmental.
ical does not necessarily equate with political prowess. Possession of political prowess does not necessarily equate with being political.

So to ignore politics is futile. Politics, like everything else, must be managed. To be political is equally futile. In practice, I admit, it is rare to find people who do possess a high degree of political prowess but steadfastly do not use it for their own ends. Such people do exist, however. In your search for a process consultant, I would recommend that this seemingly contradictory pair of factors constitutes a key assessment criterion. As a colleague of mine once remarked, 'Part of what you're selling is that you can't be bought.'

Therefore politics must be managed and it must be managed well. Much dysfunctional political behaviour in organizations results from frustration, often frustration from symptoms whose core problems change will resolve. In many organizations, everyone – victims and oppressors alike – shares a common victimhood due to conditions which, it seems, no one can ameliorate. The downtrodden foreman can be a victim; so too can the supposedly omnipotent chief executive. The shop floor worker can be aching with frustration; so can the managing director. Ordinarily, they might never realize this; but those who manage change must realize it and enable them to realize it also. Losers must be transformed into winners. All of us want to be winners. In any case, in the modern business world, there is no place for losers.

So you are aiming to achieve positive outcomes for many different power groups. To do so, you will have to create a space for assertive behaviour where weapons can be put aside and issues truly resolved. This space must be enlarged so that, finally, it encompasses the whole organization. Again, you are looking for critical mass.

The path to this critical mass is fraught. There will invariably have been many ill-conceived, poorly skilled and executed attempts which have failed. Understandably, people will be cynical. To deliver organizational change is always to succeed where others have failed.

Change which creates winners and losers will also fail; the losers will sabotage it. Whatever the difficulties, however fearsome the issues, people must be helped through them to personally acceptable outcomes. Process consultancy, facilitation — of course anyone can do it!

Change is by its very nature political. It is part of the informal organization, the social reality it must be managed and managed well.

THE NEGOTIATIVE PARADIGM

Underlying the reasoning of the previous section is the notion that in organizational life everything is negotiable. A little thought reveals that this makes sense. If management is about solving problems, resolving issues, then the sort of collaborative assertive behaviour described in the section on conflict (see p. 159) is the way forward. This implicitly recognizes the existence of pluralism; it regards conflict as
change process. I can think of at least one important project (in which I did not participate) where the initial results – for entirely noble motives – were massaged. Subsequent results were bona fide. In all honesty, I have to say that I am strenuously oppose this tactic, even though it did raise morale considerably. The risk of being caught out and thus being discredited is too high. Also it seems to me to be rather demeaning. Besides, nothing corrupts a change process faster than 'inside dealing', regardless of whether the motives are worthwhile. Change works on mutual trust; this trust needs to be sacred.

When critical mass is achieved, the initiators of change can breathe a sigh of relief. The work is over.

THE POLITICAL NATURE OF CHANGE

Politics at work is a social phenomenon which everyone knows about yet which most people fight shy of confronting. Certainly it is little mentioned in management textbooks; the prevailing assumption is that everyone is diligently digging for victory for the greater glory of the organization. The chance would be a fine thing!

This is a unitary notion – we’re all one, we’re willing parts of a collective whole. The alternative is pluralism, which postulates that there are many different power groups, with their own agendas. Anyone who has read the section on the social reality of organizations (p. 24), will not be surprised that I find the pluralist viewpoint a more intellectually honest depiction of what we all know goes on.

Nevertheless, not only do management textbooks ignore the political nature of pluralism but so also do most approaches to change management. TQM, for instance, seems to credit us with a unitary collectivism which may or may not exist in Japan but which rarely exists here. To ignore organizational politics when managing change is to fail. What then is the alternative? Should one be political?

The short answer is no. You should not be political. If you do become political, then professional integrity is sacrificed. You are just another silver-tongued hustler peddling your wares while seeking to manipulate. This is the road to disaster.

Politics does not add value. It is an overhead which, in many organizations, should be sharply reduced. There is a school of thought which postulates that organizations are backcloths against which the ruthless act. The ruthless are never satisfied until they have made a deal too many: The rest of us pay for such indulgence.

To facilitate change, you need to be highly politically aware and highly politically adept – while remaining apolitical. How can this be? You are not using your skills on your own behalf, or even on behalf of any power group. Rather, they are genuinely being used on behalf of an agreed consensus.

In many organizations, those who are regarded as political are thereby credited with a high degree of political prowess. This is rarely the case. Often they are local heroes who would be destroyed if they moved out of their familiar environment. Being poli-
cognizant of everyone else. From the remains of the old culture, you are growing a new culture. From positive and from negative energy, you are working to create positive energy.

Figure 19 illustrates the curve of commitment. Superficially, this resembles the classic marketing curve of response to new products. However, the biggest difference is in the existence of people vehemently actively against — and the divided nature of such people. They can be the old guard, who composed the status quo of yesteryear, or they can be the rebels who were once rigorously suppressed. It can be a strange phenomenon in a change project to see the establishment disband and the rebels come to power. Perhaps we shouldn't be too surprised; Machiavelli, who had his own views on change, would not have been.

![The Curve of Commitment Diagram](image)

**Figure 19** THE CURVE OF COMMITMENT

Through working with negative and positive energy to create positive energy, one is of course, building up energy to a critical mass. At this point, commitment for change dwarfs commitment against change. People who were passively for change become actively for change. The people who were passively against change become passively for change.

If one imagines a line drawn down the middle of Figure 19, then the aim of a change project is to enable people to cross that line. When this happens, it’s easier to go on than to turn back. Again, I stress that getting people across that line is no easy task. Results obviously help, for results are the best possible advertisement for a
the opportunity had finally arrived (and it wasn't another management fad), they were
revitalized. My goodness, how they shone.

Other people who are against change are people who are so frustrated that
their energies are almost completely negative. This is invariably because change is
long overdue. They are perhaps suffering in a pioneer organization which has failed to
make the transition to a systems organization. Their working lives have been a misery
because of poor operational planning and control – control which is, ironically, inevita-
ably resisted for cultural reasons. They are in a complete no-win situation. Their
achievements seem pathetic; they regard themselves as worthless failures. They are
against change because they are so frustrated and negative that they are against
anything and everything. Their very high level of existing frustration makes them
frightened of considering any solution to their problems – in case their hopes are
raised and then dashed. This is particularly poignant if such hopes have been raised
and dashed before.

In situations like this, seemingly paradoxically, one has to work with their negative
energy, because that is the dominant force. Although these people are anti-change,
they are also anti the status quo. If they really do believe that change is possible and
they see results, then their negative energy will be converted to positive energy. Why
shouldn't it be? They will be getting what they wanted. They will no longer be losers;
they will become winners.

Enabling such people to turn themselves round is no easy task. It requires powers of
moral leadership which few possess. It is the sort of quality which is needed for real,
worthwhile, sustainable change in organizations, the sort of quality of which the
hatchet man and the management fascist will never even conceive.

It is because most change initiatives are overdue that this need to work with nega-
tive energy to create positive energy is often encountered. It is, perhaps, the organi-
sational change specialist's particular form of the alchemist's dream by which base
metals are converted to gold.

Can all those who are actively against change be enabled to turn themselves around?
Typically, there will be people who for reasons of status, prestige, power, personality
or belief will remain against change. It is essential that such people are identified and
relevant issues confronted. Difference must be managed. Either there are amend-
ments to make or there are selfish motives at work. Whichever, the issues must be
confronted and resolved – or the change process is seriously at risk. Thus the absolute
importance of assertiveness, as mentioned earlier. People will want to shirk such
confrontation and resolution, they will want to bypass it. But they must not. This
requires real skill and real courage. People's right to dissent must be regarded as legiti-
mate, but it must be regarded as equally legitimate that a solution needs to be nego-
tiated. Not to resolve such dissent is unacceptable.

Culture change is people change. Culture change cannot reasonably be made to
happen any more than a flower can be made to grow. Good gardeners do not try to
make flowers grow; they enable them to grow. So it is with people change. You are
working above all with those who are actively for change while remaining rigou-

PASSIVELY AGAINST CHANGE

These people do not want change to happen. They may agree to change but their agreement is in truth rejection. They cannot be relied on.

ACTIVELY AGAINST CHANGE

These people know where they stand. They are against change and they are prepared to fight it all the way, if necessary.

Note that all four categories belong to the informal organization. A board of directors, supposedly committed to change, will often contain people who are secretly passively against change. Quite often, it will contain at least one person who is actively against change. The most important categories are those who are actively for and those who are actively against change, but all four categories are important for different reasons.

In an organization-wide change programme, everyone will be directly or indirectly affected. Nevertheless, there will be certain players who will be fundamental to the success of the programme. They will be fundamental because they occupy key positions in either the formal or informal organizations. They have leadership roles in crucial domains.

These people must become actively for change if the programme is to have any chance of success. Because they are, or tend to be, leaders anyway, they will probably already be either actively for or actively against change.

Surprisingly, many people who are initially actively against change become actively for change. This is because, sometimes, the actively againsts are the rebels whom I mentioned in the last section. They will say, for example, ‘Sure, the board are making all these lofty statements and bringing in consultants. But they’re just a bunch of muppets. They’ve had these so-called initiatives before. They’ve had consultants in before. Nothing changed. Why should this be any different?’

This is grist to the mill of someone who is serious about change because the question must be answered fairly and squarely: Other initiatives have failed. Why should this one be any different? Intellectually, people need to be pinned to the wall. The change programme was probably conceived as yet another evasion of reality – more dysfunctional behaviour. People need to be sharply disabused of this notion.

There is no question of pandering to rebels. But treating them as competent beings – as they invariably are – will often bear curious results. If their scathing honesty produces questions which should be asked and answered, and these questions are asked and answered, then, very often, they will be turned round. More precisely, they will turn themselves round.

Other rebels are people with qualities, such as creativity, which are neither understood nor appreciated by the organization. Often these qualities are the very ones needed for engendering change. I have known rebels who waited all their working lives for the opportunity to show what they were capable of. When they realized that
THE REBEL

The rebel will tell you what no one else will. The rebel gives you the downside. While the corporate mission preaches openness and trust, the rebel will tell you how little openness and trust there is in practice. The company report loftily states that ‘people are our greatest asset’. The rebel will tell you, chapter and verse, of incidents which clearly demonstrate how ‘they couldn’t give a damn about people’.

Rebels get behind the rhetoric of organizations. Rebels will make you aware of the hypocrisies, the contradictions, the paradoxes about which you emphatically need to know. You need to understand what organizational life is really like; rebels will tell you.

Rebels are often talented people who have been rejected by an organization which could not understand them and felt threatened by their talent. Very often they are embittered. As with historians, one must scrape away at the gilded lily for the truth. Sometimes they occupy surprisingly senior positions; invariably they have been pushed sideways, relegated to marginal roles. Rebels are particularly worth listening to on the subject of change.

Here we have four different types which are present in nearly every organization. Of course, more than one type can be present in the same person. The usual overlap tends to be between historian/philosopher – the other types tend to be separate. They all belong to the informal organization, which you need to understand, better than anyone else, if change is to work.

THE ENERGY FOR CHANGE

Whatever the rhetoric, the reality is that in any organization some people will be excited about change and some people will dread it. Although it may not be politic for people to reveal their true feelings, there will be a continuum of people from those who actively want change to those who equally actively don’t want it. One needs to know where people feature on this continuum.

Let’s briefly consider the four categories in turn.

ACTIVELY FOR CHANGE

These people are dissatisfied with the status quo, perceive the need for change and are willing to make considerable effort to attain such change. They do not merely agree; they commit.

PASSIVELY FOR CHANGE

These people may equally accept the rationale for change. However, they are much less willing to pursue it. They agree, rather than commit.
departed managers live on as ghostly influences. Incidents have happened which, seemingly, can never be forgotten.

To understand these ghosts, one must first identify them. Autocratic pioneers, in particular, can exert substantial influence years after they have retired to the seaside. Such ghosts often have to be exorcized; their styles are the styles of yesteryear, not today.

To help people to change, to create a new future, you must first understand their present. To understand their present, you must understand their past. This can only be achieved by considering the historical influences which have been at work.

The act of understanding an organization’s past and present is a highly creative one. You need a knack for seeking out the right people, making the right approaches and asking the right questions. Who these people are depends on the situation but in every organization the following four types will be found. These types were identified long ago by Jack Douglas, a student of organizational change. In nearly every organization, all four types will yield invaluable research.

THE HISTORIAN

This person has been with the organization for a long time. They can tell you what happened years ago. Their memory probably extends further than the memories of the present senior management team. They know what has transpired. Their memories may have been gilded by the passage of time but they can provide you with information which no one else can.

THE PHILOSOPHER

This person has thought long and hard about the purpose of the organization. Not content with merely observing events, they have reflected upon the meaning of such events. Their insights are invaluable. Cross-referencing their insights with the historian’s knowledge can yield productive results.

THE SOCIAL GADFLY

This is the person who knows anybody and everybody, who is seemingly on good terms with all parties. He or she flits between departments, across visible and invisible lines of power and prestige, up and down the hierarchy with breathtaking ease. Often their job will legitimize this role. They will be a linker, a liaison person, a personal manager. They can effortlessly diagnose the informal organization because they know it like the back of their hands. The centers, the power groups, the secret societies, they know them all. Social gadflies are possessed of a high level of political adroitness. Whatever their job, in reality they function as wheeler-dealers. Historians tell you about the past; philosophers interpret the purpose; social gadflies tell you about the present—in extraordinarily vivid detail.
For completeness, it is probably best to mention here two other roles which sometimes add to the general confusion. These are the locum manager role and the company doctor role.

Consultants acting in either expert or process role have no management authority whatsoever. They are there to help managers, and performing managers' jobs for them is emphatically not helping them. Rather it is weakening them. Process consultants, in particular, tend to be acutely aware of this. At each attempt by a client to pass the buck, the buck must be politely passed back again. Equally, process consultants must be permanently alert for the client becoming dependent upon them. The phenomenon of transference (client/consultant dependence) is commonly understood in clinical situations; it is just as prevalent in work situations. If you are engendering dependence in your clients, then either you are manipulating them or they are manipulating you, or both. Whichever is the case, they are being done a disservice.

Consultants acting in expert role are often drawn into taking over management functions. Because their expertise is in the content of their specialism (MBA, psychometrics) rather than the process of consulting itself, they find it extraordinarily difficult to resist. But they must resist.

The other two roles mentioned do, quite legitimately, employ management authority. A locum manager is simply someone brought in from outside temporarily to occupy a managerial post. Whether or not they have come from a consultancy, that is their role. If they try to be clever and combine the roles of manager and management consultant, most likely, they will spectacularly fail. The roles and commitments are different.

A company doctor is someone who comes in to occupy the chief executive role and run the company. Company doctors tend to operate in company turnaround situations which call for sharp, painful 'surgery'. They are thus a particular type of locum manager. In the past, the management consultant role was often confused with the company doctor role. They are quite separate.

In summary, for corporate culture change you need a process consultant. Do not make the mistake of trying to do it all yourself (DIY change) and do not make the mistake of trying to get other people to do it for you (consultant-driven change). Enlist someone who understands culture, change and consultancy.

ORGANIZATION DEVELOPMENT

Two questions immediately spring to mind. Is there a discipline which specifically deals with culture, change and consultancy? And where can one find worthy practitioners?

The first question can more easily be answered. The terms 'culture change', 'ownership' and 'facilitation' have been in common managerial use for perhaps ten years. Their use has grown as the business world has grown more turbulent and imperatives...
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**Organization Development**

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The first question can more easily be answered. The terms 'culture change', 'ownership', and 'facilitation' have been in common managerial use for perhaps ten years. Their use has grown as the business world has grown more turbulent and uncertain.
and imposed; they will thus be resisted by the people who need to change. As we saw in the case study 'We got the package' in Part II, packages simply do not work.

For change management, the expert role does not work either. It is of little use sending reports full of recommendations (solutions) to clients; it is extremely rare for such recommendations to be implemented and even if they are implemented, the real effort is not diagnosis but implementation (change) itself.

The process role is the prime consultancy role for change management. A process consultant has to help his or her clients diagnose the need for change, what that change should be and how it should occur. Furthermore, the consultant should remain with the clients until such change has been realized. An expert consultant can make a recommendation and walk away from it; a process consultant can't.

Many managers on their first contact with process consultancy find it extremely strange. Is it all a confidence trick? Can anyone do it? What skills, if any, are required? Is there any guarantee that it will work? As with Thor, Fernando and Carla, there is a mutual learning curve to experience.

Both expert and process consultants make use of expertise. Expert consultants give advice; process consultants do not. People will act on advice on specific technical matters, but advice will not change people. If you advise a friend who has a drinking problem to give up alcohol, will they? I think not. Only facilitation has any chance.

In the course of a change project, the consultancy role may change from process to expert and back to process again. As I made clear in the case study 'We've got these hot-shot consultants' in Part II, it is essential that, at any time, both clients and consultants know which role they are occupying and why they are occupying it.

People think of process consultancy as something very new. In truth, it is not. In terms of rational argument, Socrates was probably the greatest process consultant the world has ever seen. He didn't tell people they were right or wrong. He helped them to discover for themselves whether they were right or wrong.

Although process consultancy seems 'softer' than expert consultancy, in truth it is harder. With culture change programmes, a process consultant must be hypersensitive to what is happening, what has happened in the past and what is likely to happen. They must be possessed of almost uncanny powers of perception.

To say that anyone can be a process consultant is akin to suggesting that anyone can write poetry. Yes, just about anyone can write bad poetry. In any country, there are probably no more than a few dozen outstanding poets living at any one time. Similarly, there are probably no more than a few dozen first-rate process consultants living at any one time. It's that rare.

In no way do I wish to diminish the value of the expert role. It has its necessary place (a surgeon performing an operation, a barrister preparing a case). But it is inappropriate for facilitating change. As the case study made clear (see p. 63) 'We've got these hot-shot consultants', change which is expert-driven is consultant-driven and will fail. While the expert role and the process role are both consultative, they are consultative in completely different meanings of the word.
I have consulted a plumber. I have bought expertise. I have passed the problem over to an expert and the expert has passed the solution back to me. The expert has, unsurprisingly, acted in expert role.

Now let's consider another scenario. This time, I have a very different kind of problem, a personal problem in my marriage. Again I try to solve it. Metaphorically, I and fiddle about with a stick – but again to no avail. So again I seek consolation. I visit a marriage guidance counsellor.

Again, I have bought expertise – but expertise of a different kind. When I ask the counsellor for a solution, she tells me that giving me a solution (advice) is not appropriate. At this, I grow somewhat offended and ask her to explain. Patently, she does. She explains that my plumbing problem was a technical problem which I could reasonably delegate to a responsible expert – who would then deliver the solution. But my marriage problem is not a technical problem in the same way. It is not something which I can delegate to another person because change, if it is needed, will not be change for my plumbing system, it will be change for me.

This is why my marriage counsellor will not give me a solution. Giving me a solution will not enable me to change. And let's say, in order to solve this problem in my marriage, I do have to change. So, unlike the plumber, she cannot function as my technical expert. My problem is too personal and fundamental to be delegated to anyone else. If it involves me changing, then I must be responsible for such change; I have to make the change and I will have to live with it.

My counsellor is not prepared to function as an expert. She is prepared to function as a facilitator. What does that mean? It means that she will do her utmost to help me find and implement a solution — my own solution.

Broadly speaking, there are two management consultancy roles, corresponding to the roles of plumber and marriage counsellor respectively. The first is the expert role — the specialist who fixes our computer or outlines us of changes in legislation. The second is the process or facilitatory role — the generalist who helps us to resolve difficult issues. The use of the word process means that, in this case, a process consultant helps us with our processes — of thinking, feeling, learning, developing — in the same way in which Carla helped Thor and Fernando. She didn't give them solutions; she helped them develop solutions.

Managers are very familiar with the expert role. Organizations are, after all, structured in terms of expert role. Sales people deal with sales; they do not deal with production. Managers think in terms of specialisms — experts in production, experts in marketing, experts in psychology. And they have sold functionally expert solutions — in other words, packages.

The trouble is twofold. The notion that packages are somehow appropriate for client problems from Hammer to Heavens is a dubious one. Raina suggests otherwise. And, irrespective of appropriateness, packages will sound be seen as stylish.
Consultancy Roles

People commonly think of consultants as professional advisers. Certainly when we consult a doctor or a solicitor we expect professional advice. The role of a consultant — any consultant — is to help us resolve problems. This may, or may not, involve advice.

Let's imagine I have a problem with the plumbing in my house. I poke and fiddle around with a stick but to no avail. So I phone a plumber. Along she comes and asks me what seems to be the problem. Dutifully I tell her that the drains are blocked. At this point (it is tacitly assumed) I hand the problem over to her. She is the expert and she will solve it. Happily she does so and the drains are soon unblocked.
never deliver. But they rarely face up to the issue, because they don't want to risk psychic hurt. Instead, they vicariously attack by endless complaining about the opposition. Gripping lowers their anxiety level, but it is coping, not resolution.

Management necessitates dealing with reality, resolving issues, not just coping with them. Do managers truly achieve this? Rarely. At the social level, most organizations are moldering collections of unresolved issues which have been endlessly recycled. Interpersonal relationships are partial at best, blocked at worst. Everybody knows about it, everybody lives with it.

The miracle with such blockage is that organizations manage to function at all. But such blockage hardly enhances their functioning. By the time we've finished with personal rivalries, interdepartmental conflict and office politics, it's surprising that anything is ever achieved.

Change raises the ante. Suddenly all the creepy-crawlies that are hiding under dark stones start to encounter daylight as the stones roll back. This can be very threatening. I once worked on a process chemical industry site where two key workers, occupying a control room on the night shift, had not spoken to each other for the previous fourteen years. Neither of them could even remember what the original disagreement was about. Certainly they had never made a contract, psychological or otherwise, to work on their problem. Everybody knew about this potentially lethal threat to safety in a plant which was physically highly intimidating; no one, for fourteen years, had faced up to it.

Culture change in organizations involves replacing dysfunctional behavior with functional behavior—and making sure that the functional behavior remains. The dysfunctional behavior might or might not have been functional once, but it is now dysfunctional. In basic terms we are returning to the situation outlined in Figure 3 and renegotiating it. Figure 3 is reproduced here as Figure 18.

By progressing through the contract, communication, conceptualization, commitment cycle, people are helped to understand the power of attitude and culture, the lead time of change and the necessity of change. They are further helped to make specific behavioral change which is permanent.

In an organization, this is extremely difficult. Change is happening at an individual level, at a group level, and at an organizational level. Any issue which will imperil change must be dealt with in a timely fashion; the longer it remains, the more the atmosphere will be poisoned.

The notion that people in an organization can somehow continue running their day-to-day business while changing themselves is naive. It assumes that no skill is required in managing change, yet experience suggests otherwise. Running the business (or other activity) is a full-time effort. Acquiring change is also a full-time effort. Although the same people are involved in both efforts (they have to be) the notion that the same people can direct both efforts is absurd.
1. Mutual respect
I respect myself and I respect you. Therefore I will not attempt to attack or manipulate you. I ask you to behave likewise.

2. Legitimate disagreement
Nevertheless, we have an issue about which we disagree, irrespective of which (if either) of us is right or wrong, we still have a disagreement. Everybody has their right to their own viewpoint and we are all sometimes right and sometimes wrong. So our disagreement is quite legitimate. However, it is not helpful or desirable.

3. Psychological contract
I commit to working with you on this issue so that we can arrive at a mutually acceptable and beneficial outcome.

Obviously both parties must progress through these stages. There needs to be joint commitment. Only then will outcome 3 of the conflict (I lose; you lose) be exchanged for outcome 4 (we win).

There is a plethora of books about assertiveness, almost all dealing with it at the level of method, of technique. For precisely this reason, it seems inappropriate to enter into specific techniques here. It is important, though, to appreciate the value of assertiveness at the level of methodology. Conflict is about attacking people; assertiveness is about resolving issues. Whatever the techniques being employed, people always know whether they're in conflict mode or assertiveness mode. Change initiatives, by their very nature, involve conflict - conflict of histories, experiences, norms, values, perceptions, actions. If people do not rapidly adopt the assertiveness mode, they will wallow and drown in politics and infighting.

CULTURE CHANGE IN ORGANIZATIONS

The model of culture change developed in the previous sections came from the experiences of two individuals who faced issues of culture and change. Is it therefore applicable to whole organizations facing such change? The model is, indeed, equally applicable, but the difficulty of applying it is far greater. As Carlos would be the first to admit, it's akin to the difference between playing chess and playing three-dimensional chess.

In Part I (see p. 34) we discussed the social reality of organizations, how organizational life truly is, as distinct from how we like to think about it. Organizations are composed of people and people are very bad at facing up to reality because, as we have noted in the discussion concerning Thor and Fernando, it hurts. People avoid reality: the issues which they know deep down that they should face, by attacking other people, not by resolving such issues. When the issues are themselves interpersonal, it's even worse. People will say, 'I've got a real problem with that lot. They just...'
The stark reality of conflict is that everyone loses. Nowhere is this more vividly seen than in war – conflict brought to its natural conclusion. Neither Thor nor Fernando were happy with their conflict; both were prisoners of it.

Until Carla’s intervention, Thor and Fernando had defined their conflict in interpersonal terms. It was ‘all the other guy’s fault’ – the characteristic sign of interpersonal conflict. This is shown in Figure 16. By securing the first, crucial contract from both of them, Carla managed to change the situation from Figure 16 to Figure 17.

![Diagram of Interpersonal Conflict]

**FIGURE 16**  INTERPERSONAL CONFLICT

![Diagram of Assertiveness and Issue Resolution]

**FIGURE 17**  ASSERTIVENESS AND ISSUE RESOLUTION

Note that in Figure 17 I am using the neutral term ‘issue’ for what was undoubtedly a problem for both protagonists. Sometimes an issue will be a problem for only one protagonist, but the issue will be recognizable to both. Also, the word ‘issue’ is much less emotive than the word ‘problem’. In moving away from interpersonal conflict, we must learn to lay aside our emotion, to become dispassionate.

There are three elements to this change in focus.
My definition of commitment is this: if you commit to something then you do it. No excuses, no rationalizations. It is an act of integrity, of honour. If you say you’ll do it then you do it.

On this basis, commitment can only be assessed retrospectively. You would only know that someone had committed to something when it had actually been achieved. In practice, that doesn’t matter. Agreement is a passive, mild statement of intent. Commitment is an active, strong statement of intention. With agreement, failure involves little loss. With commitment, failure involves loss of integrity. The contract of commitment is a thousand times more powerful than the contract of agreement.

Without commitment, people will not change. The currency of change is not words (necessary though they undoubtedly are): the currency of change is action and progress.

You may be sure that, before she was finished, Carla ensured that her two proteges were well aware of the significance of this distinction.

CONFlict: THE IMPORTANCE OF ASSERTIVENESS

My whole approach to culture change rests on the premise that it must and can be managed to a significant degree. The cycle of culture change discussed in the last section gives us a model and a mechanism for such change. Underlying this model and mechanism, however, is an approach to problem resolution which says that without assertiveness no problem will truly be resolved.

What do we mean by this? Well, originally, Thor and Fernando were in a state of conflict - escalating conflict at that. We are all aware of how trivial issues can blow up into arguments of alarming proportions. The power of emotion often ensures that two people, who were only slightly apart, rapidly become alienated and finish miles away from each other. That was exactly what happened to Thor and Fernando.

Conflict is a natural and inevitable feature of human interaction. All human beings are, to some extent, similar; and all human beings are, to some extent, different. Our similarity is rarely problematic; our difference usually is. Unless we manage our differences, our differences will manage us. Finally, conflict will manage us.

In any conflict between two people (for example, Thor and Fernando), there are four possible outcomes:

1. I win; you lose.
2. I lose; you win.
3. I lose; you lose.
4. We win.

A little thought reveals that outcome 1 will probably lead to outcome 2 next time (as you exact your revenge) and thus outcome 3 will be the final result. Similarly, outcome 2 will tend to lead to outcome 1 and thus, finally, to outcome 3.
had to pinpoint specific areas where they were going to behave differently. And then they had to commit to actually behaving differently. Many of these areas concerned elements of behaviour which they had previously taken for granted. Fernando, for instance, to his great chagrin, had to learn to listen and not to interrupt. Repeatedly, Carla tripped him up by demonstrating that he didn’t know what Thor had just said because he hadn’t been listening. Instead, he had been busy preparing his next interruption. Thor had to learn to focus on specific outcomes and not to be sidetracked by secondary issues. He had to learn to always check on progress – his own and other people’s – and on mutual understanding. ‘I have had to learn all those things which I took for granted,’ he ruefully confessed to Carla. ‘That’s what culture change is all about,’ she replied, ‘challenging your taken for granted.’

Movement around this learning cycle was not regular or uniform. For any one cultural variable, there might be overlapping of stages, for example between communication and conceptualization. Movement might also be iterative; it might go from communication to conceptualization, back to communication and forward again to conceptualization. Experiential learning does not proceed along a smooth curve; very often, it proceeds in fits and starts. Clearly, however, the contract phase involves a definite commitment to proceed with a process of problem resolution. And the commitment phase involves an act of integrity – that we are committed to this course of action (i.e. behaviour) rather than any other. So contract and commitment are sharper, more precise than communication and conceptualization. Iteration here is apt to be backsliding!

It’s worth specifying exactly what I mean by commitment. I do not mean agreement. Agreement is passive. Each day, at work, people agree to all sorts of proposals which they have no intention of ever fulfilling – unrealistic corporate objectives, hockey stock sales curves, mysterious recoveries which always seem to occur in the third quarter. After years in management, one quite simply grows tired of listening to such agreements. The people making them feel good about themselves (‘Look at what I’ve just agreed to!’) or they feel momentary relief (‘I’m off the hook’). By the inevitable day of reckoning, however, a host of convenient excuses have come to mind. Such agreements are worthless; all they do is graphically demonstrate the utter lack of integrity of those making them.

This argument is even more applicable when it comes to change. Politically, an easy way to fend off change is to agree to everything and covertly ensure that convenient factors (beyond your control of course) frustrate events – meanwhile doing everything in your power to ensure that the initiators of change are discredited and run out of time. For obvious reasons, I call this ‘boxing to be saved by the bell’. It is a common ploy among senior managers who, politically, must be seen to be in favour of change but are secretly against it.

This type of spurious agreement can be used to con other people, or it can be used to con yourself. Either way, it’s worthless. So how does one know whether an agreement is spurious? One doesn’t.
suggest why their opposite number might see them in this light. Carla had to make both of them understand that blame must be suspended. She had to enable them to investigate their perceptions. Fernando saw Thor as cold and aloof. Fair enough; no judgement needed. But what specifically did Thor do which was so cold and aloof? Fernando started to realize that, no matter what Thor actually did, he would still be - unfairly - seen as cold and aloof. Thus Fernando had to confront his own biases. Carla had to lead them painstakingly through a process of mutual discovery - about perceptions, stereotypes, behaviour, outcomes, expectations, attitudes, culture. They needed to watch a video in which they were the principal players. They had to learn to see themselves as they were, not as they liked to imagine. They needed to see how their cultural norms were creating an untenable business situation. Painful stuff. Nearly all of us go through life swathed in a cocoon of illusion, insulated from reality. Why? Because reality is painful. The reality about ourselves can be extremely painful and threatening to our psyches. But, as Carla patiently enabled Thor and Fernando to realize, managers are paid to manage reality, not illusion. Much of the insulation has to be stripped away.

CONCEPTUALIZATION

The third stage, which overlaps the second stage, is generating concepts. It's not enough just to watch the video in the second stage. One must understand the video. Understanding the video requires concepts. A large part of Carla's job was to provide suitable concepts.

Carla came armed with hundreds of concepts. Thor and Fernando were oblivious to this because the concepts were all in her mind. Both Thor and Fernando had participated in dozens of training and management development seminars over the years. Consequently, they viewed facilitators as people handing out sheaves of case studies, psychometric tests, etc. All Carla had was a flip chart and a couple of pens which anybody could use. But, time and time again, she produced exactly the right concept at exactly the right moment for one or other of them to understand part of their "cultural mosaic", as Thor laughingly called it. Carla demonstrated that trying to change without using appropriate concepts is like trying to build a house without bricks.

COMMITMENT

Carla repeatedly emphasized that conceptual understanding, while fundamental, was still passive with regard to change. "You can understand what's wrong; you can understand what needs to be done. But until you're actually doing it, day in and day out, how can you say that you've changed?" To this, Thor and Fernando could only acquiesce.

Change occurs only when something different happens - and continues to happen. It was not sufficient for Fernando and Thor to agree to have a better relationship; they
FIGURE 15  A MODEL OF CULTURE CHANGE

THE CONTRACT

Thor and Fernando had a problem. They knew that they had a problem but they would not face up to it. In what has become somewhat of a cliché, they did not have ownership of it. Carla could not help them until they accepted ownership of their problem, and became committed to working at it to effect a resolution and to accepting her help.

The example of Thor, Fernando and Carla is highly abbreviated. Moving through any of the stages of this culture change cycle is a fraught affair – even with two people. Without a suitable contract – psychological, not legal – they would have lacked the integrity of commitment. When their relationship became fraught and the going got rough, they would have relapsed into blame, attacked Carla, in fact, done anything to obscure the issue.

Without a contract, people will not properly commit to change. Building a change programme without a contract is like building a house without foundations. It will not stand.

COMMUNICATION

The next stage was undoubtedly communication. Both Thor and Fernando had to say how they saw each other and how they thought the other saw them. They even had to
Overview: The Essence of Improvement

Don't start an improvement process to improve customer satisfaction or employee morale. It will do that, but the real reason you need an improvement process is to increase the organization's performance (PROFITS). — DR. H. JAMES HARRINGTON

Introduction

Wow! What an exciting time the last 15 years have been for the quality professional. It is almost as though management suddenly realized that there was a direct correlation between quality and profit, when for years, they had thought that they were opposing forces. Everywhere you look, you see quality being promoted. You open up prestigious magazines like Fortune, and you see sections devoted to quality. You look in your newspaper and you find Tom Peters' column on quality. You turn on the TV and the commercials promote the quality of their products, using catch phrases like, "Quality Is Job One." You go to conferences and CEOs expound upon their personal, as well as their organizations', strong commitment to quality, followed by an explanation of what they are doing to improve their quality. They may not understand exactly what they are saying, but they are using the right words. They are talking about "doing it right every time," "we need to prevent errors, rather than react to them," "we need to continuously improve everything that we do," etc. This surely is a step forward.

You ride down the street, and you see stores using quality in their names. Names like Quality Dry Cleaning, Quality Delicatessen, Quality Repair Shop, Quality Insurance Company, etc. In fact, I was going down a street in London,
and ran across a store called "Quality Seconds." Yes, quality scrap. Maybe that is the problem. Everyone is talking about quality and organizations are throwing big bucks at the problem, but the results have been less than acceptable for many organizations. Some organizations, like Florida Power & Light, are disappointed with the results of their improvement efforts. A 1992 Gallup survey indicates that this could also be true of as high as 10 percent of the organizations which have initiated an improvement process.

The actual number of organizations that have initiated an improvement process and failed is not important. Whether it is 20 percent or 1 percent, America is not improving fast enough. In one decade, we went from the world's richest nation to the world's largest debtor nation, and our outlook for the future is bleak. Will the United States have to follow the Soviet Union's example and break up into small countries to get out from under its huge national debt? The United States' share of total world exports dropped from 13.4 percent in 1973, to 12.1 percent in 1983, to an estimated 11.6 percent in 1992. Today's college graduates face the poorest job market in recent history and they will receive lower wages. The average real hourly wage of a college graduate is going downhill. After adjusting for inflation, in 1973, it was $16.45 an hour; in 1987, it was $15.24 an hour; in 1991, it was $14.77 an hour; and in 1993, it was at $14.21 an hour. This represents a 13.6 percent decrease in their buying power.

You cannot pick up a newspaper without reading about new layoffs. Organizations like Hewlett-Packard, AT&T, Sears, IBM, and General Motors are downsizing. Since 1989, 440,000 defense industry workers have been laid off, and 100,000 civilian defense department employees have been let go. By 1995, the downsizing of the United States Armed Forces will put more than 500,000 Veterans into a job market that is already in dire straits. Cities are declaring bankruptcy. This is the first time since the great depression that our next generation will live in a less affluent environment than their parents did. Has the United States reached its zenith and is now slipping downward, or is it on the back side of a wave, soon to rise again? All indications are that our economy has crested, and we are now going downhill.

Sixteen percent of Americans' buying power decreased an average of over 33 percent between 1976 and 1992. A two-wage earner situation has become essential just for people to keep from falling further behind. This additional income has allowed the median family income (adjusted for inflation) to increase 0.67 percent per year for the last 10 years. In the United States, 30 million people are going hungry every day. We need to stem the tide and start climbing back up the hill to undo the damages we have imposed upon our nation during the last 25 years. This means that we need to turn our losing organizations into surviving organizations, and our surviving organizations into winners. We must improve at a much faster rate than we did in the 1980s if our way of life is to survive.

Losers, Survivors, or Winners

The Pentagon's budget should shrink down to about $234 billion by today's dollars by 1997. That would have a rippling effect on defense, military, and non-military jobs. The Federal Reserve estimates that would result in the loss of 2.6 million jobs.
Your department, your organization, and your country fall into one of three categories. There are winners, survivors, or losers. Those are the choices. Check one of the following that best describes the organization you work for.

- Loser
- Survivor
- Winner

How do you know if your answer is right? That's easy. Look at your organization's relative performance in the following areas:

- Return on Assets (ROA)
- Value-Added per Employee (VAE)
- Market Share
- Customer Satisfaction

A relative performance analysis needs to be conducted to evaluate the organization from a short- and long-term performance standpoint. In addition, you need to evaluate the organization's performance against itself and its best competition (see Fig. O.1).

**Short-Term Analysis**

A short-term analysis compares the present performance to the performance of the organization 12 months prior. A plus (+) indicates that it has improved, a zero (0) indicates that there is no change, and a minus (−) indicates that there has been a negative change. An "NU" rating means that the data is "not used."

<table>
<thead>
<tr>
<th></th>
<th>Short term</th>
<th></th>
<th></th>
<th>Long term</th>
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<tbody>
<tr>
<td></td>
<td>Actual value</td>
<td>Self</td>
<td>Competition</td>
<td>Average value</td>
<td>Self</td>
<td>Competition</td>
</tr>
<tr>
<td>ROA</td>
<td>0</td>
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<td>VAE</td>
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<tr>
<td>Market share</td>
<td>NU</td>
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<td>Customer</td>
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<td>NU</td>
<td>NU</td>
</tr>
</tbody>
</table>

*Figure O.1. Relative performance analysis table.*
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Actual Value—For actual value, give the organization a plus, minus, or zero rating using the following table.

<table>
<thead>
<tr>
<th>ROA</th>
<th>VAE (in United States dollars)</th>
</tr>
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<tbody>
<tr>
<td>0 to 2 percent</td>
<td>Minus</td>
</tr>
<tr>
<td>2 to 6 percent</td>
<td>Zero</td>
</tr>
<tr>
<td>Over 6 percent</td>
<td>Plus</td>
</tr>
<tr>
<td>Below $47,000</td>
<td>Minus</td>
</tr>
<tr>
<td>$47,000 to $74,000</td>
<td>Zero</td>
</tr>
<tr>
<td>Above $74,000</td>
<td>Plus</td>
</tr>
</tbody>
</table>

The customer satisfaction rating is based upon the percentage of external customers that rate your service and/or product in the upper percentile (on a scale of 1 to 10, 1 equals very poor, 10 equals the best). Upper percentile is defined as the percentage of external customers that rate your organization 8 to 10.

Below 50 percent  = Minus
51 percent to 75 percent = Zero
76 percent to 100 percent = Plus

Short-Term Self Analysis—The “self” column compares the organization to where it was 12 months before.

Short-Term Competition Analysis—The “competition” column compares the organization’s performance to the average of the top 10 percent of its competition.

(Note: Customer satisfaction data is not used for either the self or the competition categories because market share change provides a better indication of customer acceptance of the organization’s service and products.)

Long-Term Analysis
The long-term analysis looks at the organization’s average performance over the last five years. Scoring rules that were used in the short-term evaluation apply here also.

Rating the Organization
Figure 0.2 provides you with a guide to rating your organization’s performance. Your organization is a winner if it has one or less minuses or two or less zeros, or a total of no more than two zeros and minus ratings combined. Your organization is a survivor if it has 14 or less zeros, or 6 or less minuses, or a combined total of zeros and minuses equal to less than 14. Organizations that have 15 or more zeros, or 7 or more minuses, or a total of 15 or more minuses and zeros are classified as losers (See Fig 0.2).
Using this criteria, there have been very few winners over the last 10 years in the United States. There are a lot of survivors and a lot of losers, but very few winners. This document is written primarily for the survivors and the losers, although even the winners can benefit from it. For if the winners do not continuously practice the principles and methodologies presented, they will soon slip back to the survivor classification, and eventually end up in the loser classification. When you get right down to it, there are really only two types of organizations—those that are making significant improvement, and those that are pushed out of the way by the ones that are improving.

Monopolies and the Government

Do the same classifications apply to monopolies and the government? Yes, very much so. This evaluation applies equally well to organizations like gas companies, water companies, telephone companies, and all privately owned companies. Even monopolies have indirect competition. Florida Power & Light’s competition consists of all the power companies in every other state. Each monopoly needs to compare itself to the best organization outside its monopoly. Do not just use organizations in your marketing area. You should compare your organization to similar organizations around the world. Gas and electricity organizations in the United States should compare themselves to like organizations within the United States and in countries like Japan and Germany. In these cases, they will probably need to replace market share with price of unit delivery, and evaluate customer satisfaction in all six areas (see Fig. 0.1).

Governments Need to Improve

Our top government officials have been talking about quality improvement for the last 20 years. For example, Ronald Reagan, past President of the United States, stated, “A commitment to excellence in manufacturing and service is essential to our nation’s long-term economic welfare.” On February 25, 1986, he issued Executive Order #12552 that stated, “There is hereby established a government-wide program to improve the quality, timeliness, and efficiency of services provided by the federal government. The goal of the program shall be to improve the quality and timeliness of service to the public, and to achieve a 20 percent productivity increase...
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in appropriate functions by 1992. Each executive department and agency will be responsible for contributing to the achievement of this goal.”

In October 1992, George Bush, then President of the United States, stated, “My budget indicates that my administration is launching quality demonstrations in the IRS, Social Security Administration, and the Department of Veterans Affairs. The purpose of this effort is to demonstrate and evaluate what works in order to improve federal quality in programs that touch millions of Americans.”

Bill Clinton, President of the United States, stated, “Continued emphasis on quality by American companies is critical. It is what makes ‘Made in the USA’ something to be proud of.” Stressing the importance of quality improvement in government performance, President Clinton stated, “Innovative management techniques such as TQM, should be considered as one of the many approaches to make government more effective and efficient. We can no longer afford to pay more and get less for our government. The answer to every problem cannot always be another program and more money.”

These certainly are good words, but let’s look at the results. Probably the best indicator of the improvements undertaken by the federal government is our growing annual national debt. For the first 200 years, our accumulated federal debt was $0.7 trillion. In the last 15 years, it grew to over $3.0 trillion. Another excellent indicator is the number of days an average person works per year to pay his or her tax bill. In 1950, that figure was 93 days. Today, it is over 128 days. Now that is really negative productivity!

I recently spent a week in South America, where the only English-speaking channel on television was one that was broadcasting the activities within the United States Congress. They were in the process of debating the annual budget. After watching Congress in action for a short period of time, I am firmly convinced that there are two things you never want to see made: One is sausage, and the other is law in the United States. They would call for a 10-minute recess just before a vote, and the room would empty out. At the end of 10 minutes, no one would return to start business. Fifteen, 20, 30 minutes later, people would start to trickle in. At other times, Congressmen or women would give brilliant presentations on a specific issue and when the camera would pan the audience, only one or two Congressmen or women were sitting at their tables. The rest of the room was empty.

One thing is for sure: There is a great deal of opportunity for our government to improve, to eliminate the bureaucracy, to cut waste, to streamline procedures, to make effective use of resources, and to provide better service. In all probability, a concentrated improvement effort could reduce administrative costs as much as 50 percent and improve quality of service by over 100 percent. This is true for most city, state, and national governments. In 1992, then President George Bush reported, “As a result of cost-effective quality improvement incentives, the level of satisfactory IRS responses to correspondence rose from 60 percent in 1988 to 85 percent in 1991.” Clearly this is a marked improvement, but to look at it another way, 15 percent of the IRS customers were dissatisfied with their responses. Should anyone brag about a 15 percent error rate? In manufacturing, we expect our employees to perform at a parts-per-million level, while the IRS brags about not satisfying its customers 15 percent of the time. In 1994, between February and April 15, the line was busy for
75 percent of the callers. When the IRS does answer the phone, it is estimated that between 20 and 33 percent of the answers are wrong. There certainly is opportunity for great improvement.

President Clinton pushed a major tax hike through Congress in 1993 to help slow down the growing national debt, but even with this tax increase the national debt would not be reduced, and in six years we would be worse off than we are today. On the other hand, if we cut our national government’s poor-quality cost in half, we would generate more savings than we would generate with a tax increase 100 times as great, and it would continue for years to come. We must improve the way our government is managed, and we must do it now.

President Clinton was a strong supporter of Total Quality Management when he was governor. Now he has focused his attention on “Reinventing Government.”

This approach to improvement makes use of the business process improvement methodology that should reduce costs on the government’s critical business processes from 40 to 90 percent. If a process redesign approach is used, it should take about 90 days to redefine the new process. If the reengineering approach is used, it takes approximately one year. Vice President Gore has been put in charge of this effort with a commitment to spend upwards of 50 percent of his time on this project. With Vice President Gore’s focus on the “Information Super Highway,” it looks like this effort is going the way of President Reagan’s improvement efforts. It is surprising that none of the results of their business process improvement efforts over the last year have been reflected in the national budget.

Executive order 12862 (presidential document 48257) dated September 1993 entitled “Setting Customer Service Standards” was a clear indicator that the national government is redirecting its focus back to TQM methodologies that should provide a 10 to 20 percent per year improvement in the federal government’s efficiency and effectiveness. The measurement of improvement in our federal government is its ability to sustain or improve the services they provide while reducing the percent of gross national product that the federal government consumes. A reasonable short-range target, before President Clinton’s term in office is complete, is getting back to the percent of gross domestic product consumed by the federal government in 1980. This can only be accomplished with a major focus on TIM. It will require that we stop expanding our resources to slow down spending like we are in health care, and truly understand why health care and other governmental costs have not stayed in tune with inflation, and then bring them back in line with historical cost levels of the 1970s.

The government presents a unique problem. Most of us view the government as a monopoly that we must live with, but that is far from true. I know of no other organization that puts all subcontracts out for open bid every four years, and that is exactly what we do when we have an election. Our elected officers are really subcontractors with whom we have signed contracts to manage our government, and they do have competition. I am sure that past President George Bush will agree. After Bill Clinton succeeded in “beating the Bush and flushing out the Quayle,” I will admit that most of us do a very poor job of evaluating these suppliers (elected government officials) before we sign contracts with them. In fact, if we ran our industries like we run our government, with suppliers that promise many things
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they never intend to deliver, our industries would all be rated as losers and our country would be in much worse condition than it is today. Our products would not even be able to compete with the products manufactured in Cuba.

We need to determine if our government organizations are winners, survivors, or losers in much the same way we evaluate our businesses. We have turned our backs on the critical portion of our lives for far too long, causing mismanagement at all levels of our government. We are faced with disgraceful, runaway national and governmental debt. Our accumulated national debt has jumped from $6 trillion to $10 trillion in just 10 years. United States national debt is double its GNP. During the 1980s, the debt-to-GNP ratio increased by 30 percent. Something drastic needs to be done about the way our suppliers are running our government for us. This mismanagement has resulted in individual cities like San Juan Bautista, California, and New Haven, Connecticut, declaring bankruptcy.

Local city departments should also compare themselves to other department doing similar activities in other city organizations, states to other state organizations, and our national government to other national governments. These evaluations should be based upon comparative change in performance of the organization itself and comparison to the change of the top 10 percent of similar type organizations. To government officials need to run these areas like a business. They should release quarterly reports providing key measurement data like the following:

- Percent of Gross Area Products Consumed
- Customer Satisfaction
- Percent of Campaign Implemented
- Net Favorable or Unfavorable Balance
- Ratio of Income to Expense

This is the type of data that the voter needs when contracts come up for renewal (election or candidates). Candidates running for office or reelection should campaign on how they will improve these types of key measurements. We, the United States people, are not measuring our elected officials as we should.

Past President Reagan put it well when he wrote, “The need for an improvement in government efficiency with which the federal government delivers goods and services to the American public cannot be overstated. The federal government now accounts for 24 percent of the GNP.”

Characteristics of the Winners

Every one winners is a story of common and uncommon sense that put a wide variety across the organization's operation and business practices. To gain real weight, their winning organization you need to compare the winners to the losers. Based on Dr. Ed. from Emory’s Young’s report, “The American Competitiveness Index”, their marketplace position relative were identified to separate the losers from the winners - see Fig. 1.2.
The winning organizations are those organizations that have:

- Better relative quality
- Lower relative cost
- Higher relative price that, combined with reduced cost, provides a very significant profit advantage
- Larger relative market share

Figure O.4 was based on this Ernst & Young study and relates key business characteristics to better relative performance.

A Broad Agenda of Consideration Aimed at Market Leadership

The ultimate selection of improvement initiatives and the allocation of funds to accomplish renewal objectives are products of business planning, and two aspects of planning were found to be directly related to better performance (see Fig. O.5).
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<table>
<thead>
<tr>
<th>Planning factors</th>
<th>Relative profitability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breadth of focus</td>
<td>Losers: Narrower</td>
</tr>
<tr>
<td>Leadership intent</td>
<td>Losers: Follower</td>
</tr>
</tbody>
</table>

Figure O.5. Planning factors.

First, organizations with planning processes that were broadly focused across a range of external and internal considerations were more successful than those with more narrowly focused planning agendas.

Winning organizations were more likely to address matters of internal organization and external competition than were their counterparts. Second, these broader planning agendas were aimed at achieving the more demanding ambition of market leadership rather than just self-improvement. Here, winning organizations were more likely to be pursuing product and service quality superiority, which helped form the necessary foundation for pricing leadership.³

Product and Market—Scope of Business—
as Broad as Manageable

For the majority of organizations, the planning agenda most often included product and market considerations, and a number of choices related to product and market strategy were found to influence overall performance (see Fig. O.6).

More successful organizations offered broader product lines than their competitors and were more active in upgrading these product lines through innovation. But these organizations also believed that their customers’ criteria for quality extended well beyond today’s physical product quality to include their general reputation for better products and services. More successful organizations were also more vertically integrated, more likely to have some involvement in international markets, and were less likely to find themselves in market situations where customer bargaining power was the principal catalyst for increased competitive pressure. In summary, organizations were rewarded for their ability and willingness to manage complexity and drive innovation.

<table>
<thead>
<tr>
<th>Improvement factors</th>
<th>Relative profitability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product line scope</td>
<td>Losers: Narrower</td>
</tr>
<tr>
<td>Product innovation</td>
<td>Losers: Infrequent</td>
</tr>
<tr>
<td>Quality criteria</td>
<td>Losers: Product</td>
</tr>
<tr>
<td>Vertical integration</td>
<td>Losers: Less</td>
</tr>
<tr>
<td>International scope</td>
<td>Losers: Customers</td>
</tr>
<tr>
<td>Competitive pressure</td>
<td>Losers: Less</td>
</tr>
</tbody>
</table>

Figure O.6. Product and market strategy improvement factors.
Business results are the product of an organization's good and bad habits. Habits are easy to form and hard to break. A Total Improvement Management process focuses on underlying bad habits and replaces them with winning ones. Too often we focus our improvement efforts on special improvement methodologies that are separate from the day-to-day activities. As a result, they are never incorporated into the basic fiber of the organization so that they become an automatic habit that occurs without thought. Success is only obtained when these tools and methodologies become habits and are no longer recognized as improvement activities.

Does the Customer Want Improvement?

In the 1980s, there was great deal of improvement in the manufacturing industries, while some improvement was seen in the service industries. As a result, many people feel that this improvement has eliminated the need for further improvement because they believe their organization is meeting its customers' needs. Research conducted by the Opinion Research Corporation proves this to be wrong. There is a major gap between the average product performance for all industries and their customers' expectations. There is even a significant gap between the best performing organizations and customer expectations. The organization that reduces these gaps will obtain a very significant competitive advantage.

So You Want to Improve

Improvement is not part of the game—it is the game today. Everyone wants things to change for the better. Top management wants employees to stop making so many errors. Engineering wants marketing to give them better forecasts. Marketing wants sales to improve their sales record. Sales wants manufacturing to produce better products so they will be easier to sell. Manufacturing wants engineering to give them designs that are more manufacturable. Everyone wants everyone else to change, but too often they are unwilling to change themselves. You can no longer wait for someone else to change. The improvement process must start with you. The question is: How does an organization make the process work for them? There are many approaches. Suddenly there are hundreds of consultants knocking on management's door with the single right answer for you, and they are all different and in some ways the same.

Confusion Reigns Supreme

Is it any wonder that management is confused? Even the individuals who were recognized as the gurus in the continuous improvement process cannot agree on how an organization should implement the improvement process.
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Philip B. Crosby's "14 Steps" focused on motivating the individual, documenting their commitment to quality by having them sign pledge cards and measuring progress through the use of quality costs (a concept developed by A. V. Feigenbaum in the 1950s). His 14 Steps of Quality Improvement are:

1. Management Commitment
2. Quality Improvement Teams
3. Measurement
4. Cost of Quality
5. Quality Awareness
6. Corrective Action
7. Zero Defect Planning
8. Employee Education
9. Zero Defect Day
10. Goal Setting
11. Error-Cause Removal
12. Recognition
13. Quality Councils
14. Do It Over Again

Dr. W. Edwards Deming introduced Japan's top management to the statistic process control methods developed by Walter Shewhart in the 1920s. Japanese management was quick to realize that this was the "secret weapon" that allowed the United States to mass-produce the vast quantities of high-quality weapons that defeated Japan in WWII. Dr. Deming developed a different "14 Points" program just for the United States.

Just before he passed on, Dr. Deming began to advocate a system he called "Profound Knowledge" that is made up of another 14 points. They are:

1. Nature of variation
2. Losses due to tampering (making changes without knowledge of special or common causes of variation)
3. Minimizing the risk from the above two (through the use of control charts)
4. Interaction of forces, dependence, and interdependence
5. Losses from management decisions made in the absence of knowledge of variation
6. Losses from the successive application of random forces that may individually be unimportant (such as workers teaching other workers)
7. Losses from competition for market share and trade barriers
5. Theory of extreme values.
7. Theory of knowledge in general.
8. Psychology, including intrinsic and extrinsic motivation.
9. Learning theory.
10. Need for the transformation to leadership from grading and ranking.
11. Psychology of change.

Dr. Armand V. Feigenbaum focuses his effort on 10 benchmarks that direct the improvement effort. His "10 Benchmarks for Quality Success" are:

1. Quality is a company-wide process.
2. Quality is what the customer says it is.
3. Quality and cost are a sum, not a difference.
4. Quality requires both individual and teamwork zealotry.
5. Quality is a way of management.
6. Quality and innovation are mutually dependent.
7. Quality is an ethic.
8. Quality requires continuous improvement.
9. Quality is the most effective, least capital intensive route to productivity.
10. Quality is implemented with a total system connected with customers and suppliers.

Dr. Feigenbaum is the father of Total Quality Control and published the first book on the subject in 1951. He also originated the concept of Quality Costs. He looks at the total product value cycle and applies systems engineering approaches to bring about improvement.

Dr. Joseph M. Juran, on the other hand, fosters the belief that an improvement effort is driven by many small, step-by-step improvements. Each saves the company approximately $100,000. He uses Pareto analysis to define the critical few problems and assigns teams to solve these problems. Dr. Juran defines quality as "fitness for use." He looks at what he calls, "The Spiral of Progress in Quality." The quality function is the entire collection of activities through which we achieve fitness-for-use, no matter where these activities are performed. It includes:

1. Market Research
2. Product Development
3. Product Design/Specification
4. Purchasing/Suppliers
5. Manufacturing Planning
6. Production and Process Control
7. Inspection and Test
8. Marketing
9. Customer Service

Dr. Kaoru Ishikawa was the leading quality expert from Japan and the originator of the quality circle concept. He espoused that the best way to improve performance is through the empowerment and enlightenment of the employees. Dr. Ishikawa's concepts fueled the unparalleled explosion in employees' skills and problem-solving training. Although Dr. Deming and Dr. Juran are given credit for the miraculous transformation of Japan, Inc., I believe that Dr. Ishikawa was the real genius because he took many concepts, put them together, and implemented them all effectively. Without Dr. Ishikawa's activities, I believe Deming's, Feigenbaum's, and Juran's work would have had little effect on the Japanese. Dr. Ishikawa looked at quality as a way to manage the total organization. He saw the management transformation as six categories:

2. Consumer orientation—not producer orientation. Think from the standpoint of the other party.
3. The next process is your customer—breaking down the barrier of sectionalism.
4. Using facts and data to make presentations—utilization of statistical methods.
5. Respect for humanity as a management philosophy—full participatory management.

Dr. Deming's popularity expanded because he was given credit for the success of Japanese quality programs. When comparing his and Dr. Juran's approaches, I stated, "I'm not interested in stamping out fires. That's what Juran does. I'm creating a system of profound knowledge that will still be good a century from now." But many think that Juran contributed more to the success of Japan, Inc., than Deming. "Juran was more important to Japan than Deming," says Junji Noguchi, executive director of JUSE. "SQC (statistical quality control) applies only to technicians." In 1969, JUSE developed a super prize for organizations that had won the Deming Prize and had demonstrated continuous quality improvement over a five-year period. To recognize Joe Juran for his major contribution to Japan's quality movement, JUSE asked Dr. Juran if they could name this prize the Juran Medal. Juran responded with a noncommittal answer: that the Japanese felt was a polite turn-down. They named the award, "The National Quality Prize." In 1957, McGraw-Hill's landmark book, The Improvement Process, explored the importance of:

1. Relating the organization's improvement efforts to the business plan.
2. Engineering the total improvement effort.
3. The need for both continuous and breakthrough improvement through the use of teams and business process improvement methodologies (later to be called Process Reengineering or Redesign).

4. The importance of empowerment and creativity to allow the individual to excel.

Along with the approaches sold by these gurus, other consultants and professional organizations develop even more improvement approaches. The engineering community stresses the need to invest in R&D to improve the technologies to be more competitive. The financial community talks about using Total Cost Management to improve profits. Productivity Centers around the world promote improving productivity to become more competitive. The United States Department of Defense is pushing a program called Total Quality Management as a way of improving the level of customer satisfaction.

In a very short span of time, all of these methods and tools, as well as many others, were brought to management's attention. Many of these concepts were tried to one degree or another in most of the progressive organizations during the 1980s. Each of the approaches were presented to management as the best way of obtaining a competitive advantage. Today, there are more than 180 different improvement tools and/or methods available.

Management's Improvement Dilemma

Management's dilemma is the fact that they have a limited amount of resources to dedicate to the improvement effort (see Fig. O.7), and they have at least five different methodologies all competing for these limited resources:

- Total Cost Management
- Total Productivity Management
- Total Quality Management
- Total Resource Management
- Total Technology Management

But as profitable as each approach seems, it is obvious that the organization still had to use most of its resources to provide the products and/or services to their external customers that fund the organization's operation. Top management's job is to divide
the limited improvement resources among the five improvement approaches to get the maximum results. The winning organizations have done an excellent job of distributing these improvement resources among the five approaches, shifting emphasis at the correct time. Most of the survivor organizations have adopted one approach and held dogmatically to it, ignoring the others. The losers have shifted randomly among each approach, without explaining to their employees why they were changing direction. Consequently, employees were left with a feeling that they can wait it out. Why change when the next time top management attends another conference, they will come back with another new approach that will change the organization’s direction? Management needs to understand all five methodologies to be able to make correct decisions and to stop changing direction so often.

**Total Cost Management (TCM)**

In the mid-1980s, a collaboration of financial-type employees from major U.S. organizations developed a technology called "Activity-Based Costing." From this basic start evolved a new methodology called "Total Cost Management (TCM)." It was designed to obtain a step-function improvement in key processes by analyzing every activity within the process, classifying its cost as valued-added or no-value-added, and then taking positive action to eliminate the no-value-added cost.

The TCM methodology can be divided into five phases:

1. **Assessment.** Define which business process the methodology should be applied to.
2. **Organization.** Involve and train management and process improvement teams (PIT).
3. **Analysis.** Flowchart the process, conduct a process walk-through, and do a value and root-cause analysis.
4. **Design.** Lay out a new process with as many of the no-value-added activities removed as possible, and perform a cost/benefit analysis.
5. **Implementation.** Implement the proposed process changes and measure the results.

Typical tools that are part of Total Cost Management are:

- Activity-Based Costing
- JIT Cost Accounting
- Process Value Analysis
- Performance Management
- Responsibility Accounting
- Integrated Financial Reporting
- Poor-Quality Cost
Total Productivity Management (TPM)

One of the priority projects which General Douglas MacArthur undertook when he was put in charge of the occupation of Japan was to improve Japan's productivity. The Japanese Productivity Center was formed to spearhead this movement. Their success soon got the attention of American management. As a result, the American Productivity Center, Inc., was formed, led by C. Jackson Grayson in Houston, Texas. In the 1970s and 1980s, more productivity centers sprang up around the world to collect data and promote productivity improvement within the country.

In the late seventies and early eighties a flood of organizations and consultants got productivity improvement programs started based upon the assumption that Japan and West Germany were taking away our market because their productivity growth rate exceeded ours.

All of these approaches had tools and methods that would improve the quantity of output per unit of resources consumed, whether the resource was people, dollars, or equipment. The movement, which could have been called "Total Productivity Management (TPM)," focused on improving productivity by automating time-consuming, boring, repetitive activities, and eliminating waste.

A typical Productivity Improvement Program consisted of five phases:

1. Awareness
2. Information (Education)
3. Planning
4. Action
5. Follow-Up

In IBM's Technical Report TR 02.911 dated January 15, 1981, were listed the following steps to improve productivity:

1. Lessening of government regulations.
2. Invest in capital equipment.
3. Invest in research and development.
4. Make all management aware of the problem.
5. Make effective use of creative problem solving.
6. Increase use of automation and robotics.
7. Increase teamwork and employee involvement.
8. Expand international markets.
9. Do the job right the first time.

These programs recommended that they start by getting the Chief Executive's active support first. From there they would get top management involved, then form a Productivity Steering Committee. The next step was to train middle management and supervisors on productivity concepts and provide them with the
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tools and techniques used to improve productivity. These programs then focused on establishing measurements and involving people at all levels through communication and training. I can remember when all IBM managers and key employees went through a course taught by the American Productivity Center, Inc., on how to improve productivity and the follow-on program that it inspired.

In 1980, the American Productivity Center, Inc. (APC) predicted that if American organizations did not implement a productivity improvement activity, by 1991 France, Japan, and Germany would be outproducing the United States by over 8 percent per year per person. Well, I guess we did do some things right in the 1980s because the United States is still the most productive nation in the world. And according to new APC predictions, no country is projected to be ahead of the United States as we enter the twenty-first century. By the year 2010, however, Japan will be the most productive nation in the world (see Fig. O.8).

For productivity to keep increasing in the United States, we need to increase the output per capita. Big layoffs like the ones at IBM and G.M. are having should improve their productivity, but it will not help the nation since there is no increase in output and the number of available employees remains the same. For productivity to grow, we need not only to eliminate waste, but also to invest in better equipment and create outputs that were not there before. Professor Frank Lichtenberg of Columbia University claims that a dollar invested in R&D yields productivity gains approximately eight times greater than a dollar invested in plants and equipment. Jack Welch, former CEO of General Electric, made his feelings about the need for productivity improvement very clear when he said, "For a company and for a nation, productivity is a matter of survival."

Total Quality Management (TQM)

In the early 1980s, quality became the magic word, driven by Japan, Inc.'s success in capturing world markets as a result of better design and production quality. For

<table>
<thead>
<tr>
<th>Country</th>
<th>1959 level (U.S. = 100)</th>
<th>Average % growth 1979 - 99</th>
<th>2000</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>100.0</td>
<td>1.1</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Canada</td>
<td>94.0</td>
<td>1.3</td>
<td>96</td>
<td>95</td>
</tr>
<tr>
<td>France</td>
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<td>95</td>
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</tr>
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<td>Italy</td>
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<td>98</td>
<td>103</td>
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<td>West Germany</td>
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<td>United Kingdom</td>
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<td>2.5</td>
<td>77</td>
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<td>Japan</td>
<td>79.4</td>
<td>3.2</td>
<td>92</td>
<td>107</td>
</tr>
<tr>
<td>Korea</td>
<td>56.5</td>
<td>5.3</td>
<td>65</td>
<td>92</td>
</tr>
</tbody>
</table>

*Using 1979-99 Growth Rates
Source: Bureau of Labor Statistics

Figure O.8. International labor productivity with the U.S. level equal to 100 percent (GDP/employee, purchasing power parity).
example, they earned over 30 percent of the United States automotive market because Japanese manufacturers were able to produce cars that, when compared to cars built in Detroit, had less than one-quarter of the defects after they were delivered to the customer. This drove the quality discipline to new heights. In the mid-1950s, the Department of Defense popularized the term “Total Quality Management (TQM),” extending the quality discipline into all areas of the business. Fueled with the belief that W. Edwards Deming and Joseph M. Juran were responsible for Japan’s post–World War II manufacturing marvel, TQM became the “in thing” to do. Management embraced TQM in a blind leap of faith, guided by an onslaught of self-acclaimed quality consultants. Everyone who was out of work and had taken a class in SPC or problem solving hung out their shingle as a quality consultant.

In a survey conducted by the American Society for Quality Control of organizations that are using TQM, 31 percent said they had made some mistakes. The most frequent mistakes were:

1. Not beginning sooner.
2. Failing to make quality a priority.
3. Making quality a project, not a continuous process.
4. Expecting immediate financial results.
5. Not having everyone involved.
6. Not focusing on measurements.

TQM is much more difficult to define than TPM because it was never clearly defined to start with. Many books have been written on the subject, but each one is a little different. It seemed that any program that anyone wanted to get approved in the 1980s and early 1990s was called TQM.

The general, basic elements of a TQM process are:

• Start with top management involvement.
• Educate all levels of management.
• Understand your external customers’ requirements.
• Prevent errors from occurring.
• Use statistical methods to solve problems and control processes.
• Train all employees in team and problem-solving methods.
• Focus on the process as the problem, not the people.
• Have a few good suppliers.
• Establish quality and customer-related measurements.
• Focus on the internal as well as external customers.
• Use teams at all levels to solve problems and make decisions.
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In a survey conducted by MAPI (Manufacturers’ Alliance for Productivity and Innovation) of major organizations using TQM, the following results were reported:

- 40 percent—significant improvement
- 45 percent—some improvement
- 15 percent—marginal improvement
- 0 percent—no improvement

Total Resource Management (TRM)

Driven by the major gains Japan made in the way it used resources (like inventory, floor space, and its employees), a methodology began to gain favor with management that could be called “Total Resource Management (TRM).” Human Resource groups, in an effort to empower the workers, began the most aggressive educational program ever undertaken by business. These educational programs included teaching team skills, problem-solving capability, and job-related training. Technical vitality became a priority in many organizations as management realized that a B.S. degree could be obsolete in as little as five years. The objectives of these training programs were to increase employee loyalty, productivity, and skills. Management realized that their employees were their most valuable asset and, if the organization was going to keep pace with the technologies, they needed to keep upgrading the skill level of their employees. Training and empowering the employees at all levels also helps decrease the costly turnover rates that American organizations were realizing. The worker turnover rate in the United States is more than 10 times that of Japan.

At the same time, the industrial engineering organization was redesigning the manufacturing layout and the stocking areas to balance work flow and minimize parts movement and stocking levels. This activity was largely based upon the results Toyota had with their “Just-in-Time” production process. This movement challenged the basic belief that the most effective and efficient manufacturing strategy was to process large lots of the same units through the manufacturing process together. This effort focused on making better use of other key resources, among them, floor space and inventory cost. Equipment utilization was often traded off for reduced inventory.

We realized that storage was using up to 75 percent of the manufacturing area. If the lot size could be reduced, storage could be reduced. But large lots were required because of the long set-up time. This need drove a new approach to the way tools were designed and how the production areas were laid out. Set-up cycles which had taken four hours, were reduced to less than 10 minutes at companies like Toyota and Ford. This approach minimized the amount of set-up time required and drove the production operations toward a single-unit build concept. In many cases, in-process inventories were reduced from four months to four hours. This was accomplished through the use of tools like Just-in-Time, zero stock, one-minute die change, single-unit build, and so on.
Total Technology Management (TTM)

By the early 1980s we also began to realize that our technologies were falling behind our international competitors. A lower percentage of our students were attaining the more difficult B.S. degrees and instead were taking the easier way out of college by obtaining a B.A. degree. This approach soon saturated the job market, driving many of our young people back into school to obtain a Masters in Business Administration. This is driving an effort to upgrade our educational system to do a better job of teaching the "three Rs" and reestablishing science as a desirable career.

At the same time, the product life cycle was being drastically reduced, requiring more new products to be developed and brought to the marketplace in half the previous time. It also meant that the cost of developing a new product had to be reduced, because it was now being spread over fewer units. In the 1960s, a product life cycle was 14 years, and in the 1970s, it was seven years. In the 1980s, it dropped to four years, and by the year 2000, it will be measured in months. These shorter life cycles and high customer performance expectations eliminate the luxury of shipping initial products with problems that could be corrected by later engineering changes.

Thus required a new approach to the way we managed technology that could be called "Total Technology Management (TTM)." The TTM approach was spurred on when American management realized that Japan, Inc., was able to develop a new product and bring it to market in almost half the time and cost. Many companies got so caught up with TTM that the total organization was reorganized around the available technology, creating situations where the technology drove the business, rather than the business driving the technology.

TTM focused its activities on staying ahead of the competition by having the most advanced technology in its products. It also applied new technologies to the development process to reduce cycle time and cost. TTM advocates discovered that Japan was issuing a higher number of patents per capita than the United States. Investigation revealed that Japan, Inc., was investing its Research & Development dollars with an emphasis on applications development; the United States was spending most of its R&D dollars on basic research. This has resulted in the United States winning more Nobel Prizes, and Japan winning more customers. In light of this, President Clinton is directing the government's support away from basic research to applications development.

Since the late 1970s, there has been a major trend in the United States to implement Concurrent Engineering using a team made up of development, manufacturing, customers, suppliers, and process personnel who work together during the development cycle. As a result, the product design and the process that will produce the product are created and developed simultaneously. Starting in the 1970s, TTM also capitalizes on using Information Technology to bring about improvement and reduce cycle time. (Examples: Computer-Aided Manufacturing, Computer-Aided Design, etc.) TTM is based upon the fact that you can have the best price and the best quality, but if you don't have a product that the customer wants, you will go out of business. You cannot prosper in today's market selling buggy whips or tube TVs.
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Looking at the Total

Fortunately, there is a lot of overlap between the five individual methodologies (see Fig. O.9).

The dark area in the center of Fig. O.9 indicates activities that are part of four total management methodologies (TCM, TPM, TQM, and TTM). These methodologies are shown as being on top of the TRM circle because all the other four methodologies have a direct impact on the organization’s resources. Typical activities that are used in all five areas of total improvement are:

- Top Management Involvement
- Team Problem-Solving
- Process Improvement Methods
- Strategic Planning
- Education

In Fig. O.9, the areas with a 4 in the center of them indicate activities that have a positive impact on four of the five methodologies. For example, by eliminating design review you may cut cost, reduce cycle time to product release, and increase productivity, but you cause quality problems when the product reaches manufacturing.

The areas in Fig. O.9 with a 3 in the center of them represent activities that improve only three of the five improvement methodologies. For example, a new material may be developed that reduces costs but has no impact on quality or the hours required to produce the product. Or, an employee may suggest a way to do an activity that improves productivity, thereby reducing costs, but has no impact on technology or quality. (Ernst & Young’s technical report 93.001 lists the major tools used by each methodology.)

![Figure O.9. Improvement Methodology relationships.](attachment:image.png)
Total Business Management (TBM)

The MBA schools teach that the rapidly improving communication systems and the constantly changing environment have added a whole new dimension to the way upper management looks at and plans for the organization. To compete, management needs to continuously question whether they are providing the right products and services, if they need to move manufacturing locations, whether to diversify or consolidate based on their core strengths, and what alliances they need to develop. More and more it is becoming imperative to develop partnerships with key customers and suppliers. Even organizations which have been competitors for years are forming alliances to compete in the international and local markets (example: IBM and Apple). This new way of directing the organization’s future could be called “Total Business Management (TBM).”

Enclosing Fig. O.9 is an outer circle called TBM. It is a key consideration that must be handled well if the organization is going to continue to grow, increase profits, and survive in today’s competitive environment. TBM activities focus on the overall business to identify areas of opportunities or constraints. It addresses business issues such as:

- Should the organization diversify?
- Should it consolidate?
- What products should be dropped?
- What key technologies will direct the future business opportunities?
- Where shall we expand and what locations should be closed?
- How shall we invest our net favorable balance for the short- and long-term good of the organization?

These are all key business issues and must be handled correctly if the organization is going to survive. To ignore them in your improvement effort will condemn it to failure. Because of its importance, TBM is shown as the ring which holds the whole improvement effort together.

5 Improvement Methodologies’ Impact on Each Other

The key is to realize that each improvement activity can have any one of four results:

1. A positive impact upon all methodologies.
2. A positive impact on one or more of the methodologies and a negative impact on others.
3. A positive impact on one or more of the methodologies and no impact on others.
4. A positive impact on one or more of the methodologies, no impact on one or more of the methodologies, and a negative impact on one or more of the methodologies.
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Remember that all improvement is change, but not all change is improvement. The total interaction of all changes must be evaluated before the change is implemented. To make the process even more complex, there are many different definitions of what tools and methods make up each of the improvement methodologies. For example, some proponents of TQM claim that it is doing everything perfectly, always making the very-best decision, not just a good decision. Others claim that TQM is the elimination of errors. These are two very different concepts. In the first case, it's a degree of performance, and in the second case, it's a level of performance. For example: You decide to go out to dinner in a specific town. If you have a meal which completely meets your expectations and the service was excellent as well, then you could say you had a quality meal. In this case you are defining "quality" as a level of performance. On the other hand, if quality is a degree of performance, you would not know if you had a quality meal unless you were sure that you could not buy an equivalent or better meal within that city for the same or lower price.

Blending Together the Improvement Methodologies

To blend together the many improvement facets, we have developed a combined methodology called "Total Improvement Management (TIM)." The five-tier pyramid in Fig. O.10 represents this new methodology.

Tier 1—Direction. The building blocks (BBs) in this tier develop the strategy that will set the future direction of the improvement process and focus the energy of the organization on key business relationships.

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Figure O.10: Total improvement management pyramid
Tier 2—Basic Concepts. The BBs in this tier introduce the organization to the basic improvement methodologies and integrate them into the normal business activities.

Tier 3—Delivery Process. The BBs in this tier focus on the processes that drive the product and service industries, make the organization more effective, efficient and adaptable while reducing cost, cycle time, and variation.

Tier 4—Organizational Impact. The BBs in this tier develop new organizational measurement and structure.

Tier 5—Reward and Recognition. The BB in this tier focuses on developing a reward and recognition system that provides both financial and nonfinancial rewards. This rewards and recognition system is designed to reinforce the importance of the other tasks within the pyramid.

The pyramid was selected to represent the TIM methodology because it is synonymous with strength and longevity. The pyramids were also built so that they set the absolute direction (north, south, east and west). What could better symbolize the strength, consistent direction, and long-lasting endurance of an organization that correctly implements TIM? If your organization uses the TIM pyramid’s concepts, as time passes by, it will see competitors come and go and economic conditions ebb and flow, but your organization will grow and prosper. Figure 0.11 shows the building blocks for each tier.

The Foundation of the Improvement Pyramid

The purpose of any progressive, long-lasting organization is to provide products and services to its customers that have more value, better quality, and are less costly.
Overview: The Essence of Improvement

than other organizations offer. But it also has an obligation to all its stakeholders, which include investors, management, employees, suppliers, and the community. Truly great organizations provide ongoing security and value to all their stakeholders, not just their customers. TIM is built upon establishing strong stakeholder partnerships with the organizations undertaking the improvement activities. The word "partnership" refers that all parties involved will mutually benefit from their relationship. Without building a strong stakeholder foundation, your improvement process cannot sustain itself. It is like building your home on sand close to the ocean. No matter how well you put the building blocks together on top of a bad foundation, sooner or later the sand will shift and your house will come tumbling down. One of the most difficult jobs all organizations face is to balance the needs of all its stakeholders so that the organization is perceived as value-added by these stakeholders.

Tier 1—Direction

The first tier in the pyramid is used to set the direction of the improvement process. It consists of five building blocks (BBs), which are:

BB1: Top Management Leadership. Top management must do more than just support TIM. They must be part of the process, participate in designing the process, assign resources, and give freely of their personal time. The start of any improvement process is top management leadership.

BB2: Business Plans. All employees need to understand why the organization is in existence, what the behavioral rules are, and where the organization is going. This direction must be well communicated to the stakeholders, and there needs to be an agreed-to plan on how to get there. That is what a Business Plan does for an organization. It sets the direction of the business, what products are going to be provided, what markets are going to be serviced, and what goals need to be reached in the future. Without an agreed-to, well-understood business plan that is implemented effectively, the organization has no direction. It is like an automobile speeding down the road at 100 miles per hour without a steering wheel. If the organization does have a Business Plan, but it is not communicated throughout the entire organization, it is not much better off. Management is behind the steering wheel of that car speeding down the road at 100 miles per hour, but now the steering wheel is not connected to the front wheels.

BB3: Environmental Change Plan. The only thing that management has control over is the environment within the organization. If we are going to improve the organization, it means that we must change the environment within the organization to produce the desired results. Environmental Change Plans first develop a set of vision statements that define the desired future environment. Individual vision statements and desired behavior patterns are developed for every influencing factor (example: Management Leadership, Business Processes, Customer Partnerships, etc.). Then, a three-year plan is developed to bring about
the desired transformation. The long-term effect of changing the environment is a change in the organization's culture.

A Change Management Plan is also developed and implemented. This plan provides the road for effective implementation of the environmental changes which are required to bring about the desired environment and behaviors within the organization. It is very important to prepare the stakeholders for these changes before, during, and after their implementation. Even the very best improvement effort can be shot down if the stakeholders have not been properly educated and their required changes. As a result, the Change Management Plan is a crucial part of the direction-setting activities.

Whenever you do anything, you have four options. You can do the wrong thing effectively (Option I), or do it ineffectively (Option II). You can do the right thing effectively (Option III), or do it ineffectively (Option IV). In the 1980s and early 1990s, many organizations were doing a number of good things, but doing them ineffectively because they did not prepare their stakeholders to embrace the changes. Often, the losing organizations’ stakeholders spent their efforts trying to define why the change would not work and/or sabotaging the change instead of trying to make it work. As a result, many of the changes failed to meet expectations or accomplish the improvement that they should have. The winning organizations tended to prepare their stakeholders for the changes. Because the stakeholders were prepared for the changes, they embraced them and spent their efforts making the changes work. As a result, these change programs often exceeded expectations.

**BB4: External Customer Focus.** Organizations are formed to service customers. As John Young, past president of Hewlett-Packard, put it “Satisfying customers is the only reason we’re in business.” The primary ingredient for the success of any organization is an excellent understanding of, and a close working relationship with, their external customer/consumer. All planning must be based upon improving this relationship, for it is this relationship which generates the means to meet the needs and expectations of the other stakeholders.

**BB5: Quality Management Systems.** This building block is used to establish Quality Management Systems that are in keeping with good business practices. This basic level of minimum operating systems is necessary before more sophisticated improvement methods can be effectively implemented. The Quality Management Systems should be in compliance with the International Standards Organization ISO-9000 series, or the appropriate military or commercial specification (example: MIL-S-9555A). These systems are the “blocking and tackling” of the improvement process. They are an essential building block for the rest of the structure. Usually as TQM is implemented, some of the controls that are required initially in these systems are replaced because they are no longer needed.

Included in the Quality Management System are all the quality of life impacts. This enables safety, security and environmental issues to be addressed as part of the Quality Management Systems. Requirements, procedures, and audits of the quality, security, safety, and environmental impacts should be combined. Management's
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number one priority is not satisfying their customers, but ensuring the safety of the employees and their customers.

The Direction Tier of the pyramid is extremely important and is the one most loser organizations have paid too little attention to. Ignoring or quickly passing through this phase is the reason why most organizations did not progress at the rate they should have in the 1980s and early 1990s. Not paying the proper attention to each building block in this tier results in a haphazard approach to improvement that often confuses rather than helps the employee, and in the long run slows down the progress made by the entire organization.

Tier 2—Basic Concepts

The second tier in the pyramid is directed at integrating the basic concepts into the organization. It consists of four building blocks, which are:

BB6: Management Participation. This building block is designed to get all levels of management actively participating in the improvement effort. Having management feel comfortable in a leadership role is essential to the success of the total process. It is important that you bring about the proper change in top, middle, and first-line managers and supervisors before the concepts are introduced to the employees. Most organizations have done a poor job of preparing management for their new leadership role.

BB7: Team Building. The use of management and employee teams to solve the organization’s problems and to be involved in the organization’s change process is a key ingredient in today’s competitive business environment. This building block develops team concepts as part of the management process, and prepares all employees for participating in a team environment.

BB8: Individual Excellence. Management must provide the environment as well as the tools that will allow and encourage employees to excel and take pride in their work and then reward them based on their accomplishments. This is another key ingredient in every winning organization’s strategy. You can have a good organization using teams, but you can have a great organization only when each employee excels in all jobs they are performing. Care must be taken to have a good balance between team cooperation and individuals who strive for excellence in all their endeavors. The two concepts need to work in tandem, not compete with each other.

BB9: Supplier Relations. Winning organizations have winning suppliers. The destiny of both organizations is inevitably linked. Once the improvement process has started to take hold within the organization, it is time to start to work with your suppliers. The objective of this partnership is to help them improve the performance of their output and increase their profits, while reducing the cost of their product and/or service to you.
The Basic Concepts Tier provides the infrastructure for improvement. It is designed to help management change from their role as "bosses" to "leaders." This results in an environment where all of the skills of the organization’s employees are better utilized and challenged. From the employees' standpoint, it demonstrates to them the advantage of being part of the team. It also shows them how to balance their personal needs for success with the needs of the organization, while at the same time increasing the personal satisfaction they gain from being more creative. These building blocks develop a new set of relationships between the employees and their internal and external customers and suppliers. The building blocks that make up Tier 2 are the fundamental ingredients in a continuous improvement process.

Tier 3—The Delivery Processes
The third tier is the Delivery Processes level. This tier of the TIM pyramid focuses on the organization’s processes and the output that its customers receive. It is made up of three building blocks, which are:

BB10: Process Breakthrough. This building block uses cross-functional Process Improvement Teams (PI Ts) to make a quantum leap forward in the critical business processes (overhead-type activities). It focuses on making these important parts of the organization more efficient, effective, and adaptable. This building block makes use of many different streamlining techniques, including bureaucracy elimination, value-added analysis, benchmarking, and information technology, carefully woven together. This approach brings about drastic improvements in the processes to which it is applied. Improvements between 400 to 1000 percent are being realized in a period as short as six months.

BB11: Product Process Excellence. This building block focuses on how to design and maintain product delivery processes so that they consistently satisfy external and/or internal customers. It is directed at the product design activities and the production process. All organizations, where they are classified as service or product industries, have production processes.

BB12: Service Process Excellence. The delivery processes for products and services are very different. These differences make it necessary to apply different improvement methods and common methods in different ways in the delivery of service. This building block focuses on how to design, implement, and improve the service delivery process in the service and product industries.

Tier 4—Organizational Impact
The fourth tier of the pyramid is the impact level. By now the improvement process is well underway within the organization, and it will soon start to impact the
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organizational structure as well as its measurements. This tier consists of two building blocks, which are:

BB13: Measurement Process. This building block highlights the importance of a comprehensive measurement plan in all improvement processes. It helps the organization develop a balanced measurement system that demonstrates how interactive measurements like quality, productivity, and profit can either detract from or complement each other. Only when the improvement process documents positive measurable results can we expect management to embrace the methodology as a way of life. A good measurement plan converts the skeptic into a disciple. As the process develops, the measurement system should change. When you start the improvement process, you measure activities. About six months into the process you start to measure improvement results, and about 18 months into the process the normal business measurement should start to be impacted.

BB14: Organizational Structure. As the smokestack functional thinking and measurement systems begin to change to a process view of the organization, bureaucracy is removed from the processes and decisions are made at much lower levels. In this new environment, employees are empowered to do their jobs and are held accountable for their actions. With these changes, large organizations need to give way to small business units that can react quickly and effectively to changing customer requirements and the changing business environment. Functions like Quality Assurance and Finance take on new roles. The organization as a whole becomes more process-driven rather than functional organization-driven. In this environment, the organization needs to become flatter and decentralized, requiring major changes in the organizational structure. This building block helps an organization develop an organizational structure that meets today’s needs and tomorrow’s challenges.

Tier 5—Rewards and Recognition

The fifth and top tier of the pyramid is the Rewards and Recognition level. The top of the pyramid has only one building block, which is:

BB15: Rewards and Recognition. The Rewards and Recognition process should be designed to pull together the total pyramid. It needs to reinforce everyone’s desired behavior. It also needs to be very comprehensive, for everyone hears “Thank You” in a different way. If you want everyone to take an active role in your improvement process, you must be able to thank each individual in a way that is meaningful to him or her. There is a time for a “pat on the back” and a time for “pat on the wallet.” Your rewards and recognition process should include both.

Improvement’s Impact on Stakeholders

The stakeholder is any individual or group of individuals impacted by an organization or a process. It is becoming more and more accepted that all organizations
need to consider all their stakeholders in every decision that is made. If you accept this premise, it is easy to see that your improvement process must consider more than just the end customer. Certainly it is easier and less complex if you can direct your efforts at maximizing the positive impact on just one or two stakeholders. But that is not possible for most organizations today, since most organizations have six different stakeholders with very different priorities. A typical organization has the following stakeholders:

<table>
<thead>
<tr>
<th>Stakeholders</th>
<th>Priority points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is management</td>
<td>-48</td>
</tr>
<tr>
<td>Its investors</td>
<td>-41</td>
</tr>
<tr>
<td>Its external customers</td>
<td>-27</td>
</tr>
<tr>
<td>Its suppliers</td>
<td>-1</td>
</tr>
<tr>
<td>Its employees</td>
<td>-3</td>
</tr>
<tr>
<td>Its community/mankind</td>
<td>-24</td>
</tr>
</tbody>
</table>

These six stakeholders have very different needs and expectations. Trying to satisfy six different stakeholders with such different needs is a very significant challenge to any management team. For what is good for one may be bad for another. For example: It would be good from the investors' and management's standpoint to move a manufacturing operation to Mexico, since it would reduce cost; as well as having the benefit of less strict pollution requirements; however, for obvious reasons, this change is not advantageous from the employees' and community's standpoint. It could also increase the pollution in Mexico.

To live with this dilemma, many management teams have prioritized the importance of their stakeholders. Typically, the way management consciously or unconsciously prioritizes the six stakeholders is shown in the previous stakeholder list. Management is the top priority, and the community is the lowest. This unwritten prioritization has resulted in our government passing laws to protect the general public, the environment, and employees. In order to understand the complexities of satisfying all the stakeholders, we need to understand each stakeholder's priorities. The following table lists the six stakeholders, their top five priorities, and how the six methodologies impact those priorities. The priority points are used to indicate the favorable or negative impact the methodologies have on each stakeholder.

Table O.1

<table>
<thead>
<tr>
<th>Legend</th>
<th>Priority points</th>
<th>TBM = Total Business Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>● = Direct Impact</td>
<td>-3</td>
<td>TCM = Total Cost Management</td>
</tr>
<tr>
<td>○ = Indirect Impact</td>
<td>-3</td>
<td>TPM = Total Productivity Management</td>
</tr>
<tr>
<td>○ = Little or no impact</td>
<td>3</td>
<td>TQM = Total Quality Management</td>
</tr>
<tr>
<td>X = Negative Impact</td>
<td>-2</td>
<td>TRM = Total Resource Management</td>
</tr>
<tr>
<td>TTM = Total Technology Management</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Management's measurements of improvement

<table>
<thead>
<tr>
<th></th>
<th>TBM</th>
<th>TCM</th>
<th>TPM</th>
<th>TQM</th>
<th>TRM</th>
<th>TTM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Return on assets</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>○</td>
</tr>
<tr>
<td>Value-added per employee</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Stock prices</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Market share</td>
<td>●</td>
<td>●</td>
<td>○</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Reduced operating expenses</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
</tbody>
</table>

Total priority points = +48

### Investors' measurements of improvement

<table>
<thead>
<tr>
<th></th>
<th>TBM</th>
<th>TCM</th>
<th>TPM</th>
<th>TQM</th>
<th>TRM</th>
<th>TTM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Return on investment</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Stock prices</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Return on assets</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Market share</td>
<td>●</td>
<td>●</td>
<td>○</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Successful new products</td>
<td>●</td>
<td>N</td>
<td>○</td>
<td>●</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

Total priority points = +41

### Customers' measurements of improvement

<table>
<thead>
<tr>
<th></th>
<th>TBM</th>
<th>TCM</th>
<th>TPM</th>
<th>TQM</th>
<th>TRM</th>
<th>TTM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduced cost</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>New or expanded capabilities</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Improved performance</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Ease of use</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Improved responsiveness</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
</tbody>
</table>

Total priority points = +27

### Suppliers' measurements of improvement

<table>
<thead>
<tr>
<th></th>
<th>TBM</th>
<th>TCM</th>
<th>TPM</th>
<th>TQM</th>
<th>TRM</th>
<th>TTM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased return on investment (supplier)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>●</td>
<td>○</td>
</tr>
<tr>
<td>Improved communications/fewer interfaces</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Simplified requirements/fewer changes</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Longer contracts</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Longer cycle times</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
</tbody>
</table>

Total priority points = +1

### Employees' measurements of improvement

<table>
<thead>
<tr>
<th></th>
<th>TBM</th>
<th>TCM</th>
<th>TPM</th>
<th>TQM</th>
<th>TRM</th>
<th>TTM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased job security</td>
<td>○</td>
<td>N</td>
<td>N</td>
<td>●</td>
<td>●</td>
<td>N</td>
</tr>
<tr>
<td>Increased compensation</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Improved growth potential</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Improved job satisfaction</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Improved morale</td>
<td>○</td>
<td>N</td>
<td>N</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
</tbody>
</table>

Total priority points = -3

### Community/mankind's measurements of improvement

<table>
<thead>
<tr>
<th></th>
<th>TBM</th>
<th>TCM</th>
<th>TPM</th>
<th>TQM</th>
<th>TRM</th>
<th>TTM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment of people</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>○</td>
</tr>
<tr>
<td>Increased tax base</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Reduced pollution</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Support of community activities</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Safety of employees</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

Total priority points = -24
The ideal improvement process would improve the organization's performance in all the stakeholders' priority issues. In these tables the most frequent impact was noted, but sometimes one methodology can have more than one impact, depending on the circumstances. For example, Total Quality Management can have a positive or a negative impact on job security: if improving the product increases the organization's market share, resulting in increased workload, job security is improved. But if TQM reduces waste, thereby improving productivity, but does not increase market share to the point that it offsets the productivity gains, employees could be laid off. This results in a negative impact on job security.

By analyzing the previous tables, it is easy to see why all six improvement methodologies need to be combined to at least indirectly impact all of the stakeholders' top five priorities. The stakeholders' priorities are listed based upon an average organization. We realize that these priorities can change based upon products and circumstances within the organization. For example, if the organization is a nuclear power plant, safety would be the number one priority for the community and the employees.

How TIM Affects the Organization

The TIM process, when implemented correctly, has many positive impacts on the organization, some of which follow:

<table>
<thead>
<tr>
<th>Legend:</th>
</tr>
</thead>
<tbody>
<tr>
<td>= Sometimes</td>
</tr>
<tr>
<td>= No</td>
</tr>
<tr>
<td>= Yes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>TBM</th>
<th>TCM</th>
<th>TPM</th>
<th>TQM</th>
<th>TRM</th>
<th>TMM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increases market share</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increases return on investment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increases value-added per employee</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increases stock prices</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Improves morale</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Improves customer satisfaction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Improves competitive position</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Improves reliability</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Improves maintainability</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Improves safety</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decreases waste</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decreases overhead</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decreases inventory</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Causes layoffs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increases the number of employees</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increases profit</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Overview: The Essence of Improvement

Do the Total Management Methodologies Pay Off?

- Caption: *Electronic Business* Magazine, October 1992 issue, page 48—"Probably 95 percent of (TQM) programs fail, but no one has the guts to say so," charges industrial veteran Luigi D'Angola, now a Professional Fellow at Dartmouth College.

- Rath & Strong polled 95 corporate senior managers and reported that 38 percent gave their quality improvement a failing grade.

- An Arthur D. Little survey of 500 United States executives revealed that only 64 percent believe that their quality programs have improved their competitiveness. (Source: *Fortune* Magazine, May 18, 1992.)

If you use these examples as your yardstick, one of the Total Management Methodologies Total Quality—management—is in trouble.

On the other side of the coin, the same issue (October 1992) of *Electronic Business* Magazine reported on page 47 that of the 70 companies they surveyed, none of them have scrapped their TQM efforts, and 91 percent reported that their quality had—improved compared to their competition. In a Gallup survey conducted by the American Society for Quality Control in 1992, they determined that 65 percent of U.S. consumers think that U.S. products are better than they were five years ago. In yet another 1992 survey conducted by Gallup of executives from 604 organizations, only 8 percent said they had a quality improvement program in place but that they were frustrated with the results. Only 1 percent stated that there was no need to use quality improvement as a business strategy. These are only three reports which confirm the businesses success of the improvement efforts going on within the United States today; there are many more.

The conflicting data reported is confusing management. However, it is sufficient to say that when you look at hard data, you can state with a better than 95 percent confidence level (plus or minus 4 percent sampling error) that the TQM efforts are positively making a contribution to most U.S. organizations, and are making them more competitive within the country as well as internationally.

But even if only 1 percent of the organizations that undertake a TQM effort are unhappy, this is too many. I agree that somewhere between 90 to 95 percent of the organizations that undertook an improvement effort in the 1980s did the right thing. The problem is that some organizations have had with TQM is not what they did, but how they did it. Their implementation in many cases was poor, and they did not receive the full return on their investment.

Billions of dollars were spent on training that was not put to use. I estimate that 5 to 10 percent of the organizations did a very poor job of implementing the improvement process, and received little or no return on these huge investments. About 10 to 20 percent of the organizations implemented the improvement process very effectively and documented a return on their investment of as much as 40 to 1. Between 70 to 85 percent of the organizations that implemented TQM fell somewhere in the middle. They improved at least 5 percent per year, making it worth-
while, but these organizations did not obtain the results they should have. Many of these same organizations did not see their market share grow even though they reduced waste, cut defect levels between 15 and 20 percent, cut cycle time, and increased customer satisfaction.

The reason for the lack of bottom-line results is that these organizations are improving exponentially, but their competition is also implementing the improvement process at the same time, causing these organizations to stay at a par with their competitors. As a result, their market share did not increase. In some cases, the organizations that are utilizing the improvement process are even losing market share. This usually occurs when organizations observe that their competition is implementing an improvement process and they decide to copy it. These organizations usually start one to two years behind their competition.

Figure 0.12 shows the exponential improvement curves for two different organizations. Curve “A” is the improvement curve for the competition, and Curve “B” is the organization that started the improvement effort one year later. Both curves are essentially the same, but the second curve is offset by one year. You will note that as both organizations progress with their improvement process, the difference between the two curves becomes greater, due to the exponential nature of the improvement curve.

You have just learned Improvement Rule No. 1: You cannot copy your competition. For when you get to where you want to be, they will be far ahead of you. You must improve at a steeper rate than your competition in order to be competitive.

Rule No. 2: Do not go to your competition and give them all your improvement secrets—they may listen to you.

I Benchmarking—The Worst Pays Off Big

In all businesses, there are winners and losers. The smart competitor studies both to maximize its total performance. Many organizations have documented return on investments in one year of 40 to 1. Globe Metallurgical, Inc., for example, has documented a 40 to 1 return on its improvement efforts. At the other end of the spectrum are organizations like Florida Power & Light. In 1989, they were the winner of the first Deming Award ever presented outside of Japan. In 1990, Florida
Power & Light's net loss was $391 million, yet their rate per 1000 users remains higher than for the three other major private utilities in Florida.

When James Broadhead became CEO of Florida Power & Light, he met employees and discovered widespread resentment for the quality effort. In the 1, 1991 issue of Fortune Magazine, he was quoted as saying, "I was most troubled by the frequently stated opinion that preoccupation with process had resulted in losing sight of one of the major tenets of quality improvement, namely, respect for the employees." He found "less recognition for making good business decisions than for following the Quality Improvement Process." He also stated that "If (FPL) pushed itself to the brink of nervous collapse in the months before CEO Broadhead was chosen in 1989."

Even though less than 5 percent of the organizations lose money as a result of implementing an improvement process, you cannot consider an organization a winner unless it receives a minimum of 3 to 1 return on investment. Using this guideline, about 20 percent of the organizations that undertake an improvement process can be classified as losers. These losers are hard to find. They do not write articles about their failures, and their CEOs do not go to conferences and lecture on how badly they are doing (if they know they are failing). Today, there are very few organizations that have not undertaken some type of improvement effort. As the organizations that contact me, I see the following cross-section:

<table>
<thead>
<tr>
<th>Status of the organization</th>
<th>Percent of organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizations that are so excited about what they have accomplished that they are committed to continuously expanding their efforts and are looking for more ways to improve.</td>
<td>25%</td>
</tr>
<tr>
<td>Organizations that are happy with what they have accomplished, but it is not becoming part of the way they do business, and they feel there is more potential than they have received from their activities.</td>
<td>35%</td>
</tr>
<tr>
<td>Organizations that are unhappy with their progress.</td>
<td>30%</td>
</tr>
<tr>
<td>Organizations that want to start an improvement process and have not already been involved in the use of some of the improvement tools. (Example: Teams or Statistical Process Control)</td>
<td>10%</td>
</tr>
</tbody>
</table>

Why Organizations' Improvement Efforts Fail

The organizations that are unhappy with their progress have many things in common. The following are the primary reasons why organizations are dissatisfied with the progress of their improvement process.
1. Change in top management (new top management).
2. Change in top management’s priorities and/or direction.
3. The theory has been taught in class but not put into practice.
4. Downturn of the economy caused them to discontinue their effort.
5. Middle management did not buy into the process.
6. Other, higher priorities within the organization kept it from being effective.
7. The consultants hired did not understand their business.
8. They are not improving fast enough to keep pace with the competition.
9. Lack of hard, measurable results. There is a need to show management the return on investment.
10. The teams are not solving meaningful problems.
11. The improvement process is interfering with getting the job done.
12. Lack of focused strategy to integrate all efforts.
13. The quality efforts are not reflected in the bottom line.
14. Lack of organized labor support.
15. The methodologies used did not work.
16. A big layoff killed the activities.

These are all symptoms, not root causes. The root causes for these failures are:

**Root Cause No. 1.** Upper management did not believe that they needed to change. They were giving lip service to the change process, instead of leading it. They wanted everyone else to change, but they did not want the improvement process to impact them. This usually occurs because top management accepted the improvement activities in a blind leap of faith. A business case was not developed and a viable improvement plan was not developed and embraced by the entire top management team.

**Root Cause No. 2.** Lack of trust between management and the employees is the biggest single cause of improvement process failures. In about 65 percent of the organizations we work with, we find that lack of employee trust in management and lack of management trust in the employees is one of the top priority problems that needs to be addressed first. Years of secrecy, suspicion, and seeming lack of interest in the employees has caused the employees to distrust upper management. Most employees believe that top management know much more than they do about what is going to happen to the organization and purposely keep the employees in the dark. They see the organization’s president getting paid millions of dollars per year, while they get about $20,000 and work just as hard as the president does. When things get tough, the lower-level people get laid off, while top management get increases. Employees reason that top management must have a master plan that they are following; otherwise, they would be fired for their poor performance.
Management, on the other hand, reasons that the employees don't care about the organization and that they cannot be trusted with the organization's property or information. Using an organizational loyalty index, with 100 being the best, I rate the United States 56; West Germany 64; and Japan 85.

Root Cause No. 3. The organization's improvement champion is the third major cause of failure. The champion or czar is the person within the organization selected to lead the improvement process. Too often, management selects the wrong person for the wrong reasons. Frequently, top management selects a senior executive who is about to retire, reasoning that he or she has the needed prestige and has earned the right to be assigned to what is perceived as a low-stress assignment. Often management believes that there is no need for the improvement champion to have any knowledge of the improvement methodologies. After all, anyone knows what good quality is. Even illiterate consumers know what quality is. So why does the improvement champion need to have a background in the improvement methodologies?

This type of reasoning is very much like saying that everyone knows the difference between a good and a bad design. Even illiterate consumers would not buy a television that has a fuzzy picture. So why not make anyone the vice president of Research & Development? An engineering degree should not be necessary. Sure, you can take any competent executive and with enough time, training, and a lot of errors, eventually he or she will be capable of providing minimum performance in either assignment. But what organization today has that type of luxury? It takes 4 to 6 years for a good manager to become an exceptional improvement expert.

Too many organizations that failed took a senior manager and made that person responsible for the improvement effort as a way for him or her to slow down before retirement. IBM is a good example of this type of approach. Their first two vice presidents of quality retired from their jobs within three years of being assigned as Director or Vice President of Quality. They were both excellent people, but they retired at the point where they were just really beginning to become effective.

Other organizations select bright, upcoming executives to become the improvement champions. This is a better approach if you can afford the years of delay in the implementation process or the cost associated with a good, full-time consultant to partner with the improvement champion. Other organizations select someone from the quality assurance group for this job. These individuals have usually had a number of years' experience with some of the improvement tools, having already implemented them within parts of the organization. They also have already established direct contact with customers and suppliers.

Five years ago, I felt that assigning someone from Quality Assurance to be the champion was the wrong approach because the quality organization was viewed as only being responsible or interested in the manufacturing process. But after reviewing the results obtained by many organizations that used all three approaches, I have changed my mind. I now believe that it is easier, faster, and more effective to get the quality assurance professional to expand his or her role to total improvement than it is to start over with someone who has little or no experience in the elimination of errors. The exception to this would be an individual who does not have the respect of the management team.
Root Cause No. 4. Both successful and unsuccessful organizations base their improvement process on a consultant's methodology. Often their improvement process was based upon a book written by a consultant. Others used consultants who had limited knowledge of how to convert theory into practice in different types of organizations. Let's be practical about it. A consultant's knowledge is his or her product. How can you expect them to give away their product at a conference for free or in a book for which their income is $2,500? Most authors of improvement books lose money on the books they sell. On an average book, the author invests just under 300 days to prepare it and he or she receives about $2,500 in royalties.

No one can afford to lose money on their products and stay in business. On the other hand, it does make good sense to use consultants to help you implement your improvement process. The best consultants have spent 30 to 40 years understanding and implementing the improvement process methodology. They have spent hundreds of thousands of dollars developing individual tools. They have made some errors which they have learned from, and have had a lot of successes. Why shouldn't you learn from the mistakes the consultants have already made? Why spend the hundreds of thousands of dollars to develop a class and the supporting materials when you can buy them for much less than it costs to do the job yourself? As far as training and implementation assistance, there is a time to use consultants and a time to stand on your own two feet. To start the process or to implement a new tool, a consultant can prevent you from making the mistakes that can shoot down the total process.

The problem many organizations have had with consultants is that they have selected the wrong ones or terminated the relationship with the consultant too soon. Many teachers consider themselves consultants. This is far from true. It is much easier to teach a class and discuss theory than it is to implement the theory. A consultant who teaches a class on subjects like QFD, SPC, etc., has only done 15 percent of the job. Helping implement it is 65 percent of the consultant's job. Other consultants have only limited understanding of the total improvement process, which prevents them from looking at the total picture and making the best suggestions.

There are over 400 improvement tools available today. Select a consulting organization that understands all the tools and can help you make the best choice. Few consultants can be really good at more than 10 improvement tools, but a really experienced consultant can understand the strengths, weaknesses, and interactions of all of them. These experienced consultants can direct you to a consultant who has the skills to help implement the tools that best meet your needs.

Yes, using consultants is good business. Most of the winners do it. High-tech companies like Hewlett-Packard, IBM, and Martin-Marietta use consultants; low-tech companies like United States Steel, Reebok, and Campbell Soup do it. The following are key traits to look for when you select an improvement consulting firm:

1. Are the key people certified by the appropriate professional society? (Examples: quality and reliability engineers by the American Society for Quality Control, professional managers by the Institute of Certified Professional Managers, etc.)
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2. Are the key people state-registered as professional engineers?
3. Do they have experience with implementation for at least two complete product cycles before they started in the consulting field?
4. Are they fellows or honorary members in the appropriate national associations?
5. Are they capable of training and implementing (can they do the job without your people, or are they just theoretical)?
6. Do they own the full range of improvement tools?
7. How many improvement books have they published?
8. What type of research database do they have?
9. Do the leaders of the consulting organization have a worldwide reputation and a worldwide communication system, ensuring they know the latest developments?

Do not select a consulting firm based upon the color of the consultant's eyes, the way they dress, or the glitter in their promotional materials. Select a consultant based upon his or her cumulative knowledge over the past 20 to 30 years. The consultant needs to know not only what the latest trends are, but why they have developed. Too many consultants sell the latest fad, not the balance between today's fad and the solid foundation of past business experience.

Root Cause No. 5. Forgotten Middle Management—Of all the people who have been impacted the most by United States improvement processes, it is middle management. Middle management are the ones who have felt the pinch of cutbacks, layoffs, and flatter organizations. The percentage of middle managers during the 1980s who were pushed, pressured, fired, or retired (to save face) from their jobs was twice as high as employees, supervisors, or top management. Is it any wonder that it is this group that is the most suspicious of the improvement process? In most organizations that have failed, top management did not take the time to prepare middle management for their new role in a participative environment. Top management wanted the employees to be empowered, but did not want to empower middle management. The organization had failed to keep these key people technically competent in the skills they brought to the organization (example: engineering, marketing, programming, etc.). So when middle management jobs were eliminated, they had no place to go but out. Not because they had failed, but because the organization had failed to provide a technical vitality program. Many organizations turned their back on this problem and took their improvement process directly to the employees. This turned needed allies into saboteurs.

How Does the United States Measure Up?

- Percent of the world's total export. Since 1980, the United States has lost over 43 percent of its share of the world's market mostly to Japan and West Germany.
• Return on assets. Our largest organizations are performing poorly. In 1962, the United States had 5 out of the 10 world's largest industrial corporations. Three of them lost $9.3 billion, $1.6 billion more than the combined profits of the five non-United States organizations. In 1993, the top five organizations' total ROA was 0.8 percent. Anything below 2 percent is poor (losers).

• Nondήense R&D expenditures. Since 1980, the United States R&D expenditures have been remaining constant at about 1.8 percent of our gross national product. Japan's R&D efforts have continued to increase from about 2.3 percent in 1980 to just over 3 percent today.

• Profits as a percent of GNP. This measure has continuously dropped off in the United States from a high of 12 percent in 1965 to below 6 percent today (a 50 percent decrease). In 1993, the top five organizations' profits, as a percentage of sales, were 1.4 percent.

• Hourly compensation. In 1975, the U.S. worker was the best paid in the world ($6.36 per hour). Today, the German worker is the best paid at $24.30 per hour. Workers in France, Italy, Japan, and Sweden are just some of the ones that are paid more than the U.S. workers today.

• Annual earnings. The average earning in true dollars peaked in the early 1970s within the United States and have been going down since.

• Overhead. Overhead is much greater in the United States (26 percent of manufacturing costs) compared to 21 percent in Germany and 17.5 percent in Japan.

• Federal debt. The U.S. federal debt has grown to 50 percent of our gross national product. This is an increase of more than 26 percent in the last 12 years. Of the federal income for 1992, 21 percent was borrowed to cover deficit. This is three times the total income from corporate taxes. Today, the United States has the world's largest national debt.

• Public and private debt. Not only the public but also the private sector is going into debt as never before. Savings are way down and personal debts have skyrocketed. Since 1980, the debt growth rate has increased 300 percent over the previous 40 years.

• Human rights. One of the most basic human rights is the right of protection of one's being and property. Here, the United States is one of the worst of the developed nations. Robbery rate in the United States is 130 times that of Japan's; violent crimes are 360 times that of Japan's, and motor vehicle thefts almost 22 times that of Japan's. We have a lot to learn from countries like Japan and Singapore in this area.

• Japan, Incorporated

The early 1990s took its toll on Japan, Inc. The NIKKEI stock average market price fell from a high of 38,983.87 on December 29, 1989, to below 18,000 in April 1992 (it continued even lower), a 54 percent drop. The drop in the NIKKEI wiped out $2.0 trillion in stock value. Along with the NIKKEI decline, Tokyo's real estate prices have dropped drastically. In some areas, they have dropped 30 percent and are still
going down. The annual percentage change in pretax profits has gone progressively negative for the past three years, and in 1992 the negative change in pretax profit exceeded 20 percent. In 1992, Sony lost 5138 million, its first-ever operating loss. Toshiba's profits dropped by 60 percent. JVC announced it would cut 3000 workers.19 Nissan plans to eliminate about 4000 jobs over the next three years.

As Nobukiko Kawanoto, president of Honda Motor Co., put it, "Suddenly we have to change our industrial structure for slow growth. Many Japanese don't understand this. This is not the way they have done things for 40 years. We have to change or we will not survive." Even mighty Toyota has slipped its goal to reach an annual sales rate of six million vehicles from 1995 to 2000.

Japanese engineers have been under great deal of pressure and are getting discouraged. When asked how they viewed their company, only 40 percent said they were satisfied, 42 percent said that they were not content, 44 percent said they were dissatisfied, and 10 percent said that they were thinking about quitting.20

Bankruptcy jumped from 6468 companies in 1990 to 11,385 in 1992, over a 75 percent increase. Michio Nakajima, president of Citizen Watch Company, stated, "In the bubble economy (1980s), Japanese companies lost their way."

Japan, Inc., is beginning to see a new breed of worker which it calls Shinjinran ("new human beings"). These young Japanese are very different from their hardworking parents. They are more interested in playing hard than working hard. They like to travel and want more free time. These habits will cramp Japan's productivity and savings.

Some Japanese think that Japan could lose its lead in quality. The quality improvement rate in Japan was much lower than in the United States during the 1980s. Today, Ford is producing autos at a higher quality level than half of the Japanese auto manufacturing firms. Quality problems are slipping out to the consumer. Matsushita, Pioneer, Sony, and Toshiba have recalled dozens of models that smoked and caused fires. Lexus was recalled for cruise control and brake light problems. Seiko Epson laptop computers were recalled for poor circuit soldering. A Japanese-manufactured medication for treating obesity, insomnia, and other problems became contaminated during the manufacturing process and caused hundreds of illnesses and several deaths in the United States.

In a Brouillard Communications poll a higher percentage of United States consumers rated United States products as having higher quality (53 percent) than Japanese products (48 percent) or German products (39 percent). The fourth runner-up was Britain (5 percent). Junji Noguchi of JUSE stated, "(J.M.) Juran has said the United States can catch Japan in the 1990s, and I think that's possible." Tadashi Kagewa, senior managing director at Daini Denden, Inc., said, "Japanese quality is going downhill. In my estimation, Japan's quality is still better than U.S. quality in some areas, but the United States is closing the gap fast. In other areas, Japanese products have never been as good as the United States."

Japanese companies are fierce competitors and will become even more competitive as they try to offset these trends and a weaker domestic market by boosting their exports. These pressures have driven Japan, Inc.'s trade surplus to over 122 billion (United States dollars) for 199221 and in 1993 it went still higher with no end in sight.
Some of the things that the world has believed about Japan, Inc., were shattered during the first half of this decade.

- There is an end to the cheap money supply for Japan, Inc.
- Market share is not all that counts.
- People are being laid off in Japanese companies.
- The world did survive the NIKKEI dropping below 20,000.
- There are things that can stop Japan, Inc., in expanding in all countries.

One of the key advantages that Japan, Inc., still has over the United States is its approach to developing and delivering new products. They have consistently been able to bring a new product from the concept stage to the customer delivery stage in half the time and at half the cost as the average American organization. Japanese organizations spend more time planning (Japan, 40 percent; United States, 25 percent) and as a result, suffer development setbacks on a smaller percentage of their products (Japan, 25 percent; United States, 49 percent). Japanese organizations also waste less of their time debugging the finished product (Japan, 5 percent; United States, 15 percent).

Japanese organizations develop and communicate clear visions of where they want to be 10, 20, 30 or more years in the future. Sony's chairman, Akio Morita, said, "American companies struggle to create a vision for the next quarter; Japanese companies have a vision for the next decade." With a 30-year vision that the organization is working toward, management is more motivated to invest in R&D. Japan started the 1990s investing 50 percent more of its GNP in nondefense R&D than the United States (Japan, more than 3 percent; United States, less than 2 percent).

In a move to stay ahead in technology, Japan is assigning new product development teams made up of people from research, marketing, product engineering, and manufacturing to develop three different levels of the same product. The low-level product design provides an incremental upgrade of the present product. The second level is directed at a major improvement. The third level is real innovation. Peter F. Drucker, management consultant and professor at Claremont University, writes, "The idea is to produce three new products to replace each present product, with the same investment of time and money; with one of the three then becoming the new market leader."

Where Japan is clearly ahead of the United States is in:

- College education. Japan rates No. 1; the U.S., No. 17.
- Child development. Most Japanese families accept their responsibility for the young children and one of the parents stays home to help the child develop and keep focused on education.
- Process improvement. Japanese organizations have more than three times the focus on improving their processes through tools like Business Process Improvement, Process Simplification, and Cycle-Time Analysis than Canada, Germany, and the United States.
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Moving Production Back to the United States

Things are in line for a major shift of production back to the United States. Some organizations have already done it, and many more will be following. As Robert Collins, CEO of G.E. Fanuc North America, said, “We’ve exploded the myth that you can’t produce competitively in the United States, and with better quality.” They moved their programmable logic controller from Koyo, a Japanese company, to their plant in Charlottesville, Virginia. ATT’s Applied Digital Data Systems moved their computer terminal (typical unit sells for $600) manufacturing from Asia to Long Island. This allowed them to reduce finished goods and raw material inventories to one-eighth their previous level. IBM produces products in their Rochester, Minnesota, plant cheaper than they can procure them from Asia. The list of organizations that are moving production back to the United States is growing every day.

Today, with the labor content running between 5 percent to 12 percent of the total cost, management needs to concentrate on the total impact of production overseas. For example, direct labor was 25 percent of the cost of producing an electronic module at Modecon’s plant in Andover, Massachusetts in 1988, so it was probably a good business decision to move it to Hong Kong at that time. Since that time, automation, simplified designs, and streamlined manufacturing have caused them to rethink this decision. In 1990, they moved production back to Andover.

Today, direct labor costs are 5 percent of the product cost. Motorola CEO George Fisher put it this way, “The days of chasing low-cost labor are over.”

Return on Investment for Improvement Expenditures

The return on investment for improvement activities is hard to predict since it is so dependent upon what and how effectively the improvements are implemented. It is also very dependent upon the status of your organization. The organizations that were classified as losers have much more potential for a higher return on investment than the winning organizations. Another problem is: How do you measure the indirect savings of changing a market share trend from going negative to positive? In spite of these measurement problems, return on investments between 8 to 1 and 50 to 1 in a three-year period are being recorded when the improvement process is implemented properly.

Soo Praegitzer, CEO of Praegitzer Industries Inc. in Dallas, Texas, asked Mali Bergeron, their chief financial officer, to evaluate the returns they were receiving in the effort and money invested in the improvement process. He found out there was a definite payback and a favorable relationship between gross profits and the money spent on their improvement process. Bergeron uses as an example that there was six-times return from training.

Bethlehem Steel’s improvement results also have been impressive. Steel production cost per ton has been reduced 24 percent, employment cost as a percentage of sales has gone from 50 to 38 percent, inventory required per dollar of sales is...
decreased 54 percent, and the dollar amount of sales per employee has increased 70 percent.

Now let’s take a look at the results of the mid-sized, young organization, Iomega Corporation, formed in 1980, evolved and pioneered the Bernoulli Technology for removable disk drives. With just over 1100 employees, their 1991 revenue was $136 million and they had a pretax profit of nearly $18 million. Their improvement efforts resulted in:

- 136 percent productivity improvement
- 91 percent reduction in annual scrap
- 34 percent increase in revenue
- 86 percent improvement in cycle time
- 73 percent reduction in inventories
- 35 percent reduction in product costs
- 25 percent reduction in quality costs
- 41 percent reduction in manufacturing space
- 99 percent customer satisfaction index

Globe Metallurgical, Inc., a producer of iron-based metals with just over 290 employees, headquartered in Cincinnati, Ohio, was faced with serious foreign competition and declining profits in the early 1980s. In 1985, they started their improvement process. The following improvements were noted over the next three years:

- Productivity jumped 367 percent
- Waste reduction of over $10 million per year
- $1 million saved in reduced transportation costs
- 77 percent reduction in inventory
- Absenteeism reduced to .029 days per employee per year
- They won the Malcolm Baldrige National Quality Award in 1988
- Customer complaints dropped 91 percent (Source: 1993 Shingo Prize Guidelines, page 22)

Arden C. Sims, chief executive of Globe Metallurgical, Inc., estimates that Globe’s investments in quality have produced a 40 to 1 return. From 1986 to 1992, Globe cut operating expenses by a hefty $11.3 million, and its quality efforts continue to pare operating costs by about $4 million a year. Recently, Sims told the Harvard Business Review that annual savings from quality efforts for his $115 million company should increase to about $13 million by 1995.

Another example is Motorola’s improvement crusade, which has saved the company almost $2.4 billion.
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The health care industry is currently actively seeking new and different ways to improve quality and reduce costs. A hospital in the southeast, for example, decided to form and train five cross-functional teams. These groups included both clerical and nonclerical representatives from departments such as radiology, nursing, laboratory, and pharmacy. In less than one year, these teams were instrumental in achieving nearly $1 million in cost savings while improving the quality of health care. Moreover, an additional $1.5 million of benefits had been identified for future implementation.

Typical results achieved in the banking industry are:

- Reduced cost to prepare statements by 40 percent
- Reduced handling of statement exceptions by 60 percent
- Reduced costs of Treasury handling by 20 percent

Typical results achieved in the insurance industry are:

- Reduced backlog claims inventory from 370,000 to 70,000
- Reduced claim processing time from 28 to 5 days

The aforementioned results are impressive, but they could have been even better. For even in these organizations, there is still room for improvement if they use Total Improvement Management effectively.

Summary

There is no doubt about it. The United States is the blue-ribbon country of the world—the best place to live, work, and raise a family. We are more productive than and have the best standard of living of anyone in the world. People are more satisfied with their jobs in the United States than in Canada, Europe, or Japan.

- U.S. Index 40
- Canadian Index 39
- European Index 29
- Japan Index 16

Money Magazine evaluated the standard of living in the 16 wealthiest nations. It compared them in five areas: health, solid job prospects, comfortable income, upward mobility, and adequate leisure time. The United States ranked No. 1; Japan, No. 7; Germany, No. 8; and the United Kingdom, No. 15. We are the envy of the rest of the world, and when you are No. 1 everyone is using you as a benchmark to beat. As a result, the gap between the United States and other countries around the world has decreased during the last quarter century.

How does it look for the future of the United States? We are positioned well in the products that will lead the next decade. The U.S. is recognized as being among
the very best in microelectronics biotechnology, new materials, civilian aviation, telecommunication, computers, and software.

After World War II, our production capabilities were the only ones that were not out-of-date or bombed out, ensuring us immediate success. As a result, we gained a false sense of confidence. We began to believe it was our management style that set us apart, not because the war was not fought on our soil. In Europe, an MBA degree began to stand for a manager who has been to America. The rest of the world was quick to learn from us. People around the world set a personal objective to exchange the rice or potatoes on their plates for the steak that was on ours.

As a result, we slept through the 1960s. The alarm clock rang in the 1970s, but we rolled over and turned it off. In the 1980s, we woke up, showered, dressed, and drove to work. Now in the 1990s, we have our shirt-sleeves rolled up and we are committed to not losing more ground. This new, leaner, informed America is transforming itself from a sleeping giant into a customer-oriented team that will do anything to satisfy its customers.

International customers are attracted to your organization for four reasons, in the following order:

<table>
<thead>
<tr>
<th>Win customers</th>
<th>Lose customers</th>
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<tbody>
<tr>
<td>1. Capabilities</td>
<td>1. Trust</td>
</tr>
<tr>
<td>2. Trust</td>
<td>2. Quality</td>
</tr>
<tr>
<td>3. Price</td>
<td>3. Capabilities</td>
</tr>
<tr>
<td>4. Quality</td>
<td>4. Price</td>
</tr>
</tbody>
</table>

Product and service capability is driven by using the latest technology and/or using present technology in more creative ways. Trust is based upon experience and reputation. It reflects the faith that the customer has in your ability to meet your cost, schedule, and performance commitments. Price today ties in directly with value. Customers are looking at getting the best performance at the least cost. Quality reflects more than just the initial view of the products or services purchased. It reflects the quality of the total organization, the reliability of its products, and the capability of its sales and service personnel. You lose customers for the same four reasons that you attract them, but in a different order.

For an organization to survive in today's competitive international environment, there must be improvement efforts in both the continuous and break-through improvement methodologies. Management needs to make the correct business decisions so that the correct products are available at the time they are needed, while making the most of everyone's efforts. There needs to be a high level of cooperation between government, business, labor, and academia. Each must improve the value of its products and/or services as viewed by its customers. This means that all functions in all organizations must use the most appropriate technology to improve their effectiveness, efficiency, and adaptability. In addition, all organizations need to have a well-communicated, agreed-to plan that merges together the many improvement methodologies to provide the greatest value to all of their stakeholders.
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As we prepare for the future, we need to be able to compete fairly with all organizations in all countries. Our preoccupation with Germany and Japan needs to give way to an international concern. I believe that by the year 2010, Japan's predominance as a competitor will be replaced by China. China's productivity growth rate is twice that of Japan and the United States. Their real GDP growth rate between 1986 and 1991 was about 8 percent, and has gone up since then. Since 1986, they have more than doubled their total export value, and for the first time since World War II, they are seeing growing trade surpluses with the United States ($20 billion in 1993 alone). China is now in the top five countries that the United States has the biggest sale unbalance with. If the present trends continue, the United States will have a bigger negative balance of trade with China in 10 years than we have with Japan. If you think Japan is a fierce competitor, it's a pussycat in comparison to China.

The other alternative to China is the European Common Market. They could come together, combining their specialties, to make a manufacturing superpower. A combination of the Soviet Union's scientific capabilities, Germany's craftsmanship, Italy's design flair, and Great Britain's financial management, would be hard to compete with.

The last, and probably the most important, competitor is all the emerging industrial nations. They are modernized, upscale, and hungry. They pay lower wages, have higher work ethics, are improving at a faster rate, and their standard of living is improving faster than Japan, Germany, and the United States. I believe there is a direct correlation between a person's work ethic and the last time he or she went hungry.

Although things in the United States today, on an average, are good and will continue to be during the 1990s, it could be a very different story in the twenty-first century. As Lester Thurow, economist at MIT, wrote, "No one at the end of the twentieth century is less prepared for the competition that lies ahead in the twenty-first century." The United States has five years to prepare, and today it is not ready. It has not prepared itself as it should have. The United States needs to really get serious about making a major improvement in the way its government, business, and schools perform.

Today, I would rate our production organizations a B- and our service organizations C-, because they have started to improve; our government a D- because it is not really trying; and our educational system an F, because it is a dismal failure at the grade school and high school levels. We spend a higher percentage of our GDP (5.8 percent) on education than Japan (6.5 percent) and Germany (4.6 percent), yet only 7 percent of our 17-year-olds are prepared for college-level science courses.

As former President Bush put it "A dedication to quality and excellence is more than just good business. It is a way of life, giving something back to society, offering your best to others."

References and Sources

Team Building: Bringing Synergy to the Organization

Kenneth C. Lomax
Senior Manager, Ernst & Young
— National Practices Group

Being part of a team or a group that provides security, acceptance and a sense of belonging is a basic need for most human beings. DR. H. JAMES HARRINGTON

Introduction

In the seventies and eighties, we learned how important teams were to the overall success of the improvement process. In the ensuing years, hundreds of organizations throughout the world have validated this. In the eighties, we realized that teams had much more to offer than just their abilities to solve problems. We gave teams the authority to make decisions and manage their own process. By doing this, we increase our ROA (Return on Assets) and increase the overall organization morale. It's a win-win for everyone.

Japan's Dr. Kaoru Ishikawa, the "father" of the Japanese quality approach and Quality Circles, is no longer with us but the legacy he left is one of a more humanistic approach to quality. We no longer need to ask the question, "Are teams right for our organization?" Of course they are. Do teams, or should teams, be expected to solve all the problems of the organization? Of course not. A recent survey, conducted as...
A joint effort between the consulting firm of Ernst & Young and the American Quality Foundation (ref. "The International Quality Study") found that, for organizations just starting their quality effort, building the human resource infrastructure and organizing teams into effective work units is one of the basic strategies. Typically, these organizations have less than 5 percent of the work force participating on teams. As we move up the ladder to organizations that are beyond the starting point in their continuous improvement effort (medium performance), we find continuing the focus on teams is important and of benefit to the organization. 1

Most "medium performance" organizations say that approximately 25 percent of their employees participate in department-level teams. Problem solving and department teams play a key role in these organization improvement efforts. 1

Higher performing organizations also see advantages from numerous forms of employee involvement. This is less in the form of employee department teams and more in higher "macro-level" teams such as Process Improvement Teams. 1

While there is certainly a time when organizations can back off wide-spread department team involvement, the organizations surveyed all felt problem-solving teams played an important role in the continuous improvement effort.

The following shows the percentage of organizations in several different countries, including the United States, that indicate that 25 percent or less of their employees are involved in quality-related teams. 2

<table>
<thead>
<tr>
<th>Country</th>
<th>Present %</th>
<th>Future %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>59</td>
<td>23</td>
</tr>
<tr>
<td>Germany</td>
<td>81</td>
<td>58</td>
</tr>
<tr>
<td>Japan</td>
<td>64</td>
<td>62</td>
</tr>
<tr>
<td>United States</td>
<td>51</td>
<td>30</td>
</tr>
</tbody>
</table>

The following shows the percentage of organizations with more than half the work force participating on natural work-teams (Department Improvement Teams). 2

<table>
<thead>
<tr>
<th></th>
<th>Manufacturing %</th>
<th>Service %</th>
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<tbody>
<tr>
<td>Past</td>
<td>22</td>
<td>3</td>
</tr>
<tr>
<td>Present</td>
<td>30</td>
<td>5</td>
</tr>
<tr>
<td>Future</td>
<td>53</td>
<td>33</td>
</tr>
</tbody>
</table>

A detailed analysis of this data can be found in the Ernst & Young Technical Report by Dr. R. James Harrington entitled, "Different Strokes for Different Focals—The International Quality Study." 2

Canada, Germany, and the United States plan to greatly increase the level of team participation during the next three years. If Germany lives up to its plan, it will have a higher percentage of employees involved in quality-related teams than...
Japan. At the present time, North America has a higher percentage of its employees on teams than Japan does and if its projection holds true, North America will have approximately 50 percent more team involvement than Japan will be utilizing. This lack of team involvement flies in the face of what we have been told about Japan, but verifies Dr. Kaoru Ishikawa’s statement: quality control circles were developed to train Japanese employees, not to solve problems.

It looks like North America is over-correcting again. The most extensively used type of team is the natural work team (Department Improvement Teams/Quality Control Circles). Manufacturing has been using these types of teams since the 1960s. They have been growing in usage for the last 30 years, but during the next three years their usage will almost double. The service industry has been slow to adopt this tool but will expand its use by over 300 percent during the next three years, starting to close the gap between itself and the manufacturing industry.

You see, it’s really not how many teams you have, or what types of teams you have. It’s having the right number of teams trained with the skills to solve organizational issues and problems.

Element of a Team

In Dr. Harrington’s The Improvement Process he stated: 1

Team participation should never occur until the management team is totally participating in the improvement process. If you don’t want the employees to believe they are being manipulated, management must provide visible evidence of the company’s thorough commitment to a policy of preventing problems rather than reacting to them.

We find there are four key elements in the team environment: The element that must be in place prior to teams being formed is the Executive Improvement Team’s (EIT) commitment to the process. The second is the team member’s themselves, the third is the team leader, and last but certainly not least, is the facilitator. Let’s look at them individually:

The Executive Improvement Team

The executive team has overall responsibility for the entire improvement effort. If the effort succeeds, much of the credit should go to them, and, if it fails, all of the credit should go to them. Why?

When the team environment is first being established in an organization, its early success will depend on the amount of support and encouragement given teams and team members by management. Early team planning by the EIT will eliminate many of the problems that plague organizations with a poorly organized team structure. However, there is one ingredient that comes before establishing the team, and that’s training.
Basic Team Effectiveness Training. The smart executive team will train as many employees as possible in the basics. By basics we mean:

- Understanding the Organization’s Goals and Objectives
- Understanding the Improvement Process
- Team Dynamics
- Team Effectiveness
- Effective Meeting Skills
- Basic Problem Solving

Establishing the Team Process. Establishing the team process should take place prior to forming the first team. The EIT should know what type of team is being established (see Fig. 7.1: “Types of Teams and Their Characteristics”). The EIT should also decide how the team process will be managed. For example: Will the

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Task force</th>
<th>Task team</th>
<th>Process improvement team</th>
<th>Department improvement team</th>
<th>Quality circle</th>
<th>Autonomous work team</th>
</tr>
</thead>
<tbody>
<tr>
<td>Membership</td>
<td>Selected members based on experience</td>
<td>Selected members based on experience</td>
<td>Members involved in the process</td>
<td>Department members</td>
<td>Department members</td>
<td>Department members</td>
</tr>
<tr>
<td>Participation</td>
<td>Mandatory High</td>
<td>Mandatory Moderate</td>
<td>Moderate</td>
<td>Mandatory</td>
<td>Mandatory</td>
<td>Voluntary Low</td>
</tr>
<tr>
<td>Management</td>
<td>High</td>
<td>By management</td>
<td>By management</td>
<td>By management</td>
<td>By team</td>
<td>By team</td>
</tr>
<tr>
<td>Selection</td>
<td>High</td>
<td>Organization wide</td>
<td>Organization wide</td>
<td>Organization wide</td>
<td>Department wide</td>
<td>Department wide</td>
</tr>
<tr>
<td>Scope of activity</td>
<td>Long meetings, short period, no other assignment</td>
<td>Short meetings, intermediate period</td>
<td>Short meetings, intermediate period</td>
<td>Short meetings, ongoing</td>
<td>Short meetings, ongoing</td>
<td>Short meetings, ongoing</td>
</tr>
<tr>
<td>Meeting time</td>
<td>Optional</td>
<td>Optional</td>
<td>Recommended</td>
<td>Recommended</td>
<td>Recommended</td>
<td>Recommended</td>
</tr>
<tr>
<td>Leadership</td>
<td>Appointed</td>
<td>Process owner or designee</td>
<td>Supervisor or designee</td>
<td>Supervisor or designee</td>
<td>Shared or rotated</td>
<td></td>
</tr>
<tr>
<td>Implementation</td>
<td>By others</td>
<td>By team or others</td>
<td>By team or others</td>
<td>By team</td>
<td>By team</td>
<td>By team</td>
</tr>
</tbody>
</table>

Table 7.1. Types of teams and their characteristics.
EIT itself be responsible for team training and day-to-day management? Probably not, but it is important to decide who is! Listed below are several areas an EIT should consider in establishing the team process.

1. Who is responsible for overall management of the teams?
2. Who is responsible for setting the team mission?
3. How empowered is the team?
4. What type of team reporting will be required?

Each team, however, should be required to submit for approval their Team Charter and Project Plan. These are discussed in more detail later. In addition, minutes of all team meetings should be prepared and distributed to members as soon as possible.

Setting and/or Approving Team Structure

For organizations just starting their improvement efforts, we recommend the EIT set up and/or approve each individual problem-solving team. Yes, this causes more work for an already overburdened executive team, but we believe in the long term it will pay-off in huge dividends.

The EIT identifies and/or approves the issue the team is to focus on, picks a team leader (typically someone with knowledge of the issue) and, with the leader's assistance, identifies the team members.

This approach tends to conserve the organization's limited resources while allowing the overall team process to "settle down." After the organization has been involved in teams for six months to a year, the EIT can (and should) start empowering lower level management to establish teams.

Establishing the Team Mission

As we mentioned in the preceding section, the EIT should either pick or approve the task the team is to focus on. Once this is decided the EIT should determine the mission of the team. The team mission should simply give the team a clear perspective of why it (the team) exists.

One of the most frustrating experiences a team can have is to be assigned an unclear task or problem by the EIT. An example of this is forming a team to look at the "communication" issue. This is referred to as a divergent problem or a problem that tends to grow in size and complexity as the team moves forward in their efforts to solve or control it. In other words, it keeps getting bigger and bigger. It's up to the EIT to ensure the team is working on problems that are convergent or those that tend to become more clearly defined as the team moves toward solution and implementation. In the case of "communication," a more convergent problem would be: "We have a problem communicating between management and the employees." The EIT would then give the team a mission that might say...
"The mission of the communication task team is to identify ways to enhance communications and understanding between management and employees."

The mission sets the stage for how you want the problem or issue to change. It should be very brief, no more than two or three sentences.

Once the mission is set, the team can establish the rest of its own Team Charter. The charter consists of three key elements:

- **The mission**—Why the team exists
- **Team goals**—What the team hopes to accomplish
- **Team guidelines (or Code of Conduct)**—How the team will manage and measure itself

As you can see, the clearer the team mission the easier it will be for the team to complete the task. Once the team charter is established it is typically signed off by each team member and the team’s EIT sponsor. This sign-off shows “ownership” by both the team and their sponsor and helps the team in identifying team process issues that may inhibit their performance.

Another element that supports the team charter is the project plan. This plan gives the team specific direction in the following areas:

- Team Meeting Schedule
- Resources Required
- Schedule of Activities
- Completion Time Frame
- Measures of Success

Both the completed Team Charter and the Team Project Plan should be reviewed and approved by the EIT. This review and approval authorizes the use of the organization’s resources for a specific period of time to complete a specific task.

**Providing Resources**

Chances are, no matter what problem or issue the team is working on, some resources will be expended by the team. Not providing adequate resources to the team will send a very clear and negative message as to how much the EIT supports their efforts.

It is the EIT’s responsibility to understand enough about the team’s problem or issue to adequately budget the money, manpower, time, etc. to complete the task. It is not a good idea to expect the team to accomplish corporate miracles on their own time.

If the EIT is concerned or unsure about the amount of resources it will take to complete the task, the team should be asked to complete a cost analysis. This analysis should include, but not be limited to:
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- Estimated time away from the job (for each team member)
- Estimated cost of outside analysis (if any)
- Estimated cost of team supplies
- Estimated cost of outside consulting (if required)
- Potential savings

The cost analysis should not include any implementation estimates at this time. At this stage, the team would not have progressed far enough in the problem-solving process to make any implementation estimates.

After the team has completed its task and is ready for implementation, a new cost analysis should be conducted and presented to the EIT. This analysis will assist the EIT in identifying and planning for the resources needed for final implementation.

Approving Team Projects

After an organization's improvement efforts have been underway for awhile, teams will be formed to solve organizational problems. Approval of these projects may take place at several levels, but first, let's look at the three basic types of problems:

- **Type I**—Team controls. The team has information and knowledge about the problem as well as expertise, resources, and authority to solve the problem.
- **Type II**—Team can influence. The team does not have full control of the problem or issue, but can influence the outcome, with some outside assistance.
- **Type III**—Team neither controls nor influences this problem or issue, and should not take on a task of this nature.

If the team and the project is at the department or work unit level, the manager or supervisor may be empowered to approve the task. This would be a Type I problem. If outside resources are required, the task would be a Type II problem, and the project may need to be approved at the senior management level. The team should not undertake any Type III problem since the problem is outside their scope. The Type III problem should be turned over to management to form a new team to correct the problem if it is justifiable.

Any project requiring cross-functional team membership should be approved by the EIT. In cases where the organization is multi-divisional, any project requiring cross-divisional teams may have to be approved at the corporate level.

In Dr. Harrington's report, "The Collapse of Prevailing Wisdom," he provided us with insights into the concerns placed upon the formation of teams in different parts of the world. He reported:
Percentage of Companies in the Automotive Industry Where Management "Always or Almost Always" Approves the Formation of Teams

<table>
<thead>
<tr>
<th>Country</th>
<th>Past %</th>
<th>Present %</th>
<th>Future %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>34</td>
<td>18</td>
<td>10</td>
</tr>
<tr>
<td>Germany</td>
<td>41</td>
<td>31</td>
<td>28</td>
</tr>
<tr>
<td>Japan</td>
<td>68</td>
<td>68</td>
<td>64</td>
</tr>
<tr>
<td>United States</td>
<td>45</td>
<td>30</td>
<td>21</td>
</tr>
</tbody>
</table>

Percentage of Companies in the Computer Industry Where Management "Always or Almost Always" Approves the Formation of Teams

<table>
<thead>
<tr>
<th>Country</th>
<th>Past %</th>
<th>Present %</th>
<th>Future %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>38</td>
<td>24</td>
<td>11</td>
</tr>
<tr>
<td>Germany</td>
<td>24</td>
<td>24</td>
<td>13</td>
</tr>
<tr>
<td>Japan</td>
<td>68</td>
<td>68</td>
<td>72</td>
</tr>
<tr>
<td>United States</td>
<td>4</td>
<td>14</td>
<td>5</td>
</tr>
</tbody>
</table>

Using this data, it is easy to see that Japanese management maintain strict control over the formation of new teams and plan to continue the practice. In contrast, the other countries are reducing their controls.

EIT's Support to Teams

The EIT should be willing to run interference for the team and guide them on policy issues and potential barriers. As the team progresses, the EIT should hold periodic reviews on progress to eliminate any surprises during the solution and implementation stages. Team recommendations should be reviewed and approved by the EIT prior to implementation. This should not make the team feel less empowered. Remember, the EIT still has final responsibility for utilizing the organization's resources wisely.

Last, but certainly not least, the EIT helps drive the implementation effort. This becomes much easier, even for a team totally empowered, when management has been a part of the process from start to finish.

Team Leader

The individual selected to lead the team may be elected by the team, or more often, appointed by the EIT. In the case of natural work group teams it may be the supervisor or manager of the organization or department. It is usually someone with a deeper knowledge of the problem area, someone having much
experience in the problem solving process or someone that has an excellent understanding of the team process.

For those of you with a more autocratic management style, learning to be an effective team leader can be a challenge. While it is one of the harder jobs in the team process, we feel it is one of the most rewarding. Two of the most important traits of an effective team leader are being able to guide the team without dominating it and acting as an effective role model to the team.

Some of the duties of the team leader are:

• Coordinate team meetings and activities
• Teach members
• Promote and sustain the team synergy
• Encourage individual member participation without coercion
• Follow up on meeting action items
• Assist the team in monitoring and measuring its progress
• Ensure the team process is being followed.

Team Members

The team member is certainly the “heart” of the team. The idea of “Participative Management” is based on allowing employees to help management make better decisions. The whole concept of “synergy” is based on two heads being better than one. If the team leader is there to guide, the team members should assume responsibility for successfully completing the task. Some specific team member responsibilities are:

• Willingness to express opinions or feelings
• Active participation
• Listen attentively
• Think creatively
• Avoid disruptive communication
• Be willing to call a time-out when necessary
• Be protective of the rights of other members
• Be responsible for meeting the goals and objectives of the team.

Team Facilitator

Probably the most difficult role in the team environment is that of the facilitator. There are several different thoughts as to what the role of the facilitator should be. Some organizations use the facilitator as a full member of the team. Other organiz
The facilitator should be an expert or have a lot of knowledge in the team issue. There are essentially three types of facilitators. They are:

1. Integrator/Coordinator
2. Group Process Specialist
3. Session Leader

The Integrator/Coordinator can, and in many cases does, fill the role of assistant team leader. Duties for this individual are typically in the administration of the team process and in communicating with others, outside the team process. It has been said that this role is that of the Team Secretary or Team Assistant.

The Group Process Specialist is the more traditional facilitator role and is primarily that of facilitating the team meeting with a focus on process. This is the facilitator role that was developed as part of the Quality Circle and group problem-solving process developed in Japan. This facilitator is not a full-time member of the team. His or her role can be described as that of teaching, coaching and supporting the team.

The Session Leader Facilitator is simply one who leads a session, often in the form of a training session or workshop where a more traditional facilitator is not required. He or she is usually a subject matter expert on the problem or activity being presented.

We believe the more traditional view of the team facilitator, the Group Process Specialist, is best when an organization is developing a team culture. First of all, the team facilitator should not be a part of the team. The key responsibility of the team facilitator is to assist the team in focusing on process, not content. The most effective facilitators are those with the ability to tune out most of the team’s content discussion and focus on the overall effectiveness of the team. In other words, is the team reaching its goals and objectives? Do they stay on track? Do they start and end on time? Are they using the proper tools and techniques at the proper time?

We have included a chart that shows the team roles and responsibilities (see Fig. 7.2). The key is to remember that the team leader’s and members’ major concern is what decisions are made (content) and the facilitator’s concern is how decisions are made (process).

The Problem-Solving Process

The team environment really exists for one reason only—to improve the organization’s performance. Let’s face it, we probably wouldn’t have a participative management process like teams if it only gave the organization a “warm and fuzzy good feeling” and didn’t produce tangible results that translates into dollars. In other words, “if it doesn’t make the organization money, don’t do it!” There are as many approaches to problem solving as there are to structuring teams. The one we’ve chosen is probably the most detailed approach.
Table 7.2. Team roles and responsibilities.

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Team facilitator</th>
<th>Team leader</th>
<th>Team member</th>
</tr>
</thead>
<tbody>
<tr>
<td>To promote effective group dynamics</td>
<td>To guide teams to achieve successful outcomes</td>
<td>To share knowledge and expertise</td>
<td></td>
</tr>
<tr>
<td>Major concern: How decisions are made</td>
<td>What decisions are made</td>
<td>What decisions are made</td>
<td></td>
</tr>
<tr>
<td>Principle responsibilities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ensure equal participation by team members</td>
<td>Conduct team meetings</td>
<td>Offer perspective and ideas</td>
<td></td>
</tr>
<tr>
<td>Mediate and resolve conflict</td>
<td>Provide direction and focus to team activities</td>
<td>Participate actively in team meetings</td>
<td></td>
</tr>
<tr>
<td>Provide feedback and support team leaders</td>
<td>Ensure productive use of team members' time</td>
<td>Adhere to meeting ground rules</td>
<td></td>
</tr>
<tr>
<td>Suggest problem-solving tools and techniques</td>
<td>Represent team to management and EIT</td>
<td>Perform assignments on time</td>
<td></td>
</tr>
<tr>
<td>Provide TQM training</td>
<td>Document team activities and outcomes</td>
<td>Support implementation or recommendations</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Assist team in developing and maintaining measures</td>
<td>Maintain measurements</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Position type</th>
<th>Organization-wide</th>
<th>Team-specific</th>
<th>Team-specific</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selection criteria</td>
<td>Personal characteristics</td>
<td>Job title and/or description</td>
<td>Ownership of/in the process</td>
</tr>
</tbody>
</table>

The Opportunity Cycle

Let's change the way we look at problems. Let's think about each problem we face each day as an opportunity to contribute to making the organization more successful. As these opportunities arise, we need to have a systematic way of addressing them so that they are not just put to bed, but burned. If you put a problem to bed, it can and will get up some time in the future to cause the organization more disruptions. It may be next week or next month or next year, or perhaps in five years, but it will come back unless the process that allowed the problem to occur initially is error-proofed. When you have error-proofed the process that allowed the problem to occur, then and only then have you burned the problem so that it will not come back. That's what the "Opportunity Cycle" is all about (see Fig. 7.3).

When you investigate each problem, go through the six distinct phases indicated in Fig. 7.3. Each phase contains a number of individual activities. The total cycle consists of 25 different activities.
Figure 7.3. The opportunity cycle.

**Phase 1: Opportunity Selection Phase**
- Activity 1: Listing the problems
- Activity 2: Collecting data
- Activity 3: Verifying the problems
- Activity 4: Prioritizing the problems
- Activity 5: Selecting the problems
- Activity 6: Defining the problems

**Phase 2: Protection Phase**
- Activity 7: Taking action to protect the customer
- Activity 8: Verifying the effectiveness of the action taken

**Phase 3: Analysis Phase**
- Activity 9: Collecting problem symptoms
- Activity 10: Validating the problem
- Activity 11: Separating cause and effect
- Activity 12: Defining the root cause

**Phase 4: Correction Phase**
- Activity 13: Developing alternative solutions
- Activity 14: Selecting the best possible solution
- Activity 15: Developing an implementation plan
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Activity 16: Conducting a pilot run
Activity 17: Presenting the solution for approval

Phase 5: Measurement Phase
Activity 18: Implementing the approved plan
Activity 19: Measuring cost and impact
Activity 20: Removing the protective action (installed in Phase 2)

Phase 6: Prevention Phase
Activity 21: Applying action taken to similar activities
Activity 22: Defining and correcting the basic process problem
Activity 23: Changing the process documentation to prevent recurrence
Activity 24: Providing proper training
Activity 25: Returning to Phase 1, Activity 1

When teams follow these six phases (or a similar process), their life becomes much easier. Unfortunately, the more experienced the team becomes, the more likely they are to take shortcuts. Process shortcuts have probably led to the demise of more teams than can be counted. When a team elects to circumvent the correct problem-solving process they automatically reduce their ability to function in a continuous improvement environment. The team may ultimately be successful but it will be by accident, not by design.

Types of Teams

We have identified what we believe are the six types of teams most often used in businesses today. They are:

• Department Improvement Teams (DIT)
• Process Improvement Teams (PIT)
• Quality Circles (QC)
• Task Teams (TT)
• Self-Managed Work Teams (SMWT)
• Task Force (TF)

Department Improvement Team (DIT)

One of the most valuable teams in the entire process, the "Department Improvement Team" is made up of the employees in a particular department reporting to the same manager. They are also called Natural Work teams.
Typically, these types of teams start by performing an Area Activity Analysis to develop a mission, their customer-set, and their measurements. If they have problems meeting their measurements, then they are trained to solve them.

This team tends to focus on Type I problems only. These are problems the team has knowledge about, resources to use, and is empowered to implement their solutions with little or no outside approvals. This team is normally led by the department manager or supervisor. In cases where the department has more than 10 employees, membership in the actual team that meets periodically may rotate every 90 to 180 days. This gives everyone a chance to participate.

The team normally meets for about one hour, once a week for an indefinite period. Departmental problems are identified and prioritized. Management has the final veto in case the team solicits a problem that is outside their scope or will not meet the ROI requirements.

Since this team is looking at issues that affect their own efficiency and effectiveness, there are huge opportunities for saving organizational resources.

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Process Improvement Team (PIT)

Another very valuable team to any organization is the "Process Improvement Team." While other teams tend to have more of a "task" oriented mission, the Process Improvement Team is allowed to focus on a specific process. These teams are also called Cross Functional Teams.

Membership in this team is directed by management or individuals intimately involved in the particular process. In some cases, short meetings are held over long periods of time (typically one to two hours per week for six months or more). These types of PITs very often will identify process issues that can be corrected through the use of a task team. While the process team remains together, the task team would only meet until the particular process issue is resolved.

Often organizations will prioritize their critical business processes and assign PITs to redesign or reengineer one to three processes at a time. In these cases, the PIT members usually are assigned to the PIT for between 50 to 100 percent of their time for three to six months.

Like the Department Improvement Team, the Process Improvement Team has great opportunities to reduce internal costs by increasing the efficiency, effectiveness, and adaptability of the process.

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Quality Control Circles

This is the team concept that allowed Japan to excel in the 1970s and 1980s. It also started the participative management movement in North America as we know it today. Unfortunately, Quality Control Circles (QCCs) got a bad reputation in the late seventies and early eighties because most North American organizations used the concept incorrectly. Management did not provide the required skills training, direction, and support for successful implementation. In addition, management expected the Quality Circle Teams to solve problems that management had been unable to solve for years. As a result, management became discouraged with circles because
they did not rack up big dollar savings. Dr. Yoshio Kondo, one of Japan's leading quality professors and consultants, stated, "Quality Control Circles are to motivate employees, not to reduce costs." Japan has been very effective in using Quality Control Circles to train their employees on how to solve problems. In North America, the Quality Circle movement failed not because of the employees, but because of lack of management's understanding of the process, and, as a result, they misused it. As North American management matures, they will understand why these types of teams are so important to their overall improvement success. The self-managed team concept is based upon the Quality Circles concept.

This type of team is mostly made up of volunteers who hold short meetings over a definite period of time and work on either departmental or organizational issues. Management direction tends to be low on this type of team. This is probably what got the QCC teams in trouble in the first place. We have found the more management shows interest in the process, the more likely the team is to succeed. Most U.S. organizations have moved away from calling a team a Quality Circle and even if they are the exact same thing, call them something else. If and when U. organizations start to empower their employees, these are the types of teams that will most often be used.

Task Teams

A task team is put together to resolve an issue, then disbanded. Management identifies the team members who are selected, based on experience in the issue.

The issue and/or problem usually are not urgent. The length of team assignment may be short meetings over long periods (i.e., one hour per week for 30 days or more) or if the issue is of a more immediate nature, longer meetings over a short period.

Self-Managed Work Teams

The Self-Managed Work Team seems to be the "brass ring" many organizations are grabbing for. We believe there is a big future for self-managed work teams in the United States but we don't believe it's here quite yet.

We have heard this type of team called everything from an Autonomous Work Team to Self-Directed Work Teams. In the truest sense, the Self-Managed Work Team is one that manages its own business without outside interference from upper management. The team is responsible for setting its own departmental budget, managing its own resources, and even hiring and firing its employees. Most organizations in the United States that use this type of team allow them to function with low direction from management. And they function very effectively in most cases.

A word of caution: While Self-Managed Work Teams can be a real money maker for certain organizations, they don't work for everyone. Before the organization implements this type of structure, they should be very far along with their quality improvement initiative, and there needs to be a high degree of trust between management and the employees. This type of organizational structure is not for neophytes.
The Task Force

The task force is a team most often designed to work on a very important issue or problem. They meet for long periods, sometimes as much as 12 hours a day, 7 days a week, for a short duration (typically 30 days or less). This team is usually called on to solve "survival" issues or issues that must be corrected or resolved as soon as possible. Usually, this team's activity takes precedence over all other activities going on in the organization. Typically, task force type teams are formed when a manufacturing process is closed down for what could be a long period of time due to problems or a customer safety problem.

The task force is usually formed by management with membership being mandatory and the leader and members being selected based on experience in the issue at hand. Direction from management is as high as the urgency of resolving the issue.

The use of task forces indicates that management has major problems with the organization's processes. Organizations that have good business processes should never need to use task forces to manage and correct the organization's problem, because problems will be eliminated or recognized before they become critical.

We have included some information that may assist you in identifying the team that is right for you and your situation (see Fig. 7.1: "Types of Teams and their Characteristics"). This data is designed to guide you in understanding basic team characteristics....

Training Teams

In every organization where we've conducted improvement assessments, the topic that always makes the employee's "Top 5" list is "training," or the lack thereof. It most often is their number one issue. At Xerox, effective Quality Improvement Team participation grows, in part, from effective quality training. At a minimum, every Xerox employee has received 28 hours of quality training. Xerox's initial training investment is estimated at more than four million employee hours and $125 million. The training of teams is just as important as training individuals to do their job!

There are really only two ways to train teams. Let's look at both:

Formal Classroom Training

Teams can be trained as a group, where all members of the team go through training together; or as individual participants, where several (normally 10 to 30) employees are trained together and assigned a team at a later date. Either way works well; however, in both cases the training should not be conducted until the participants are within 30 days of using what they have learned. Don't waste valuable organizational resources by training and waiting 3 to 6 months to put the training to use.

On-the-Job Training

Actually, this should be called "on-the-team" training—more skilled or experienced team members training new members. While this type of training is not as effective as formal classroom training, the team member can catch up with others on the team....
Here the untrained team member is taught the skills he or she needs by other, more skilled or experienced team members. Some organizations formalize their on-the-job training process by assigning a training curriculum for teams to follow. This ensures each new team member receives the same amount of training as the others.

Obviously, the downside to this approach is having one or more team members that may not be as effective as the members with more formal training, which will slow down the rest of the team.

An additional word of caution: Timid or less aggressive team members may never become completely competent through this approach. We recommend team and problem-solving training be a part of the New Employee Orientation process, thereby providing everyone in the organization with a common language and approach.

Using the Team Approach to Organize and Run Meetings

One of the quickest paybacks to the team process is better meeting management. A study conducted a few years ago identified ineffective meetings as the number-one time waster of management in American businesses. Most of us can quickly relate to this since we all spend an inordinate amount of time in meetings.

If you are a senior level manager, you probably spend anywhere from 60 to 85 percent of your time in meetings. Mid-management spends from 50 to 70 percent of their time in meetings. When asked, most managers will tell you that maybe 10 percent of the meetings they attend are beneficial and those would be more valuable if they were conducted with some structure.

We feel there are three pieces to the meeting "pie." They are:

1. Logistics. This includes the where, i.e., things such as getting the meeting noticed, on time, preparing the meeting room, etc.
2. Process. This is the how. Here we’re looking at how the meeting is conducted, what type of meeting style is in use, what tools and techniques will be used, and how do we use them?
3. Content. Here is the heart of the meeting, or the what. What do we hope to accomplish, what action do we need to take, etc.?

Five Elements of a Successful Meeting

Equally important are what we call the Five Elements of a Successful Meeting:

1. Before the Meeting:
   A. Plan the meeting.
   B. Develop a complete agenda.
   C. Prepare for the meeting.
2. At the Beginning of the Meeting
A. Start the meeting on time.
B. Utilize a scribe or recorder.
C. Reach agreement on the agenda and the key objective of the meeting.
D. Define each participant’s role.
E. Define the meeting process style. There are basically four types of meeting styles. They are: informational, discussion, problem-solving, and decision-making.

3. During the Meeting
A. Be as positive as possible.
B. Stick to the agenda and meeting time limits.
C. Keep the discussions on track.
D. When necessary, conduct a process check or “time-out.”
E. If new items come up, post them on an “Issues List” (parking lot) for discussion at a later date.

4. At the End of the Meeting
A. Reach agreement on the results.
B. Establish action items.
C. Review the process. Take time to evaluate the meeting.
D. If required, set a time and place for the next meeting.
E. Prepare the agenda for the next meeting.
F. End the meeting on time.

5. After the Meeting
A. Follow up on any action items.
B. Prepare and distribute the minutes of the meeting.

Evaluating Team Meetings

Earlier in this chapter we talked about the advantage of having a “Team Charter” consisting of a mission statement, guidelines or code of conduct, and goals or objectives.\(^6\) For a team to function properly, it must first decide how the members will react and respond to each other. The guidelines, sometime called “The Code of Conduct,” set the stage for member interaction. Figure 7.4 is an actual code of conduct developed by a team during their first formal team meeting.

At first glance this looks like a nice “wish” list, but it’s much more. Once the team has developed its own guidelines, it has a way to measure efficiency and effectiveness. The team takes the guidelines and turns them into an evaluation form. Evaluate the meeting if you are really interested in holding better meetings.
Basic Problem-Solving Tools

No work on teams would be complete without mentioning the tools used by the team in solving problems or resolving issues. Below we identify the Basic Problem Solving Tools and give a brief overview of each.

Brainstorming
Brainstorming is simply a group technique used to generate a large number of ideas or a given subject, problem, or issue. It is probably the most used of all the team tools.

Check Sheets
These documents are simple forms for collecting and organizing data. In some cases, they can be used in analyzing the data, but more often are used in the preliminary steps of data gathering. There are three basic types of check sheets: recording, checklist, and location.

Graphs
Graphs are visual presentations of data collected by some means, probably by check sheets. The relationship between different sets of data can be easily identified with the aid of a few well-drawn graphs. The seven basic types of graphs are:

1. Line Graphs (the most simple type of graph)
2. Column and Bar Graphs (typically used to compare two or more measurements)
3. Area Graphs (used to show "totals amounts" or 100 percent of something)
4. Milestone and Planning Graphs (these graphs help organize and coordinate projects and activities)
5. Pictorial Graphs and Pictograms (uses pictures or symbols to represent data)
6. Histograms (special type of column graph showing the variable measurement of a given object or process)

7. Pareto Diagrams (another special type of column graph and line graph, used to prioritize data)

Nominal Group Technique
Nominal Group Technique is a structured method combining individual idea generation and idea selection through voting. It can be used in problem identification and selection or in problem resolution. Its main strength is that it generates a large number of ideas in a short time and prioritizes them. It is basically a five-step process that works best with groups of seven to ten individuals.⁵

Force Field Analysis
Force Field Analysis is a very simple and effective problem-solving tool. It can help you to better understand a problem, develop a problem statement, determine root causes of a problem, generate and evaluate solution ideas, and prioritize and plan the implementation tasks required for change.⁶

There are two basic influences or forces that influence the problems, causes, or solutions in questions. These forces are identified below.

1. Driving or facilitating forces. Forces which promote the occurrence of the particular activity of concern.

2. Restraining or inhibiting forces. Forces which inhibit or oppose the occurrence of the same activity.

An activity level is the result of the simultaneous operation of both Facilitating and Inhibiting Forces.

The two force fields push in opposite directions and, while the stronger of the two will tend to characterize the problem situation, a point of balance is usually achieved which gives the appearance of habitual behavior or of a steady state condition.

In order to appreciate just what kinds of forces are operating in a given situation and which ones are susceptible to influence, a Force Field Analysis must be made. As a first step to a fuller understanding of the situation, the forces—both facilitating and inhibiting—should be identified as fully as possible. Identified forces should be listed and, as much as possible, their relative contributions or strengths should be noted.

Cause-and-Effect Diagrams
Cause-and-Effect Diagrams are graphical pictures showing the relationship between the effect (the problem) and its potential causes. These diagrams help analyze
problems by organizing their causes so that they can be systemically investigated. These diagrams are also called "Ishikawa Diagrams" or "Fishbone Diagrams." The step most often left out of the problem-solving process is the Cause Analysis step. When presented with a problem, many of us find it very difficult to sort out all the possible causes of the problem.

This approach almost always results in correcting or resolving only a part of the problem. Most often the implemented solution is, at best, a "temporary fix." Remember, in problem solving you really aren't trying to solve the problem. You are trying to correct the things that caused the problem. Eliminate the key causes and the problem will go away.

We have now looked at what most consider the basic problem-solving tools. There are other simple tools that can be used, as well as many complex tools. In the next section let's look at some of the Macro or Big Picture Improvement Tools.

### Macro Improvement Tools

The macro improvement tools identified here are designed to assist the organization in improving, not only quality, but also productivity. Given the amount of tools available, only an overview of each macro tool will be presented.

#### Business Process Improvement (BPI)

Business Process Improvement is a long overdue improvement tool. Very little attention has been paid to the processes that maintain the business. It is estimated that only 5 to 15 percent of the organization's dollar is spent in the manufacturing processes. This makes sense because the business processes are where most of the organization's decisions are made and are the sources of the majority of the cost. (This subject is covered in detail in Chap. 11.)

#### Area Activity Analysis (AAA)

Area Activity Analysis is one of the few, if not the only, improvement tool that is specific to an individual natural work group and focuses on the internal and external customer and supplier. It's based on a model that has a supplier providing input into an area that adds value to produce an output that a customer needs. This tool works best with organizations that are well along with their overall improvement effort. It is used to understand how a natural work group fits into the overall picture and to establish its measurements. AAA is divided into eight individual activities. They are identified below:

- **Activity 1:** Developing the team's mission statement
- **Activity 2:** Defining the team's major activities
- **Activity 3:** Developing the customer-related measurements
- **Activity 4:** Estimating real-value-added per activity
- **Activity 5:** Developing the poor-quality cost per activity
Activity 6: Developing a real-value-added/poor-quality cost matrix
Activity 7: Developing efficiency measurements
Activity 8: Developing suppliers, input requirements, and measurements

AAA is known as "The Employee's Improvement Tool." Why? Because this is the one tool that helps individuals within a particular work area to identify what they do for the organization and assists in determining the area's improvement opportunities.

Poor-Quality Cost (PQC)
Poor-Quality Cost is a tool designed to help reduce the cost associated with poor quality. We would all probably agree that costs money to make mistakes or produce poor-quality products or services. Poor-quality cost is defined as "... all the costs incurred to help the employee do the job right every time and the cost of determining if the output is acceptable, plus any cost incurred by the organization and the customer because the output did not meet specifications and/or customer expectations."  

Flowcharting
Flowcharts are graphic representations of processes which show the activities of both business and product/service processes and the relationship between them. They have value in almost any step of the problem-solving process. They may be used to identify problems, define measurements, generate ideas, provide a view of the desired future state, and select the proper solution.

As you can see, these macro tools can be used in any type of organization. They are, however, very dependent on two things. The first is understanding the need for using the tool and the second is training the individuals using the tool in its methodology and use. Additionally, these macro tools use many of the basic tools to support them. An understanding of all these tools will enhance any team effort.

The Seven New Management Tools

We've seen the basics and have been trained in their use. What's next? Are there other tools and techniques out there that may assist a team with its problem-solving process? Yes, and they're called the Seven New Management Tools. The following is a very brief description of each of the seven new management tools. For more detailed information about them, we suggest reading the book Management for Quality Improvement (editor, Shigeru Mizuno, published by Productivity Press) or Bob King's book, Hoskin Planning—The Development Approach (published by GOAL/QPC).
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Affinity Diagram

Also known as the KJ method, the affinity diagram is a team process tool that organizes ideas, generated through brainstorming, into natural groupings in a way that stimulates new creative ideas. Categories and new ideas are obtained by the team members working silently.

Interrelationship Diagram

This tool displays the cause-and-effect relationship between factors relating to a central issue. Factors that have a high number of relationships (arrows going into and emanating from) are usually the most fundamental or critical.

Tree Diagram

A tree diagram shows the complete range and sequence of subtasks required to achieve an objective. A derivative of this tool is fault-tree analysis, which depicts all of the ways that a product or service can go wrong so that preventive measures can be planned.

Matrix Diagram

The matrix diagram is an excellent way to show the relationships among various data. For example, Quality Function Deployment (QFD) is a process to understand the voice of the customer and to translate it into technical design parameters, subsystems, parts, components, processes, and process controls. It depicts a tree diagram showing the relationship between primary, secondary, and tertiary customer needs and the technical design parameters or substitute quality characteristics which, if met, would ensure that the customer’s needs will be satisfied.

Prioritization Matrix

This tool uses a tree diagram of alternatives and a list of weighted criteria. Prioritization matrices are used to reduce the number of alternatives to those that are most significant in a structured, quantitative way.

Process Decision Program Chart (PDPC)

This chart is used to plan the implementation of new or revised tasks that are complex. The PDPC maps out all conceivable events that can go wrong and contingencies for these events.

Arrow Diagram

The arrow diagram is used to develop the best schedule and appropriate controls to accomplish an objective. It is very similar to the Program Evaluation Review Technique (PERT) and the Critical Path Method (CPM).
Reaching and Managing Decisions

One of the most difficult obstacles a team will face, early on, is how to reach decisions and, once reached, how to manage them. There are basically three different ways to make decisions, but before we discuss them let's go over a few basics that need to be in place first.

If a team is expected to make good decisions, we must assume the team understands its task and is empowered to some describable level. We must not only have a team that clearly knows why it exists but also one that has been trained in the basics; i.e., Team Dynamics, Group Effectiveness, and Problem Solving.

Now we have a team that is, hopefully, functioning like a well-oiled machine and can focus on reaching decisions. As we mentioned earlier, there are basically only three different ways decisions are made. They are: autocratic, voting, or consensus.

In the perfect "team" environment all decisions would be made based on group consensus. There are two types of consensus. The first is "hard" consensus. This is where a group of individuals or a team are all in absolute agreement about an issue. It's easy to move forward when "hard" consensus is reached. Not so easy is the second type of consensus. This is called "soft" consensus. It's when most of the group or team is in total agreement with one or more members liking a different decision better. These dissenting members, however, are willing to support the group decision as if it were their own.

As we all know, we don't live in a perfect "team" environment and therefore must be prepared to compromise when appropriate. This compromise may be in the form of putting the task or issue to vote with everyone agreeing that, no matter what, majority rules. It could also mean that we, as a group, may have reached the wrong decision and should study the issue more thoroughly.

Once we have reached a decision we must find a way to manage that decision in the most efficient and effective manner. The first step is to properly manage the agreement we just made in reaching the decision. Teams taking the time to manage agreement will spend much less time making mistakes.

An associate professor of management science at the George Washington University, Dr. Jerry B. Harvey, wrote a paper on this subject entitled "The Abilene Paradox: The Management of Agreement."[1] This paradox is described by Dr. Harvey as:

Organizations frequently take actions in contradiction to what they really want to do and therefore defeat the very purposes they are trying to achieve. It also deals with a major corollary of the paradox, which is that the inability to manage agreement is a major source of organization dysfunction.

The essence of this paper is that often we make a decision in which everyone fully agrees and move forward in implementing an action only to discover that it is much nobody was really that thrilled with the decision in the first place.

There are many ways to avoid the "Abilene Paradox." I believe the most effective way is effective communication between the team members. Whenever possible, take the time to reach consensus. Then discuss the decision and try to look
at it from all angles including how the key stakeholder(s) may feel about it. If anyone
protests the decision or really feels he or she cannot support it as if it were their own,
take a second look. Go back and look at all the supporting data. You may find that
by taking more time you save yourself a “trip to Abilene.”

How to Implement a Team Process

There are many ways to implement a team process within an organization. Some
organizations train everyone and send them on their way. Other organizations do
it without training anyone. More organizations do it by selecting a few people that
will be trained and assigned to teams. The combination of task teams, process
improvement teams, department improvement teams, and executive improvement
teams provide many other options. There is no one right way to implement the team
process. The implementation plan is always unique to the personality of the
organization. The best practices that we want to impress on you are always to
provide formal training before you assign anyone to a team, and never train anyone
until they will have the opportunity to put the training to work.

The following is the approach that we recommend using if it is applicable to the
organization:

1. Form an Executive Improvement Team (EIT) and train them on basic team,
   meeting, and problem-solving skills.
2. Have the EIT define some quick-win problems that will have significant impact
   on the organization. They should then assign Task Teams (TTs) to solve these
   problems. To get the TTs started, they should be provided with:
   — Basic team, meeting, and problem-solving skills training for the members of
     the Task Team.
   — Task Team leaders should also have team leadership skills training.
   — Facilitators should be trained and assigned to work with the task teams.
3. Conduct management level Area Activity Analysis (AAA). In this case, each
   manager that has managers reporting to him or her should prepare an AAA with
   the managers that report to him or her.
4. Develop Management Department Improvement Teams (DIT). Note that the
   deviation from requirements are defined, management DITs can be formed to
   work on these deviations. All people assigned to a team should have team and
   problem-solving training. A facilitator should be assigned to each DIT.
5. Form Process Improvement Teams (PIT). As a result of the measurements that
   were defined in step 3, and the business needs, key processes should be selected
   by the Executive Improvement Team and PITs assigned to streamline these
   processes. The PIT's members will be trained on basic team, meeting, and
   problem-solving skills. In addition, the PITs will be trained to use the Business
   Process Improvement Ten Fundamental Tools and selected Advanced Tools. A
   facilitator should be assigned to each PIT.
6. Train the Trainers. After the management team has experience with the team methodologies, interested managers and/or key staff should be selected to be trained as team methods instructors.

7. Establish Employee Department Improvement Teams (DITs)/Natural Work teams. When management has confidence in the team process and their ability to exist in the team environment, the process will be expanded to all first-level areas (departments). It will start by each area doing an AAA. All employees will be trained in basic team skills and AAA methodology before the AAA activities are started. After the efficiency and effectiveness measurements and requirements have been established for each major activity, the employees on the DITs will be trained in problem-solving methodology and start the problem-solving phase of the team activities. A facilitator should be assigned to each DIT.

8. Form Quality Circles (if applicable). As the team and problem-solving cycles become integrated throughout the organization, groups of employees will be encouraged to identify problems that they would like to work on that are not being addressed by the DITs.

9. Develop Self-Managed Work Teams. With the proper management support, the employees that are members of the quality circles become more and more effective at correcting their own problems. As this occurs, they can take over more and more of the manager’s responsibility. With proper financial and general operations training, the normal day-to-day activities for the work group can then be turned over to the employees, allowing them to evolve to self-managed work teams.

How to Measure Team Success

The measurement of team success depends largely on the strategic business objectives of the organization. What does the organization hope to accomplish through its team process? What are management’s goals? Are they interested strictly in raising quality awareness or do they want teams that can assist in problem-solving, reducing customer returns, reject rates, and defects? Or perhaps eliminating communication barriers between employees and management. What about reducing employee absenteeism and raising productivity? As you can see, there are as many ways to measure teams as there are teams. It is pointless to try to devise a single way to measure team success. Some teams, such as a reject rate reduction team, may be easily measured and have tangible results where others, like a management support improvement team, may not.

No matter the type of team or the problem or issue they are working on, measurement systems must be developed and applied during the start-up of the team. Some simple measurements may be applied to almost any team, regardless of type. They are:

- Meeting team milestones
- Proper use of problem-solving tools
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- Team member attendance
- Meetings start on time and end on time
- Effective use of time and other resources

Other, more complex measurements may be:

- Process cycle-time reduction
- Reject rate reduction
- Customer satisfaction increase
- Cost savings

In measuring a team, the important thing to show is that the team is adding value to the overall organizational improvement effort. The team should be able to prove that they have an important role in improving the performance of the organization, its work environment, product and/or service quality and, very important, the people.

There are many reasons for measuring teams and looking at some of them will provide a foundation for what and how to measure. First of all, one reason is that measuring is the expected management thing to do. After all, if you don’t measure it, you can’t manage it.

The common denominator in all the possible reasons has to be “dollars.” To be value-added to an organization, teams must show a positive Return on Investment (ROI). The difficult part is determining how much the team affected the ROI. Teams do not exist in a vacuum. Ultimate team success will be directly attributable to the way the process is managed and supported.

Most organizations with an existing team process have already determined the cost effectiveness of the effort. This cost effectiveness is a key measurement of the overall team effort. The cost effectiveness measured is the “Return on Investment” ratio of cost reduction and savings resulting from team suggestions compared with the cost of the process.

Organizations report a “cost effectiveness” range of a low of 2 to 1 to a high of more than 40 to 1. The average seems to be around 6 to 1.

How to Deal with Problem Teams

Every organization that has ever had teams and every organization that will have teams will sooner or later face this question—“What do we do about our problem team?” Organizations that tell me they have never had a problem team or a major problem with a team—well, they either aren’t paying close enough attention to their teams or they’re not telling the truth! Anytime you involve individuals in a process, the potential for conflict exists.

Realizing there are many dynamics affecting group process, from individual personality types to basic communication failures, let’s look at 13 of the most
common problems with teams. We've listed the problems in what we feel is a "priority" order. A team may have any one of the problems listed below, but some are the effect of other causes.

1. The team doesn't have a good charter (mission, goals/objectives, and operating guidelines).
2. Team or team members don't understand the mission.
3. The team hasn't learned or isn't using the tools and techniques.
4. The team has failed to set goals and measure results.
5. There are too many goals with unrealistic expectations.
6. There is a lack of team leadership and accountability.
7. Team runs out of new ideas or problems.
8. The team mission or task is causing difficulties.
9. The team isn't integrated with the organization's vision.
10. The team is isolated from other employees.
11. There is a lack of understanding or support from management.
12. There is a lack of team recognition and rewards.
13. Team becomes inactive or dormant.

Problem teams must be dealt with swiftly and efficiently. The sooner the problems are dealt with, the sooner the team can start earning its keep. Tackle the problems like any other organization issue. Identify the problem, the cause, and then develop a recovery plan for the team.

The Future of Teams

Do teams have a place in the future of an organization's improvement efforts? The Ernst & Young "Best Practices Report" makes a point worth considering. It states "Building the human resource infrastructure is essential..." According to the report, lower performing organizations show less than 5 percent of the work force is participating on teams while higher performing organizations show over 25 percent.

The United States was introduced to participative management and the team concept almost three decades ago. It's changed the way we do business. Richard E. Davis, President of Martin Marietta's Manned Space Systems, stated:

Ten years ago, when our employee involvement effort started, we had varying ideas about the program and expected results. Few of us envisioned the atmosphere and attitude of participative problem solving and cooperation that we have at Manned Space Systems today.
Ford Motor Company almost cut the Mustang automobile from its line-up. A team known as the “Gang of Eight” researched innovative ideas and changes, presented the changes to top management, and, after very tough questions from CEO Harold Poling, they got the go-ahead. The team promised a 37-month turn-around. This was several months quicker than any previous turn-around on a new car design. Working together the team slashed bureaucracy and delivered the new Mustang in just 35 months. Will Boddie, Ford’s Mustang boss, said, “We made decisions in minutes around the coffee pot that would normally take months.”

Richard DeVogelaere and the folks at GM took a team approach to taking on water leaks in the Camaro and Firebird model automobiles. They called themselves the F-car SWAT team. Not only did they fix the water leaks but also that “screech” noise made when a window glass rubs wrong against the rubber. They also took care of some shakes and squeaks in T-top models by using under-body braces. DeVogelaere’s comment:

You say to yourself, “If we’d done this five years ago, how many more could we have sold? How many more thousands of owners would be out there saying what a great, exciting car this is?” We thought we were meeting the customer’s expectations, but we weren’t really listening. I guess.

The stories go on and on. Every organization involved in teams can give you success stories like the ones above. Do they also have failures? Of course. To succeed you have to try and to try is to sometimes fail. From our failures we learn to improve.

So, do teams have a future? We believe so. The payoff from teamwork is substantial and proven.

## Summary

If your organization needs to move from a loser category to a survivor category, it needs to do very different things than it would to move from a survivor to a winner category. The winning organizations need to do very different things to stay a winner. For example, Department Improvement Teams (DITs/natural work teams) are very important and should be strongly encouraged if the organization wants to move from the loser category to the survivor category. For those organizations that are already in the survivor category, expanding the use of natural work teams does not provide a significant positive or negative result. For those organizations that are already winners, expanding the use of natural work teams often produces negative results, because it can decrease individual creativity.

The following shows how the three types of organizations approach teams:

**Department Improvement Teams (DITs)/Natural Work Teams**

**Losers:** Less than 10 percent of their people are involved.

**Survivors:** Between 40 and 100 percent of their people are actively involved in DITs.
Winners: All employees have been trained for and served on a DIT. The percentage of the employees active on DITs is decreasing as there are fewer problems that need to be addressed.

Process Improvement Teams (PITs)/Cross Functional Teams

Losers: Not often used.
Survivors: Used on occasion only.
Winners: Used very frequently, but with discretion.

Task Forces

Losers: Often used.
Survivors: Used now and then.
Winners: Seldom ever needed or used.

Team Training

Losers: Informal training on basic seven tools.
Survivors: Formal training for about 50 to 60 percent of the workforce on basic seven tools. Often this training is not directly tied in to application.
Winners: Total workforce trained on basic seven tools, plus other, more sophisticated problem-solving methods. Training is always tied in very close to application of the training.

Approach to Forming Teams

Losers: Management assigns team members and projects.
Survivors: No management approval required (hit-or-miss approach).
Winners: Management charters all teams.

Most Effective Problem-Solving Tools Used

Losers: Brainstorming is used to define corrective action.
Survivors: Cause-and-effect diagram along with brainstorming to define corrective actions.
Winners: Business process improvement is the most effective approach to improving performance, although many other tools are also understood and used.

General Electric offers workers in Bayamon, Puerto Rico, management through self-managed work teams and an incentive plan that rewards employee learning and performance. The plant manager states, “I’m going to have the best workforce in all GE.”

Reengineering processes have been going on at Kodak for several years. Their “Zebra” team, comprised of 1500 employees who make black and white film, work in what the organization calls “the flow.” Within the flow are “streams” or customers
(Kodak business units). In the streams, most employees are part of self-directed work teams. A recent *Fortune* Magazine article says these Zebras "... have good reason to horse around. Since black and white film manufacturing set up a horizontal organization—called 'the flow'—productivity, profitability, and morale have yellowed." Also, Hallmark Cards expects to halve new-product development time using cross-functional teams. At Xerox teamwork is an essential element. At any given time about 75 percent of all Xerox employees are engaged in team projects.

Teams and the team process work, and the "winners" can prove it.

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Individual Excellence: Going Beyond Teams

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Principal, Ernst & Young

and

Norm Howery
Improvement Consultant

Teams make an organization good. Individuals make an organization great.    DR. H. JAMES HARRINGTON

Introduction

An organization can only excel when it taps the full potential of each individual within the organization, sparking their creative juices and providing them with a high degree of personal self-worth and pride. As Maslow so long ago pointed out, all people’s first instinct is a self-survival instinct. Once that need is satisfied, the desire for camaraderie and friendship that a team involvement provides becomes their top priority. But the highest level of performance is self-actualization. This is the point at which the individual performs superbly; not because he or she is driven to perform by promises, threats, or praise, but because excelling in their chosen job provides personal, satisfaction and fulfillment.

Don’t fool yourself: The job you have today is your chosen job. Very few of us have not had options and career choices to make as we first enter the work force.
and we still have options available to us today. You can choose to leave your present assignment and go to work in a fast-food restaurant, roam the streets of San Francisco looking for a handout, or maybe your option is to start your own business. Everyone has options. It is you who decides to continue doing what you are doing or not. It is your choice and you must accept your responsibility to excel at the job. Too many of us gave up many of the choices we could have had early in our lives by not doing well in school or putting fun ahead of work. Too many of us are unwilling to put forth the additional effort that is required to have the best options available to us. The only exception to this is the few people that are limited physically or mentally. The rest of us have no excuse. We are free people—we have freedom of choice. We need to weigh the consequences and live with our own decisions.

As Martin Luther King, Jr., put it, “If a man is called to be a street-sweeper, he should sweep streets even as Michaelangelo painted, Beethoven composed music, or Shakespeare wrote poetry. He should sweep streets so well that the host of heaven and earth will pause to say, ‘Here lives a great street-sweeper who did his job well.’"

For employees to perform effectively, management must provide them with three “T”s:

- Training
- Tools
- Time

The three “T”s get the employee to the starting gate. They are required for an employee to perform well. To excel, an individual has to build upon these basics using individual creativity, pride, and sacrifice as she or he reaches for the star of self-fulfillment. The trick is to build personal challenge into your present job that will throw off the chains of boredom and mediocrity. What could be more b-o-r-i-n-g than hitting a walnut with a stick, then running after it and hitting it again for eight hours a day? Well, put eighteen holes in the ground and that b-o-r-i-n-g task becomes golf, a sport that millions of people wait anxiously to pay money to play.

We are not suggesting that any individual invest their entire lives in their work. Everyone needs to spend time in each quadrant of the Arena of Life (Chapter 5).

In today’s environment, the fastest-growing quadrant is the “Self” quadrant, as the sacrifice of the other three. Individuals need to define the correct balance between the individual quadrants. Well-adjusted people cannot devote all of their efforts to any one quadrant if they are going to have a healthy, normal life. Employees that spend too much time at their workplace soon burn out and lose their individual creativity. Because of the overemphasis on the work quadrant in Japan, a firm called Japan Efficiency Headquarters rents out access to visiting parents and children of people who are too busy with their careers to do it personally. The Tokyo-based organization charges $385 for a five-hour visit by one person, $580 for a couple, and $1,165 if the client also wants to rent a baby or child. For example, a 35-year-old Tokyo computer salesman sent a couple to visit his 94-year-old father who lived ten minutes away from him. Company President, Ms. Sano, Owa stated, “Our purpose is to fill a hole in the heart.”
Individual Excellence: Going Beyond Teams

But things are changing, even in Japan. The people that are entering the Japanese work force today are looking at their jobs differently. Sachiko Kataoka, a 24-year-old college graduate, puts it this way, "When I was small, I got to see my father's face only once a week—on Sundays. It was lonely," she recalls. "I don't want to become like that. I'd like to spend time with my children if I have them. I plan to make a clear distinction between work and play. I have no intention of sacrificing everything for the company."

When it comes right down to it, everyone spends time in the "work" quadrant to provide funding for the other three quadrants. The average hours per day devoted to work from the time an individual leaves their home until they return are 13 hours in Japan, 11.3 hours in the United States, 10.5 hours in Germany, 10.4 hours in France, and 10.2 hours in Britain.

Selling half of your life to support your needs should be enough without working additional overtime. What we need to do as individuals is use our time effectively and creatively while we are at work so that we do not need to work overtime. I doubt that we have ever heard a person laying on his or her deathbed say, "I wish I had spent more time at work."

In discussing the "1994 Accreditation Manual for Hospitals," Paul M. Schyve, MD, Vice President for research and standards for the Joint Commission, stated, "While the standards clearly emphasize systems and processes, rather than individuals in health care, you cannot ignore the role that an individual's knowledge and skills play in outcomes. In the interest of driving out fear from an organization, you can't choose to ignore issues of individual competence. The standards represent the need to balance those issues."

Yes, you have to have a good process and teamwork to get into the race, but when it comes right down to it, it is the individual's personal excellence that makes or breaks the organization.

Dr. Kaoru Ishikawa, the man who started the quality circle movement in Japan and contributed more to the Japanese quality movement than both Deming and Japan combined. openly recognized that individuals were more productive and effective at solving the Japanese quality problems than the team movement was. The need to excel is an idea that everyone can associate with on a fundamental, very personal level. Excellence applies to everyone's occupation. The need to excel, to be the very best we can be, is not something that can be imposed upon us. It comes from within us.

The key is not to sacrifice and take away another minute from the family, religion, or self quadrants, but to better use the time that you are presently devoting to the work quadrant. For example, Germans spend an average of 52 minutes a day socializing; Japanese, 1 minute a day. That is 51 minutes taken away from the other 3 quadrants.

Probably the Japanese are not a good role model to follow. Most Japanese workers are unhappy with their jobs but due to the system, they are as much a slave to the organization as the American black slaves were on southern plantations before the Civil War. In Japan, people work long hours at great sacrifice to their family with little or no personal sense of accomplishment. Jobs are burying and growth in the organization is slow for all but a few select candidates.
Koizumi, president of Nippon Telegraph and Telephone Corporation, stated at a ceremony for new recruits, "You might feel bored during your first three years in this company because you will not be given jobs that require your brain."

If Japan is not the role model that we want to use, what is the answer? We all need to work to improve the way we perform our jobs so that it does not interfere with the activities that go on in the other three quadrants. At the same time, we have to increase our value added to the organizations so that we can improve our financial status and be able to accept more responsible assignments. To accomplish this, each person must:

- Be educated to perform their assigned task(s).
- Understand the organization's business plan and how it relates to their job.
- Understand how well they are performing.
- Not be afraid to take risks.
- Be willing to learn new assignments.
- Be uncomfortable with the status quo.
- Think creatively.
- Be willing to share credit.

Indira Gandhi said, "My grandfather once told me that there are two kinds of people: those who do the work and those who take the credit. He told me to try to be the first group, there's less competition there."

**Training—Opening the Door to Individual Excellence**

David Kearns, past CEO of Xerox and current Deputy Secretary of the U.S. Department of Education, stated, "To be competitive as a nation, we must do two things: improve quality and improve education." Ex-IBM CEO John Akers stated that "market-driven quality begins with education and ends with education. It is everyone's job to teach it and coach it incessantly." One of the primary things that made IBM the leader in the computer field was its total dedication to education. As Thomas J. Watson, Sr., put it, "There is no saturation point to education."

**Deplorable Public School Systems**

The U.S. public schools are deplorable. Teachers perform more as baby-sitters than teachers. In a recent United Nations test of 9- and 12-year-old students from 16 developing nations, the United States came in number 13. The average U.S. high-school graduate has an education level equivalent to a runt-or grade in France, Japan, Germany, and China. Individuals in the United States that do not go to college are not competitive with workers in the developed nations around the world. In 1950, 13 percent of U.S. citizens over 18 that did not go to college earned less than the
Improvement-Related Training

Improvement-related training is directed at upgrading the employee's basic skills. It starts with the very basics to help offset the illiteracy problems facing many employees and continues through to help increase the individual's creativity.

Improvement-related training is directed at helping the individual perform better in any job that they are or could be assigned to within the organization. Improvement training should start the day a new employee is hired. The winning organizations have three- to five-day indoctrination programs that start the first day the new employee reports to work. Most of the improvement training activities should take place during the first two years with the organization, then continue at a slower pace as new concepts are introduced.

We cannot overemphasize the importance of creativity training and development. Surviving organizations train their people to understand and conform to the procedures. Winning organizations train their people to be creative, causing the procedures to be continuously challenged and upgraded.

Job-Related Training

Job-related training focuses on preparing the employee to meet the requirements of a new job and to understand process and product changes related to the present job. Often these process/product changes are driven by changes in the consumer's expectations. Refresher job-related training is usually required to ensure common approaches are used by all employees doing the same job and to help the employees excel in their jobs.

Job-related training is directed at all the special skills and knowledge required for an employee to perform his or her present job. Many organizations today have a section in the job description that defines the knowledge required to be assigned to a job and the additional training that should be provided before the employee is certified to do the job on their own. The advanced organizations have employee assignment certificate programs that include observed performance analysis and written evaluations that document the effectiveness of the training process.

In Japan, new professional employees, or what could better be called recruits, start off in an almost military basic training program that introduces them to the organization. They dress alike, wear corporate pins in their lapels, eat together, and take long hikes together. Employees are trained in the Sony Corporate Etiquette Manual (as well as other things). This manual tells the recruit how to do everything—from how loud to say good morning, to how to reply to a superior's call, to how to bow. This is just the starting point for a socializing process intended to transform young Japanese students into dedicated corporate warriors or "kaisha senshi." It is difficult for most Americans to realize and understand the strict obedience that is taught during the first year of employment with a Japanese organization.
Chapter Eight

Career Growth Training

One of the best ways to develop long-term employee commitment and loyalty to the organization is to transform a job into a career for an employee. The best organizations realize that they have invested a great deal of money and time into each employee and do not want to lose this valuable resource. The best way to keep employees is to help them understand they have a future with the organization and get them to commit their personal time to preparing themselves for the future challenges that will face them in the organization.

To accomplish this is a two-way street. The organization needs to commit resources to prepare the employees so that they can effectively compete with outside resources when a career opportunity occurs. All organizations should compensate employees for some, if not all, of the additional costs incurred when they take formal classes on their own time that help them to prepare for potential job opportunities within the organization. On the other hand, people who want careers within the organization need to be willing to invest their own time preparing themselves to be competitive for a desired career opportunity.

How Training Will Be Provided

With the increased need for more and more training, our approach to training needs to change. We need to find more effective ways of providing formal training than a group of people listening to a lecture because, by their nature, lectures are:

1. A poor means of communication.
2. Very costly.
3. Often not provided when needed.
4. Not adaptable to training a single individual.
5. Not consistent from one class to the next.

Because of these limitations, educational systems within organizations must drastically change in the years ahead, placing more emphasis on other media like closed-circuit television broadcasts, computer interactive programs, audio/video training tapes, audio tapes, and videodisk.

Federal Express uses videodisk systems to provide quality training to its entire U.S. workforce of 75,000 people, at a cost 80 percent less than the same training would cost using classroom training methods. At Hewlett-Packard, 80 percent of the training provided to their work station and computer system sales force is accomplished through satellite television and video methods. Ameritech (a Baby Bell) uses an interactive video program to train their sales personnel on how to sell space in the Yellow Pages. More and more manufacturing processes are being videotaped and put into training programs so that each time a different employee is assigned to a job, he or she can study the way the job should be done without the
assistance of an instructor. This reduces cost and assures that training is presented the same way each time.

**Developing Individual Performance Plans**

The keys to an effective individual performance process are:

- The right things are measured.
- Both the employee and the manager agree on the performance standards.
- There is an ongoing measurement and feedback system that provides information to the employees and management.

We strongly believe that any business plan should involve everyone from the board room to the boiler room. With this as a basic starting point, it is easy to see that the individual’s performance plan should be based upon how the individual performance is going to support the organization’s business plan. Concepts of this nature have become very popular in Japan under what they call Hoshin Kanri (Hoshin Planning or Policy Deployment). In our case, we are taking this approach one step further, bringing the individuals’ goals and measurements in line with the organization’s goals. After all, the best way for an individual to grow within an organization is to increase his or her perceived value added to the organization. The performance plan should also be focused on the organization’s commitment to internal and external customer satisfaction and developing a strong, effective internal team.

The individual’s performance plan should be prepared by the employee and the appropriate manager working together to understand what assignments the employee has and will be assigned to in the near future (next 12 months’ maximum). Using the business plan and input from the individual’s customers, a list of performance measurements should be prepared for each of the individual’s major projects and/or activities. As major new projects are assigned, a new performance plan should be prepared for the new project. In many cases, this will require that several performance plans are prepared for one individual each year. The job description and input from the individual’s customers should be used to define the “meets requirements” performance level for each measurement that will be established.

The process of aligning organizational objectives as they apply to the individual can be a long, challenging, and difficult one, but one that management will find worthwhile for several reasons.

We do not like a preprinted performance plan. In fact, we believe that they are detrimental in the long run. A performance plan should be customized to the individual and the job. For this reason, we recommend that the performance plan form consist of only three columns, the Task Name, the Task Description, and the
Task Priority. The rest of the form should be left blank to be filled in by the manager and the employee.

Performance planning for managers usually consists of three major sections. They are management of business issues, technical management, and personnel management.

Performance Evaluations (Appraisals)

The ideal time to evaluate an individual’s performance is as soon as a job is completed. To take advantage of this timing, the annual performance evaluation should be based upon a series of evaluations that occurred throughout the year. An evaluation should be completed each time a project is completed. Evaluations should not only occur at the end of a project, but also at key points during the project, thereby allowing the individual to correct errors and eliminate undesirable performance as early as possible. At a very minimum, performance evaluations should be scheduled every three months.

Who Should Do Performance Reviews?

The employee is in the best position to evaluate his or her overall performance. As a result, the employee should document his or her performance compared to the targets that they and management have agreed to. If the employee feels that he or she is exceeding requirements, the employee should explain what was accomplished over and above the required performance. The employee should also record any roadblocks that prevented him or her from performing as well as he or she could have and make suggestions of what action should be taken to improve future performance.

To supplement the individual’s input, customers of the individual are asked to evaluate the individual’s performance from their viewpoint. Using these two types of inputs, the manager should complete a Performance Evaluation Form.

After this form is filled out, the employee and the manager will meet to review it and the other input. During this meeting, particular attention will be paid to any activity where the employee or the customer rates the employee’s performance higher than the manager rated the employee. Any differences in perception and/or interpretation of data will be resolved during this meeting. The manager and the employee will also discuss the roadblocks that the employee faced and the suggestions the employee made to improve future performance. The results of these discussions will be recorded on the performance evaluation short form. As a result of this discussion, action plans will be developed to help improve the employee’s future performance. Also, during this meeting, a list of short-term performance objectives will be developed and the next performance evaluation date will be scheduled.

Turnabout is fair play. The appraisal process should provide the opportunity for the employee to make suggestions on how management can contribute to the
employee's overall performance. Because the individual's performance is greatly impacted by the type of direction and support she or he receives from management, at each evaluation the employee should suggest at least one way that management can change or improve to help the employee perform better.

**Annual Performance Reviews**

Once a year, the manager will summarize all of the individual reviews to be sure that all of the objectives defined in the performance plan are met. The result of this summary should be reviewed with the employee. This review should run very smoothly because it is simply a summary of many individual reviews.

Organizations that require all annual appraisals to occur at the same time do it so that performance can be considered during the salary planning cycle. Organizations that do this create many problems for themselves. First, because of the heavy additional workload, the manager lets other tasks slip or does them poorly. Second, because of time limitations, the appraisals are poorly prepared and given.

Through the use of many ongoing evaluations, the time required to perform an annual review can be greatly decreased, and they do not need to all be done at the same time. A manager with 12 employees reporting to him or her can do one a month. Some organizations have refined the process down to the point that a total review is conducted only when the employee is recommended for promotion or is being reassigned to a new manager.

The key to this performance evaluation approach is that the manager is never comparing the individual to other employees. The baseline used by the manager is the required performance level as defined by the job description and/or the employee's customer. A manager could have an entire department consisting of "far exceeds requirements" performers. There is no longer a need for a performance rating distribution that takes the shape of a normal curve, because the concept of an average performer is completely ignored.

**The New Employee**

Ann Landers wrote in one of her columns, "Anyone who believes that competitive spirit in America is dead has never been in a supermarket when a cashier spots another checkout line." Yes, people are competitive by nature, but too often we put away that competitive spirit when we enter the organization's front door. We become part of the pack. We are afraid to stand out as individuals. We don't want to be enthusiastic about our job because the other employees will think we are strange. But enthusiasm makes the ordinary person extraordinary. As individuals, we all have the same needs that must be fulfilled if we are going to excel at our job. They are:

- Economic security. We need to feel that we are getting a fair day's pay for a fair day's work.
- Personal self-esteem. We all want to be viewed as value-added to the organization. None of us wants to be average.
• Personal self-worth. We need to feel that we are contributing to a worthwhile goal.
• Personal contribution. We want to be listened to, to have our ideas heard. We can accept the fact that everything we suggest may not be implemented, but we need a fair hearing.
• Personal recognition. We all need feedback to show that good work is appreciated, that what we are doing is worthwhile.
• Emotional security. We all need to be able to trust the managers we work for and to feel they will be honest with us.

Only when these six basic needs are satisfied can an individual have a chance at excelling at his or her assigned task(s).

That’s Not Fair
The new employee does not expect the world to be fair because it isn’t. Those that dwell on the unfairness in life use it as an excuse for their lack of drive and success. No matter where you are in the world there will always be people who are above you who are not as deserving as you are (in your eyes), and people at your level or below you who do not do their fair share. Most of us believe that we have more than our fair share of problems. In truth, there are many people who have overcome more obstacles than we will ever face and have become more successful than we will ever be. They have used these obstacles to build stamina and the drive to succeed, to forge a will and personality that are unstoppable. On the other hand, there are many individuals who have had much lighter burdens to carry than we have faced who have failed miserably. No, the world is not fair, but the new employee accepts and understands this fact, making the best use of his or her talents and opportunities to provide themselves with a positive attitude and a personal dedication and commitment to success.

The Open-Minded Employee
In today’s environment, growth is going to be very limited. Management and employees need to look for other ways to stimulate job satisfaction and recognition. Employees need to have a very open mind about what is going on around them and how they can contribute. Employees who do not find their job interesting are employees who have closed their minds to its possibilities. Employees and managers alike make excuses for their closed minds. Some of the more frequently used excuses are: we tried that before, let’s hold it at bay, let’s give it more thought, management would never do it, and you can’t teach an old dog new tricks.

It is time to open your minds and stop using these phrases. Every time you utter or hear one of these popular phrases, it’s time to challenge what’s going on. Stop putting up roadblocks and detour signs to change and start knocking them down. Ask how you can make it work now if it didn’t work before. Ask if it isn’t time you tried something new if it is a first-time suggestion. Embrace the positive and cut the
jegs out from under the negative. You may not always win, but you will never win if you never try.

Career Building

Today you are building your career within the organization. The best way you can ensure the success of your long-range career is by doing a superb job today. Keys to a successful career within any organization are:

• Do an excellent job in every assignment you get.
• Make sure you and your manager understand where you want to go.
• Be willing to make the desired sacrifices.
• Ask for the opportunity to compete for the desired assignments.

Career Planning

Every individual needs to stop and reflect periodically on how things are going and where they want to go in the future. When it comes to how things are going, the organization’s internal measurement system should provide the required information about the job that the individual is performing today. But that is a very short-term look at the employee’s career. It provides no input as to where the individual is going. From the individual’s standpoint, performance appraisals leave two of the most important questions unanswered. They are:

1. Am I progressing at the right speed?
2. Am I heading in the right direction?

It is for these reasons that everyone needs to develop a career plan that plots their course to retirement and, often, beyond. Too often, people get so bogged down doing the day-to-day activities that they never stop to determine if what they are doing today will help them to meet their career objectives. A career plan lays out the route that an individual needs to take to reach his or her personal career objectives. For some people, this career plan can be very simple.

Career planning is a very significant part of the Total Resource Management Methodology. The objectives of career planning are:

1. Help fulfill the individual’s desire to develop their potential and grow in the organization.
2. Ensure a continuous supply of qualified people as a resource for the future and key leadership assignments.
3. Make the best use of the employee’s ability now and in the future.
4. Enhance the employee’s feeling of personal value.
5. Provide resources that allow for promotion from within.
6. Show that the organization has respect for the individual.
There is a distinct difference between career planning and performance planning. Performance planning addresses the immediate job and its responsibilities. Career planning deals with the individual’s skills and preferences for the future as well as for today. Although there may be some overlap in the two activities, the primary intent is very different. Career planning is a shared responsibility. The basic responsibility rests with the individual. The manager’s role is one of giving the employee encouragement, information, and support, as well as being a reality tester. The organization’s role is to develop an environment for personal growth, provide educational support, and promote from within whenever possible.

Career planning strengthens the employee/manager relationship by placing the manager in a guidance role. It is a useful tool to the employee and the employer in improving the utilization of the employees and developing the employees’ full potential. Without an effective career planning process, there is a high probability that the organization will have an underutilized, disenchanted work force that is very prone to making errors and job hopping.

**Building a Bond with Your Manager**

No one has more influence over your next career step than your present manager. The relationships you establish with your manager can make or break your career. To have a career-building relationship, you do not have to be a “yes person”; in fact, these type of people are soon discarded as “no-value-added” type individuals by all but the extremely insecure managers. In Mark H. McCormack’s book, The 110 Percent Solution, published by Villard Books, he gave the following advice to people who want to establish a career-building relationship with their manager:

- **Be loyal.** Disloyalty is a major character flaw that will not be accepted by any manager.
- **Keep the boss informed.** The boss should always know everything that is going within your span of responsibility.
- **Embrace change, even if you do not understand it.** Managers are measured more and more on how effectively they implement change. Help them with this responsibility. Do not resist change.
- **Respect your manager’s time.** Spend your manager’s time like you would your own money.
- **Don’t tread on his or her turf.** Honor the fact that your manager has divided up the available work into specific job assignments.
- **Follow up quickly.** When your manager gives you an assignment, get it done and out of the way.

These simple rules provide the key building blocks for developing a good relationship with your manager and will apply equally well, whether you are an assembly worker or the vice president of a major corporation.
Reinforcing Desired Individual Behavior

We all work for the same things—to gain security and self-esteem. Few of us report to work at 8:00 AM, five days a week, because we can’t find anything better to do. I worked for IBM for 40 years and really enjoyed my assignments. But the last day they paid me to come to work was the last day I got up at 5:30 AM, put on my dark blue suit and wing-tip shoes, and left home to go to IBM. Why? Because IBM and I agreed that it was no longer a desired behavior that I would be compensated for.

If we want individuals to excel, we need to recognize and reward them for the additional effort that they put forward. Japan recognizes the individual workers by crowning their best workers with the title of “Ginohshi.” It is awarded by Japan’s Ministry of Labor for passing a series of rigorous examinations related to industrial performance of the highest quality. Since 1971, IBM Japan’s Yasu site has had over 200 employees honored with this coveted title. In addition, individuals are recognized by Japanese prefecture and regional governments for excelling at their assignments. For example, five IBM “Ginohshi” workers were chosen as outstanding skilled workers by the Governor of Shiga Prefecture in one year. Obviously, being singled out as outstanding skilled workers has an extremely positive effect on these individuals’ present and future performance. Likewise, not being recognized or taking away previously established recognition systems diminishes the importance of the act. For example, in IBM’s zest to cut costs, G. H. Larson, site manager at IBM San Jose, issued a letter to all employees on March 17, 1992, that made the following changes to IBM’s established recognition program:

- Quarterly Century Club Annual Dinner and Family Day will be held biennially in alternate years. (They were both held annually in the past.)
- Watson Trophy Dinners for winners and guests will be replaced by Luncheons for winners only.
- Children’s Christmas Parties will no longer give out gifts.

Although we believe that he did not mean to, what did he telegraph to the IBM employees?

1. Longevity with the organization and building an IBM family feeling was not as important as it used to be.
2. IBM’s outside athletic program that helped build IBM’s team spirit was less important than it used to be.
3. The individual’s family was less important to IBM than it used to be.

Great care must be exercised not to establish individual recognition systems that may be cut back in the future. Any negative change in the recognition system is interpreted very personally by the employees.
Salary as a Reinforcer of Desired Behavior

Employees sell their lives for their salary. Today, most people sell themselves into limited slavery just as the indentured servants used to in the seventeenth and eighteenth centuries. Most of us work to put food on the table and to live in the style that we have selected for ourselves. There are very few of us that have all the money we want and work for others only to get a feeling of self-worth. Management communicates the employee's worth hour by hour, by the amount they pay their employees. Everyone understands that the organization pays the people and the jobs it values the most, the most money. Every time you pay one person $10 a week more than another person, management is communicating that the first employee is more valuable.

What options does management have in determining where an individual should be paid within a salary bracket? The following are the most common options used today:

1. Time with the organization
2. Time in the assignment
3. Fixed pay per assignment
4. Age of the employee
5. Employee's knowledge of the organization
6. Pay for performance—quality of output, meeting schedule, cooperation, versatility, creativity, and productivity
7. Team performance
8. A combination of 3, 6, and 7

Combination. More and more often, the individual's compensation is based upon a combined approach, plus a bonus system. Many Japanese organizations make effective use of the bonus system to control expenses. Many organizations in Japan pay employees a very minimum wage, then supplement this wage with a bonus based upon the organization's performance. The annual bonus may exceed 100 percent of the employee's annual salary. Typically, these bonuses are paid twice a year, just before summer vacation and during the first part of December in time for the holiday-added expenses. The good thing about the bonus system from the organization's standpoint is that salary expenses can be cut 50 percent when the organization is not performing well and money is most needed.

In addition to the organization's "performance bonus" concept, we suggest the combination of the "pay for performance" and "pay for knowledge" concepts. This is accomplished by relating the employee's salary to their performance evaluation. Additional compensation is given to the individual based upon the number of work assignments he or she has mastered (see Fig. 8.1).
<table>
<thead>
<tr>
<th>Assignments mastered</th>
<th>Added compensation per week</th>
</tr>
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<tbody>
<tr>
<td>1-2</td>
<td>$ 0.00</td>
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<tr>
<td>3-4</td>
<td>$10.00</td>
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<tr>
<td>5-6</td>
<td>$20.00</td>
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<tr>
<td>7-8</td>
<td>$30.00</td>
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<tr>
<td>Over 8</td>
<td>$50.00</td>
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Figure 8.1. "Pay for knowledge" typical compensation plan.

The trend today is the combined approach to compensation. Even in Japan which has traditionally based its compensation on employee’s seniority with the organization or on age, things are changing. Today, things are changing very fast. For example, Honda Motors has announced that they will begin paying some of their managers on an annual basis rather than monthly. Individuals will negotiate each year with their supervisors either a raise or cut in pay based upon their performance.

Cross-Discipline Training

It is no longer enough for employees to perform one predefined activity and be oblivious to the activities going on around them. Employees today need to understand that they have customers that need to be pleased, and suppliers that they are dependent upon. To properly interface with their customers and suppliers, employees need to gain an understanding of what they do and what their problems are. Employees need to expand their view of the organization, getting away from the microscopic view of just their one assignment, to understand the macro-processes that the organization is built around. This broader view is necessary so that everyone is working in harmony to achieve the organization’s goals.

To accomplish this, cross-discipline training is becoming an essential part of developing the employees within the organization. Cross-discipline training has a number of positive benefits to the individual and the organization. They are increased productivity, increased communication, reduced rivalry, and reduced bureaucracy.

For example, when a petroleum inspection firm sent their accounting staff out on sales calls with their salespeople, they quickly realized that the controls they had imposed on purchase orders were unrealistic and wasteful. As a result, the purchase order dollar amount that required accounting approval was raised significantly.

How does cross-discipline training help the individual?

- Revitalizes the individual
- Provides personal growth
- Expands personal contacts
- Increases visibility
Chapter Eight

- Opens new career opportunities
- Clarifies organization's key processes
- Provides increased personal flexibility

A major factor in succeeding as an individual or as an organization in the twenty-first century is the flexibility of the individual within the organization's processes. Cross-discipline training provides a key answer of how to break away from today's status quo while growing our most valuable resource, the individual employee.

An excellent way to start the cross-discipline training process is at the functional manager level. Many functional managers are empire builders. They are usually quick to complain about what other functions are contributing. Managers that reach this level in an organization should be professional managers, not technologists. These are individuals that have the potential of becoming the CEO and/or COO. It is important that the organization train these individuals in how the total organization functions. It is for these reasons that we recommend that the cross-discipline training program starts with them. We have seen organizations that rotate these managers regularly. Each functional manager tries to work with the other functions because if they complain about one too much, it probably will be the one that he or she will be assigned to next.

Turning Employees' Complaints into Profits

William Safire has said, "Language developed because of our deep inner need to complain." Yes, to complain is just human nature, but all too often, management looks at it as a negative habit. I have often heard managers say, "If only our employees spent as much time working as they do complaining." It is time for management to change the way they think about complaints. Complaints are a valuable first step in the improvement process. In reality, a complaint is an employee's way of telling someone else that they have recognized a problem.

The challenge that management faces is how to change a complaint into an improvement suggestion. Fortunately, that is not as hard as it sounds. For example, if the employee complains, "This process is so complicated that there is no way we can get good results," the manager has an opportunity to answer, "What would you suggest to simplify it? I am really open to any suggestions you might have."

Each time an employee comes to management with a complaint, they enter the office with a monkey on their shoulder. Frequently, management will reply to the complaint with, "I'll look into that," or will imply that the problem is not important with a comment like, "John, don't let that bother you. I'm sure you can meet your schedule." When this occurs, the monkey has just jumped off the employee's shoulder and now rests heavily on the manager's back. The trick is not to allow the employee to put the monkey on your back. If you make a consistent habit of not letting the employee put the monkey on your back, the employees will get the word that management expects them to solve their own problems, or at a very minimum, they will come to management with a suggestion on how to correct the problem.
Ask your employees to try to solve their problems themselves. If they need approval to use resources outside of their control, tell them to come back and discuss it with you so you can help them. Let them know that if they cannot solve the problem, they should bring it to you and together you will attack the problem and try to find a solution.

Toyota has implemented what they call a "Thank-you Movement." When a problem is presented to management, they buy the employee a cup of coffee or tea as a way of thanking the employee for identifying the problem. Then the manager sits down with the employee to drink the beverage. During this meeting, the manager asks the employee, "Why do you think the problem occurred and what should be done to correct it?"

Many employees have already been trained on how to solve problems and present their recommendations as part of their team training process. Those who have not had the advantage of this training should now be introduced to these tools, thereby helping them make good, valid suggestions.

**Improvement Effectiveness Program**

Management needs to encourage and empower their employees to be creative related to their assignments. We hire engineers, accountants, MBA's, etc. to help improve the quality and productivity of the total organization. They are expected to do this as part of their assignment. Some of these employees do an outstandingly creative job. Others do a good job, while others do just enough to get by. For years, management has relied on the theory that, "Cream floats to the top" to help them identify and promote the best candidates. This is an excellent theory if the milk is not homogenized and the management ranks are expanding to make room for these high potential employees. The problem is that this is not the case in most organizations today. As a result, we need to search for ways to motivate, allow our professionals to compete, and develop a database that ensures the very best candidates are identified for each promotional opportunity. The way to do this is through the implementation of an Improvement Effectiveness Program (IEP).

The improvement effectiveness program is available to all individuals and teams alike. It is a way to recognize employees for improving the things they are responsible for. In this program, the employee(s), after they have implemented a suggestion that was within their job scope, make an estimate of the first-year net savings that resulted from the suggestion (savings minus implementation costs). These estimates should be reasonably accurate (about ± 10 percent). The suggestor(s) should then fill out a form documenting the idea and the savings.

The department manager will review this document and sign it if he or she concurs with the estimate and can verify that the change was implemented. This form is then sent to Personnel where the information is added to the Total Improvement Management database and the individual's personnel record. The improvement effectiveness ideas that have general and/or multiple applications will be noted at this point. These multiple-use ideas are then documented in a quarterly report that is circulated to management. This report provides the stimulus for many four-star improvement effectiveness ideas.
Suggestion Programs

To this point in time, we have been talking about suggestions and ideas that fall within the employee’s job description. Now we want to discuss ideas that are outside of the employee’s responsibility. For example: a secretary who suggests the use of a different printer because it would improve productivity; a test operator who suggests redesigning a test fixture so the parts cannot be put in backwards; or the repair technician who suggests using a different part because it will last longer in a specific application, etc. These are all good ideas that will save the organization money and/or improve its reputation. As a result, the organization should be willing to share the savings from these ideas with the employees who made the suggestions. Usually, the scope of the suggestion requires that someone other than the suggestor implements the suggestion or at least approves the suggestion before it can be implemented. As a result, these suggestions are submitted into a formal suggestion program.

All individuals and all ideas are eligible for the improvement effectiveness program. Many suggestions are not eligible for the suggestion program. The best approach is to evaluate an idea to see if it is eligible for the suggestion program and if it is not, then turn it in under the improvement effectiveness program after it has been implemented. The key elements of the suggestion program are:

1. The suggestion must not be part of the suggestor's responsibility.
2. The suggestion does not have to be implemented to be considered.
3. The suggestor shares in the savings resulting from the suggestion.
4. The suggestion cannot be pre-dated by activities or plans already underway.

How does the suggestion process work? National Cash Register Company developed the concept back in 1896. The value of the suggestion program is that it offers the person closest to the work activity the opportunity to suggest improvements. This results in more effective utilization of assets, increased productivity, waste reduction, lower product costs, and improved quality. As Paul Petermann, then manager of Field Suggestions at IBM Corporation, put it, “Ideas are the lifeblood of the company, and the suggestion plan is a way of getting these ideas marketed.”

The formal suggestion program requires that employees document their ideas for improvement and submit them to a central suggestion department that is responsible for coordinating and evaluating the ideas and reporting back to the employee. The suggestion department reviews each suggestion and chooses an area within the organization that is best suited to evaluate the suggestion. The evaluation area studies the recommended changes to determine if they will provide overall improvement in quality, cost, or productivity. If the suggestion is accepted by the evaluation area, the evaluator will determine what tangible savings will result from implementing the idea.

In some cases, suggestions will be adopted even though the savings are intangible. These ideas benefit the organization but the savings cannot be measured or
estimated in a precise dollar amount. If the idea is rejected, the investigator records the reason why the idea was rejected on the evaluation form. Both the accepted and rejected suggestions are then returned to the suggestion department, where the evaluations are reviewed for completeness and accuracy. A letter is then sent to the employee's manager describing the action that was taken on the suggestion. For an accepted suggestion, a check normally accompanies the letter. Each suggestion is then reviewed with the employee by the employee's manager. When major cash awards are received, the manager will usually call a department meeting to present the award to the employee, to publicly recognize the employee as well as to provide an incentive to get the other members of the department participating in the suggestion program.

Paul Revere Insurance Company employees submitted 20,000 suggestions during the first three years of their improvement process. The suggestions were a major contributor to the organization’s improved performance.

- Income up 200 percent with no additional staff
- The organization moved from No. 2 to No. 1 in their field of insurance.

Frank K. Sonnenberg, in his article entitled “It’s A Great Idea, But ...” wrote, “A new idea, like a human being, has a life cycle. It is born. If properly nurtured, it grows. When it matures, it becomes a productive member of society.” He points out that at 3M, some people claim that the company’s “11th commandment” is, “Thou shalt not kill an idea.”

Japan’s Suggestion Process. The following is a quotation from Toyota’s Creative Suggestion System manual: “The system came to Toyota from the United States back in 1951 when Toyota was still a newcomer in the automobile industry. Two Toyota officials traveled to the United States to study modern management methods, and at Ford Motor Company they saw a suggestion system being used that inspired them to try a similar system in Toyota.”

Starting with this very modest introduction, the Japanese, in a very methodical way, expanded this application and used it much the same way they did statistical process control and Total Quality Control. Starting from a zero base line, they expanded the idea to the point that today it is the most effective employee involvement tool used in Japan, surpassing even the Quality Circle Movement: In a study done by the Japanese Suggestion Association, they reported, “As viewed from the relationship with small group activities, which is the nucleus of suggestion activities, 50 times as many suggestions are made for every solution of one problem by one circle.” Dr. Kaoru Ishikawa, the father of the Japanese quality team and the Quality Circle concept, stated, “In Japan, only 10 percent of the quality improvements come from teams. The remaining 90 percent come from individual suggestions.”

Now let’s compare Japan’s and the United States’ suggestion programs.
Chapter Eight

<table>
<thead>
<tr>
<th>Activity</th>
<th>Japan</th>
<th>U.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suggestions per eligible employee</td>
<td>52.4%</td>
<td>17%</td>
</tr>
<tr>
<td>Percent of workers participating</td>
<td>72.0%</td>
<td>38%</td>
</tr>
<tr>
<td>Percent of suggestions adopted</td>
<td>57.0%</td>
<td>31%</td>
</tr>
<tr>
<td>Average award value</td>
<td>$23.00</td>
<td>$547.20</td>
</tr>
<tr>
<td>Average net savings per suggestion</td>
<td>$1.19</td>
<td>$7,103.00</td>
</tr>
<tr>
<td>Yearly net savings per employee</td>
<td>$3,793.00</td>
<td>$3,750.00</td>
</tr>
</tbody>
</table>

Now this data may be interpreted that the United States goes after the important problems and the Japanese workers focus on the insignificant problems. But look at the bottom line. The average eligible Japanese worker saves the organization more than $3,500 per year over the savings generated per American worker.

Problems with U.S. Suggestion Programs. The major reasons that suggestion programs are not as effective as they should be in the United States are:

1. Lack of management involvement
2. Long evaluation cycles
3. Lack of goal setting
4. Lack of recognition

Too often, management uses the suggestion program as a way of putting off the employees. Instead of listening to the employee’s ideas, they say “Write it up and turn it in as a suggestion.” The manager’s job in the idea generation process is to:

- Encourage employees to express their ideas.
- Help them clarify their thoughts.
- Determine if the idea is eligible for the suggestion program or if it should be used in the performance improvement program.
- Support good ideas to help them get implemented quickly.

We have found that the quantity of employee suggestions is directly proportional to the manager’s interest in the suggestion process. Japanese suggestion programs are so successful because everyone commits to them. Each department should set a target for the number of suggestions that the department will submit every three months. This helps make the suggestion program a challenge for the department and its members.

Idea Submittal Training

We have already talked about the importance of training people on how to solve problems, but management needs to provide them with training that addresses:
Individual Excellence: Going Beyond Teams

- How employees submit suggestions and improvement effectiveness ideas.
- How to evaluate what will be saved as the result of an idea.
- How to estimate the cost of implementing an idea.
- How ideas can be presented so that they are easily understood.

| Getting Ideas Flowing |

For the average organization, it is easy to embrace the concept of tapping the hidden powers of the employees' ideas. The problem is, how do you do it? How do you keep your credibility with the employees if they start turning in ideas and swamp the process? A good way to tap into this reservoir of ideas and not open the floodgates is to hold an "idea week." In this approach, management announces to the employees that a specific week will be set aside to see how many improvement ideas can be generated. For example, "The week of January 16 to 21 will be set aside to see how many ideas can be turned in that will improve safety and quality or reduce costs."

This is an excellent approach to getting the idea process flowing. It allows the organization to develop the idea processing system under a controlled environment. It will also help to define any problems that need to be corrected before the formal process is implemented. Many organizations will repeat this cycle two or three times before introducing the formal ongoing suggestion process.

| Idea Sharing |

An important part of developing a creative environment within an organization is the open sharing of the ideas that are generated. Many organizations accomplish this by maintaining a list of new and creative ideas that is made available to the entire organization. Often this data is stored in a computer database that can be sorted in many different ways, providing a valuable database to help solve future problems.

3M Corporation has made use of "Innovation Fairs" to exhibit new ideas. Employees from Product Engineering, Marketing, Production, and other departments attend these fairs to gain new ideas and to discuss the ideas that are being exhibited with their creators.

| Problems without Known Solutions |

No matter how good an organization is or how well employees are trained, there will always be a few problems that cannot be solved by the person who recognizes them. And questions that the employees would like to get answers for. In these cases, the first approach that an employee should use is to talk with his or her manager. Often an employee's level of trust is low or they believe that their manager will just
put them off. Other employees are just too meek to discuss the situation with their manager because they feel that they will bother him or her with little things or things that they should already know the answer to. To offset this situation, we need to provide all employees with other ways to get their problems solved and/or their questions answered.

Request for Corrective Action

Most managers think that they know all the problems that are plaguing the organization. We have seen managers who have told their employees, "Don't bring problems to me without your suggested solutions. I already know what the problems are. What I need is help in solving them." The real truth of the matter is that most managers do not know about most of the problems that are preventing their employees from doing an excellent job. In a study designed by Sidney Yoshida, a leading Japanese consultant, he reported that:

• 4 percent of the organization's problems were known by top management.
• 9 percent of the organization's problems were known by middle management.
• 74 percent of the organization's problems were known by supervisors.
• 100 percent of the organization's problems were known by the employees.

Of course we all know that priorities are set by these same top management that know about only 4 percent of the total problems. The use of a Request for Corrective Action (RCA) process provides a way for the employee to inform management about the problems that the present process shields them from.

The RCA process is a very effective way of identifying the submerged problems before they tear the bottom out of the organization's ship. Any employee who is having a problem or knows of a problem can fill out an RCA form and send it in to the improvement control center. The writer has the option of signing or not signing the RCA, with the stipulation that he or she will remain anonymous unless the employee designates a desire to discuss the situation with the investigator. Organizations that have implemented this type of program indicate that over 90 percent of the items submitted can be acted upon and brought to a successful conclusion.

Speak-Up Program

Another way to relieve pent-up emotions and provide employees with answers to questions is a process called "Speak-Up Program." This program encourages employees to share with the organization the problems they are having or questions they may have about the organization and its activities so the situations can be corrected or explained. The speak-up program is a very confidential process that provides an ombudsman to represent the employee without divulging the employee's name. This is very effective at identifying and correcting personnel prob-
Items and items that should be discussed more openly with all employees. Many of the questions that are submitted are questions that many people have but never take the time to ask, creating a sense of uncertainty.

Safety

CFO of HON Industries, John W. Axel, stated, “We are now putting safety on an equal footing with quality and productivity. Our total focus is on eliminating injuries, rather than reducing costs.” HON was spending about $5 million per year on worker’s compensation costs when they initiated their emphasis on the safety program. By implementing a comprehensive safety program, they were able to reduce this cost by $1.5 million in the first year. The number of accidents decreased by 50 percent.

We agree with Mr. Axel that safety is important, but we feel it is even more important than quality and productivity. There is no doubt about it. Safety must be management’s first concern when it comes to protecting its most valuable resource: its people. But the documented results puts the United States in a very gloomy position compared with many of the developing nations. According to the U.S. Department of Labor’s Monthly Labor Review, America has seven times as many private-sector injuries and illnesses as Japanese businesses have. Japanese work injury rates continue to decrease, while the U.S. rate continues to climb. This is true of most industries, not just the hazardous work environment industries. The following data reflects the computer and telecommunications industry’s lost-time injury rate per year per 100 employees.3

<table>
<thead>
<tr>
<th>Country</th>
<th>1987</th>
<th>1990</th>
<th>3-year trend</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>2.34</td>
<td>1.98</td>
<td>down</td>
</tr>
<tr>
<td>France</td>
<td>1.10</td>
<td>1.10</td>
<td>same</td>
</tr>
<tr>
<td>Germany</td>
<td>2.70</td>
<td>3.30</td>
<td>up</td>
</tr>
<tr>
<td>Italy</td>
<td>2.50</td>
<td>2.50</td>
<td>same</td>
</tr>
<tr>
<td>Japan</td>
<td>0.93</td>
<td>0.07</td>
<td>up</td>
</tr>
<tr>
<td>U.K.</td>
<td>1.70</td>
<td>1.50</td>
<td>down</td>
</tr>
<tr>
<td>U.S.</td>
<td>3.10</td>
<td>3.80</td>
<td>up</td>
</tr>
</tbody>
</table>

IBM, whose safety record is well below the average of all these countries for their industry, estimates it saves $50 million a year in workers’ compensation as a result of these differences.

U.S. organizations need to step up to their responsibility for providing their workers with a safe environment. Management should not be content with anything less than 1000 percent improvement in the organization’s safety record over the next three years. To accomplish this, organizations should

* Provide regular safety training for all employees.
* Provide a continuous safety focus campaign.
• Pay rewards to individuals who identify safety problems.
• Have an experienced staff investigate each accident and report what corrective action was taken. This report should be reviewed with upper management.
• Post accumulated accident-free hours.
• Have each manager conduct a safety review of their area at least once a month and turn in a report on their findings.
• Have middle management conduct an audit of their area and one other middle manager’s area every three months and turn in a written report.
• Document a negative analysis of each area every 24 months.
• Have a third party conduct an audit of the entire organization every six months.
• Fire employees who will not correct unsafe working habits.

When it gets right down to it, the elimination of accidents is a very personal thing that requires each employee’s attention. Management can help by error-proofing the business environment, but accidents will never be eliminated unless the employees use the tools and processes as they were designed to be used. Everyone’s goal should be to eliminate not only lost-time accidents, but all accidents—right down to things as seemingly small as a paper cut.

1 Empowering the Individual Closest to the Customer

The individual who is closest to the internal and external customer must be empowered to meet the customer’s expectations. If the organization is to be viewed as a world-class leader, true service excellence is a very personal, individual thing. Procedures and good processes help, but the performance of the organization rests with each individual and how they relate to their customers.

There are very few processes that are so good that someone, somewhere, under some condition, someone won’t fool them up. It is for this reason that we must go beyond teaching our employees how to use the organization’s processes. We need also to explain to them why the process exists and what the expected outcome from the process is. Then management needs to empower each employee to act on his or her own to ensure that the customer is satisfied with each individual’s output. This personal empowerment does three things:

• It aligns accountability with responsibility.
• It builds pride in the employee.
• It maximizes customer satisfaction.

Empowerment occurs when management provides employees with all the required information, knowledge, and resources that are needed to perform their assignments and allows them to execute their assignments in any way necessary to
achieve the desired results, as long as it is done in keeping with the organization's values. Usually, empowerment is limited to a set, specific boundary and/or accepted operating norms. (Example: The boundaries that could be set for a salesperson might be, “You can give full refunds as long as the customer has a receipt.”) All employees today are empowered to some degree. The advanced organizations are continuing to relax the boundaries that each employee works within. (Example: The new boundaries placed upon the salesperson could be, “You can give full refunds as long as you believe it is the correct thing to do for the customer and the organization.”) You will note that with the relaxed boundaries, the employee has a greater responsibility to exercise good judgment, while having increased authority to expend more of the organization's resources.

There is no doubt about it. If an organization wants to excel, each individual within the organization needs to be empowered and have the required knowledge to perform their job in a superior manner. The general can have the very best military strategy and plan, but if the soldiers do not hit the target, the war is lost.

The Start of Individual Excellence

The start of individual excellence is the hiring process. Most organizations have a base population that they want to develop and should work with them to help them excel. The degree to which this activity will be successful is greatly influenced by factors that are far outside the control of the organization. In an IBM technical report entitled “Theory H,” it was pointed out that the highest individual performance level (“H” level) was a basic trait like honesty, diligence, religion, work ethics, etc., that is developed during a child's formative years. By the time an individual enters the workforce, his or her “H” level has been established.

For the rest of the person's career, he or she will perform at a point someplace below his or her “H” level, based upon other outside forces, for example, how much pressure management applies on schedule or quality. The employee will only perform above the “H” level for short periods of time under extreme pressure. (Example: The employee is told that he or she will be fired if his or her quality of work does not improve, or if his or her life is in danger.) Thus “H” level will not change unless the individual suffers a serious emotional experience. It is for this reason that the organization must be very careful when it selects new employees.

There are a number of factors that need to be considered in the selection of a new employee. Some of them are:

1. Does the candidate have the personal traits that will have a positive impact upon the rest of the organization?
2. Does the candidate have the background to do the job?
3. Does the candidate have the physical traits required to do the job?
4. Is the candidate compatible with the organization's visions?
5. Can the candidate be moved to another function within the organization when this job is completed?
6. What type of long-term contribution can the individual make to the organization?
7. How well has the candidate performed other tasks that she or he has undertaken?

Japanese organizations realize the importance of selecting the right employees because they plan to make careers for them with the organization. Most Japanese export organizations rely heavily on recommendations from employees and associates when hiring new employees. They go to their schools and talk with potential employee's teachers, not just at the college level, but also at the grade-school level. They talk to the employers of the candidate's siblings to determine how the candidate's relatives are performing. Strong consideration is given to the reputation of the family, as well as the individual.

In the United States, we used to be much more careful in selecting new employees. I remember when I joined IBM. They interviewed six of my neighbors, my minister, and three teachers before making a job offer. Strong consideration was given to me because my father had been an excellent employee with IBM for over 14 years, and my uncle also had worked for IBM for over 20 years.

Today, U.S. organizations frequently do not exercise enough control over the hiring process. They have a vision of a cooperative team environment and then hire a new employee who has not been involved with team activities within the school system. Management has a tendency to hire an individual to fill an immediate need without considering how other functions could use the employee later on. All new employees should be reviewed by at least two functions that feel the employee has potential for working in their area. We suggest that you select your new employees as carefully as you would a new son-in-law or daughter-in-law.

**Creativity**

The single biggest advantage that human beings have over the rest of the animal race is our ability to create new concepts based upon past experience. Constructive use of fire, the wheel, the telephone, the light bulb... the list goes on and on of how individuals' creative minds have provided the fuel to move mankind ahead. But creativity does not just manifest itself in breakthrough concepts. It is around us all the time. Mary finds an easier way to print standard letters; Jim develops a new sales pitch that increases book sales; Fernanda discovers how to get waffles out of the waffle iron without burning herself. Yes, creativity and discovery go hand in hand. Creativity is the very personal things that every individual does to some degree on a regular basis. Creativity is not limited to a few geniuses. It is as natural as waking up in the morning. It's just that some do it better than others, because the more creative people have a tendency to think about things in a different way.

Realizing that creativity is a different way of thinking about everyday occurrences opens a whole new perspective to everyone. Why? Because everyone can be trained to use creative thought patterns that will greatly increase their creative abilities. With this realization, management around the world have altered their training programs to include creativity training.
Creativity for the Individual

Do you agree with this statement?

Participating in creative activities is a lot of fun, but it is just a diversion from the "real" work to be done.

Well, part is true and part is false. It is true that creative activities are a lot of fun. It is false to think that they are not part of the "real" work. This book deals with how to improve the work that we do. This chapter deals with how to increase your capability to make improvements. Not by a little bit here and a little bit there, but with major steps forward. This occurs when being creative becomes not a diversion, but the way you think and do your job. Consider these facts:

In a USA Today survey of 100 executives on what is more important, being creative or being smart, 59 percent said creativity was more important, as compared to 28 percent responding that being smart was more important. That is better than a two-to-one ratio for being creative!

Fortune, April 19, 1993, had an article entitled "Japan's Struggle to be Creative," where the various organization programs for enhancing creativity are discussed. Those companies involved are Shiseido (cosmetics), Omron (electronics), Fuji (film), and Shimizu (construction), all leaders in their field. These types of programs are truly revolutionary for Japan.

Having said this, let's find out how we can become more creative by first defining some basic premises.

Many of the books and papers on creativity consider the role of the individual as being a member of a team or group involved in creative activities. No particular emphasis is made as to how being creative is best done—with a team or as an individual. Before we become involved in which way is best (if there is a "best" way), let's look at just what creativity is. The dictionary definition of creativity states "to bring into existence," and "to produce through imaginative skill." Not too much help: nothing we didn't really know before. Let me offer a definition that is helpful. It comes from Albert Szent-Gyorgyi von Nagyrapolt, an American biochemist (born in Hungary) who won the Nobel Prize in 1937 for physiology and medicine. He described creativity in terms of discovery in this way:

Discovery consists of looking at the same thing as everyone else, and thinking something different.

I believe Szent-Gyorgyi has taken a vague definition and made it into a concept that we can understand and use. There are two parts to what he has said. The first part is quite easy, but the second part, well, that is the challenge we will discuss for the rest of this section. The first part, "looking at the same thing as everyone else," means that if I hold up a pencil or any object you choose, and ask "What is this?" most of you would say it is a pencil. Now if I asked you to "think something different," about the pencil, there just might be a bit of a mental struggle to do that. How to make this less of a struggle and to make "thinking differently," the rule and not the exception, is the whole reason why I wrote this and why you are reading it.
Thinking differently, obviously, means making changes, and through my experiences in teaching classes on creativity, I've come up with three basic mind-sets needed for making changes.

The Basis for Change

• **Attitude.** One must work toward developing the attitude that change can be a positive force in our lives, that whatever happens can be for the good. Remember the 1940s song that said "eliminate the negative, accentuate the positive"? Well, this is the way that change needs to be accepted.

• **Continuous Improvement.** We must always be striving to improve whatever we do. My motto for many years has been that "there is always a better way." Nothing has been done that cannot be done better. The only way this happens is through the constant effort of finding that better way.

• **Reach out.** Our goals need to be high enough to cause us to "stretch" to reach them. We will often find that it is the journey towards the goal that is more rewarding than the achievement of the goal.

All three of these, what I call mind-sets, are needed for anyone that truly wants to think differently. Each person needs to internalize these thoughts, that is, keep the concept, but use your own words so it becomes your thinking, not just what I have written here. You may even want to add other concepts to these three regarding change, and if that helps in further developing the internalizing of your personal "basis for change," then that is great!

So now let's say that you have your own change mind-sets and move on. What we have just discussed is needed by each of us, as individuals, whether or not we are part of a team.

The opening paragraph asked the question: Is there a "best" way for being creative? Not all creative acts happen as the result of being on a team, but being on a team can, in some cases, speed up certain parts of the creative process. For example, developing a list of possible solutions to a problem will proceed at a much faster pace through the use of brainstorming by a group of people rather than one person trying to do so alone. This is especially so if the members of the team are relatively inexperienced in the brainstorming process. On the other hand, those individuals that have been involved in brainstorming activities on a regular basis can do almost as much as the team. What this means is that creativity, the act of thinking differently, always starts with the individual. It is the experience and the way creativity is approached that determines the "best" way. It is appropriate then that we focus on the traits that you, as an individual, need to develop in order to facilitate your creative capabilities by thinking differently.

So what does it take to "think differently"? Almost anyone that has been involved in the creativity field will have their own set of ingredients for doing this. I don't think, though, that too many would disagree with the ones we are going to discuss now. There are (at least) five elements that each individual needs to have in
order to think differently on a regular basis. The more we develop these elements, the easier it is for us to make creativity a normal part of our life and not a special effort that strains our brain (a bit of a serious pun!). Let’s define these elements first, then look at how we can make them part of our life.

Elements of Thinking Differently

Curiosity. I think that all of us are curious to some extent, especially when something happens that really boggles our mind. For example, most normal sunrises are from the east and have the distinctive, soft orange-type color, and we don’t give it another thought. What, though, would we think if the sun rose in the south and had a bright green color? Most likely, and almost without exception, each of us would say (leaving pure panic aside), “I wonder what is causing this (very!) strange event?” And we would probably speculate as to the cause of it, coming up with, maybe, two or three reasons for it. We need to have this level of curiosity, not for just the very unusual event, but for many of the usual, normal parts of our lives. We need to develop an intrinsic sense of curiosity as part of the way we think, the way we observe the things that go on around us. Becoming naturally curious is the first step in being able to think differently.

Risk-Taking. Let me say, right away, that I am not in any way talking about sky-diving or race car driving, or anything like this. I am talking about the risk we need to take in thinking about and doing the things we do during a normal day. Thinking differently (and in some cases acting differently) does involve a certain element of risk. Risk in the sense that we might be embarrassed, ridiculed, feel left out, be talked about, and all those other things that potentially happen when one stands out from the norm. The nature of the society that we live in today is strongly biased towards conformity, where everyone is expected to stay within certain bounds. Those that go beyond these bounds are considered different and are, in some way, “punished.” But then thinking differently makes it necessary that we think beyond these bounds. We need to find ways to do this without damaging our mental selves and this we can do, as we will find out later on. Being able to and wanting to take these risks is the second step toward thinking differently.

Paradigm Shifting. A paradigm is a shared set of assumptions, the way we perceive the world. Having paradigms helps us explain the world around us and helps predict its behavior (from Powers of the Mind by Adam Smith). Another definition is that a paradigm is the basic way of perceiving, thinking, valuing, and doing associated with a particular vision of reality (from An Incomplete Guide to the Future by Willis Harmon). Though not the first to do so, but the most recent to popularized the concept and role of paradigms in our current times, Joel Barker in his book, Discovering the Future—the Business of Paradigms, has done an excellent job in explaining the need for and yet the problems of having paradigms. Having paradigms, and we all have many of them, is necessary because they provide the stability we need in living somewhat normal lives. At the same time they create
shackles on our mind and actions, which strongly constrain our ability to think and act differently. We need to identify our paradigms and develop the means to shift them (develop new ones) on an ongoing basis. Too many of us get stuck with the current paradigm and only change when society makes the change. Those who develop the ability to think differently are the ones that can, independently, make their own shift in paradigms. Being able to do this is the third step toward thinking differently.

Continuous Exercise. You might wonder, just; what does exercise have to do with thinking differently? Well, thinking differently, being creative, deals with the use of the mind. The brain is the physical entity of the mind, that 3 to 4 pound, grapefruit-size part of our body that sits inside of our skull, and it is as much a muscle as are the muscles in our arms and legs. It is well recognized that muscle improve with continuous exercise, whether it be lifting weights, running, swimming, or any of the many ways now used to strengthen, shape, and improve our bodies. The key, though, is continuous. The very same principle holds for our mind. The more we use it, the more it improves. As there are specific exercises for the other parts of our bodies, so there are specific exercises for our mind specific ones for the left side (the verbal, analytical side) and for the right side (the visual, imaginative side). Later in this chapter, I will provide you with several mind exercises. Engaging in continuous exercise of our mind is the fourth step required for thinking differently.

Perseverance. There is not a pill you can take, there is not a book you can read and there is not a classroom course that you can attend that will, by themselves make you a creative thinker, fluent in thinking differently. All of these can help by acquiring and developing the ability to persevere is absolutely necessary. Perseverance means to persist in your actions in spite of counterinfluences, opposition, or discouragement. Mastering the first four steps will be a major part in developing you perseverance, which is the fifth step towards thinking differently.

So where are we now? Each of us has developed our personalized “Basis to Change” factors and we are now aware of five “Thinking Differently” elements. Let’s now look again at each of these and see what we have to do to make them become our “tools” for truly thinking differently when seeing the same thing as everyone else.

Tools of the Trade for the Ingredients

Curiosity (Why Are Things the Way They Are?). Being curious about the thing that go on around us is a very natural act. Just look at children as they are growing up. Why is the sky blue? Why can’t I see air? Why does the ocean taste salty? Ask on and on and on... As adults, we find being asked questions like this rather tedious and often respond with irritation; and some answer just to get the young person to be quiet. After not too many of these types of answers, the one asking them soon learns that being curious is apparently the wrong thing to do, and so the question soon stops. When the questions stop, the mind stops being curious. But then, doesn't
the same thing happen with us as adults? How many times have you been doing a job and asked your manager “Why do we do it this way?” and often get an answer that says, in effect, “Just do the job and shut up.” So even as adults, we soon learn not to ask questions and once again our curiosity is stifled.

Action: We need to, in spite of the pressure not to, continue to ask questions like: “Why is this the way it is?”, “What caused this?”, etc. If the environment that you live and work in is such that no one wants to hear the question, then ask it of yourselves. It is not just getting a specific answer that is important, it is getting the mind to think about the “why and what” that is important. We need to regain a child-like curiosity about things. One can never find creative ways to do things unless one first asks the questions of “why and what.” Not only should we do this, but we should encourage others to do the same thing. You can practice this quite easily and you do not need to have a problem to work on. As an example, consider this scenario. You are driving somewhere and see a herd of cows bunched closely together and you notice that two of the animals are separated from the herd by some distance. Question: “Why is that so?” Of course you are not really trying to find the real reason, but just want to get the mind to start being curious about why things are the way they are. All around us are things like the cows that we can start to notice and ask questions about.

Risk Taking. Again, I’m not talking about death-defying feats. What I am saying, though, is something as simple as this. Consider what almost everyone does when they ride in an elevator. You walk into the elevator, turn around, push the button for the floor you want, then either stare at the floor or at the changing floor numbers, and because of the “Rules of Elevator Riding,” you will not say anything! Ever notice that? No one talks, even if you are riding with someone you know! Try this risk: Say something, anything. Perhaps, say, “I’m sure glad we are all going the same way,” or “We are all sure quiet today!” or, if it is crowded, ask someone to push the floor button for you. It is not that you are trying to be a stand-up, one-liner comic, but you are trying to use your risk muscle by doing something different, which is helping you think differently. If you really want to take a big risk, try standing with your back to the elevator door facing the other people in the elevator. Consider another situation. You are in a meeting (like a class, or a staff meeting) and someone says something that you don’t understand. What do most people do? They don’t say anything, hoping that someone else will, or maybe it will be explained later (usually this never happens).

Action: Take a risk and ask the question. In almost every case, you will find that there were others that had the same question as you had. This is especially difficult if the one who is talking is a senior (older, high-level) person. There is always some intimidation, even if unintentional, and it can be seen as a risk in that you might feel foolish (to ask such a question when no one else did), you might be subject to ridicule (all eyes turn to you as if to say “How come you don’t understand?” or any number of things that you could imagine). So with that fear, you just sit there quietly. The elevator, the meeting, and other similar situations give us the opportunity to use our risk muscle to think differently and then act differently. The act of thinking and acting go together, because the acting will strengthen the thinking.
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When we find that our world doesn’t come to an end when we do this then it will be easier the next time we take a risk. Soon, probably within three or four times, it becomes second nature.

Now you have started asking why and the what (the curious part) and you are willing to act on this in meetings. When you are doing this on a regular basis and are feeling more comfortable doing so, then you are ready for the next step.

Paradigm Shifting (Getting Out of the Rut). Start this step by identifying your paradigms. Don’t get so deep that you are looking at paradigms that relate to the meaning of life or the like. One paradigm that has ruled industrial organizations for the last hundred years (and civilization for the last thousand years or so) is that organizations are structured vertically, with orders flowing down and results flowing up. If there is a need to communicate with other organizations, this is usually done through a manager, particularly if the communication has to do with making changes in the way results are achieved. This is how most businesses are run today, but there are some, very few, that don’t run a business that way. The reason for this is that someone challenged the vertical organization paradigm. Someone got curious and thought: “Why does information have to flow up and down?” and “Why does a manager have to always be the one to make the changes?” Most likely, this same person decided to take a risk and ask these questions in a staff meeting. Let’s hope that the manager was inclined to think differently and said “Let’s see if there is a better way.” The point is not what the manager did or did not do, but that someone questioned the paradigm. The person who wants to think differently, to be creative, has to be curious, be willing to take a risk, and then start shifting from an existing paradigm to a different paradigm.

Action: Identifying your paradigms is the first thing to do. Some of these will be strictly yours, some will be shared with others, and some will be shared with society. Right now, though, identify those unique to you. For example, one might be the way you dress for the work you do. Is it always a suit and tie, a tailored business suit? A sport coat and slacks? A certain style of casual clothes? Another example is how you go to work (the route, by car, by other means). Do you always go the same way, at the same time? Admittedly, these may be in the trivial category, but looking at something simple and being able to do something about it is a good way to get used to shifting paradigms.

As you look at the examples I’ve mentioned or others that you have identified, ask yourself if it is really necessary to do what you are doing. What happens if you do it differently? Will it jeopardize your job (as in how you dress)? Will it cost or save you money (as in how you get to work), or take more time? I believe that the key to shifting any paradigm, large or small, is to first question it, then understand it, and then make a decision to either keep it or change it.

Continuous Exercise (The Mind Is a Muscle). If you are now in the process of practicing (regularly) the first three ingredients of thinking differently, then you are already in the mode of continuous exercise. There is more, much more, that you can do to strengthen and improve your mind to the point where you easily think differently and are more creative. This idea of exercising the mind is not something
I discovered in some flash of insight, but it is something that I have come to appreciate more and more as the cheapest and easiest way to make thinking differently the rule and not the exception.

Action: So, just how do you exercise your mind? Simple; just play games! Games? How can something as serious as improving your mind benefit from playing games? Well, first of all, being creative is a fun thing to do and it is not all work and no play. Humor, play, fun, interesting, exciting, are words that aptly relate to the exercises that will help you on the journey toward being a person who can regularly think differently and therefore be more creative. The key, once again, is to play these games on a regular basis, the same way that you do exercise for the physical body. Just what are these games? The best book I have read for mind exercises is *Pumping Iron*, by Tom Wujec, Doubleday and Company, Inc., 1988.

Let's take the time here to show the characteristics normally associated with each side of the mind and from this you can get a sense of the exercises you should use.

<table>
<thead>
<tr>
<th>Left</th>
<th>Right</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verbal—words</td>
<td>Nonverbal—pictures</td>
</tr>
<tr>
<td>Analytic—step-by-step</td>
<td>Synthetic—holistic</td>
</tr>
<tr>
<td>Temporal—sequential</td>
<td>Non-temporal—nonsequential</td>
</tr>
<tr>
<td>Rational—reason, facts</td>
<td>Nonrational—no judging</td>
</tr>
<tr>
<td>Digital—use of numbers</td>
<td>Analog—relationships of all</td>
</tr>
<tr>
<td>Logical—order</td>
<td>Intuitive—insight, hunches</td>
</tr>
<tr>
<td>Linear—sequential</td>
<td>Holistic—patterns, wholeness</td>
</tr>
<tr>
<td>Vertical—narrow, sequential</td>
<td>Lateral—broad, many areas</td>
</tr>
</tbody>
</table>

Most of us have lived in an environment where the emphasis has been on the use of the left side, so this is the side that is more developed and easier for us to use. What we need to do is to balance our two sides a little more and to recognize when we need to use a particular characteristic; i.e., look at a situation from the aspect of the "other" side. Notice that each side has the opposite characteristic of the other side. Regular use of verbal and visual exercises will help us be more "whole brained."

Since I have mentioned *Pumping Iron* as the best source for mind exercises, let me also mention two other books that you should have and use. Roger von Oech has written two books that are probably the best for total creative thinking. The first is *A Whiz on the Side of the Head*, and the second is *A Kick in the Seat of the Pants*. The first one, *Whiz*, deals with the ten mental locks to being creative; i.e., being able to think differently. The second, *Kick*, deals with the roles you need to play when you think differently; i.e., first be an explorer (gather data), then be an artist ("sculpt" this data in many different ways), then be a judge (make a decision on the pros and
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core of the “sculpted” ideas), and last be a warrior (put a fire in the belly and a lid in the heart). With all that has been said before, this leads us to the final and most important of all elements.

Perseverance (All Good Things Take Time). Of all the five elements, this one perseverance is the most necessary and the most difficult to master. If one does not develop this capability, having all the other four elements will be of limited value toward thinking differently and becoming creative. Thomas Alva Edison said (around 1932) that “Genius is one percent inspiration and ninety-nine percent perspiration.” I believe that Edison would agree to the substitution of creativity to genius and not lose any meaning in his quote. If you truly believe in the mind-set shown in the section “Basis for Change,” then being able to persevere, over long periods of time, can be accomplished.

Action: Start observing how you act on new ideas. Do you give up when someone tells you it won’t work? Feeling discouraged when you receive negative remarks is perfectly normal, but the key is that you don’t give up, but continue to think of ways to have your idea accepted and acted on. The Japanese phrase “Gambatte Kudasai” expresses this well. It means “Don’t give up, carry on, persevere.” Also observe how you react to the ideas of others. Are you positive and supportive, or are you negative and critical? Bob Conklin, in his course Adventures in Attitudes, said, “To the extent that you give others what they want, they will give you what you want.” So if you give positive support, you will get positive support.

Patience, persistence, perseverance—they all mean about the same, and they all are difficult to practice. Yet those that have been successful with new ideas, new businesses, new ways of doing a simple job or running an organization have had to have a large measure of patience, persistence, and perseverance.

The Next Step

We have been through the five major elements of the thinking differently process and let’s say that you understand and accept them. Now what? Just what do you do to spread this to your work unit, perhaps to the whole organization? Consider these steps:

1. Make sure that you are convinced of the need for and the value of the thinking differently process. Ask yourself periodically (say, weekly, on a specific day) about how well you are doing on each element. Grade yourself by using a scale of 1 to 3 to indicate your strength in each element. If the number is low, you have more work to do. These five elements need to become the rule, not the exception, for how you work (and live, by the way).

2. Discuss with your work unit how thinking differently can enhance the team’s capability for finding better ways to improve their work.

3. Ask the team to read this chapter and the books I have recommended (later in the chapter). Perhaps have one book assigned to each member of the team, then have them brief the others on the contents of the book. The team should particularly look...
for problem-solving techniques; e.g., there are around 12 different ways to do brainstorming.

4. Discuss among yourselves the ways that the team will use the information gathered.

5. At the beginning of each team meeting there should be a period of time, say
15 minutes, devoted to creativity enhancement. This could be a review of one of the
books, grading of the team’s strength on the five elements, practice improving one
of the five elements, use of one of the exercises from Pumping Iron, practice of a
problem-solving technique, and so on. It is important to have the discipline to do
this on a regular basis. You will not be able to improve your thinking differently
process unless you practice again and again. Remember the fourth element: Con-


You now have the foundation for Thinking Differently and the means to become

more creative in your improvement journey. Remember, no one event (reading this

chapter, a book, taking a class) will make you creative. Rather, it is a combination of

all of these, plus your day-to-day use of the techniques we have discussed in this

chapter that will lead you to the point where being creative is not a diversion from

your job, but the normal way you think, do your job, and live your life.

Self-Managed Employees

The management process as we know it today has gone through many evolutions.
The management process that lasted the longest was the tribal leader, or father,
management process. This approach to coordinating activities within a group
started back in the cave-dwelling era and is still used in many farming groups and
subcontract situations in Asia. This approach eventually gave way to the guilds or
craftsmen/apprenticeship management process. As organization size outgrew this
process, the hierarchical (pyramidal) management process evolved. In recent years,
this hierarchical management process has been modified in a number of different
ways. Some organizations have organized their management processes to coincide
with their business process flow. Others have tried to form matrix management
processes. But at the grass roots level, these management processes all look alike.
The employees have a manager that they report to who has been given the respon-
sibility to accomplish a specific task, at minimum cost, and at the highest possible
quality level, using the resources that have been assigned to him or her.

Little has changed in the first-level management structure since the cave dwell-
ers first implemented it until about 1965, when some very advanced organizations
started to empower their employees to take on more and more responsibilities. Out
of this grew some major changes to the management structure. First, management
focused on training the employees to understand the organization’s goals, values,
mission, and business plans. Then management explained how the team, depart-
ment, contributes to the success of the business objectives. This logically led to
estabishing team measurements that reflected the team’s customers and business
plan requirements. Once the measurement system was established, the teams were provided with training on the organization's operating procedures, financial controls, problem-solving, and process measurement techniques.

The result of all this preparation was the beginning of **Self-Directed Work Teams**. The empowered Self-Directed Work Teams allowed the employees to get together and decide how best to do the tasks that they were assigned. As the teams became more effective at self-controlling the tasks assigned to them, it was only natural to expand their empowerment to take over the total management role. As a result, Self-Managed Work Teams evolved. The Self-Managed Work Teams eliminated the need of a direct manager because the team took over activities like giving raises, selecting team members, evaluating performance, discharging poor performers, and developing budgets.

In my article entitled “Worklife In The Year 2000” published March 19, 1990, in the *Journal of Quality and Participation*, I predicted that employees would become more than empowered in the twenty-first century. Their role would evolve to alter an independent contractor relationship in which employees would actually buy the rights to provide services to the organization. Well, that prediction is evolving faster than I thought possible. In China, employees who want to work in some organizations pay for the training that the organization will be providing before they are hired.

The evolution of Self-Managed Work Teams, network organizational structures (discussed in Chap. 14), and new communication systems that allow employees to work as effectively at home as they do in the office or plant, has resulted in freeing the employee from his or her bosses. The result is the **Self-Managed Employee**. The Self-Managed Employee process has at last given the employee control over his or her life, and a new sense of freedom and dignity has resulted.

The Self-Managed Employee has specific measurements that relate directly to organization performance. Management monitors performance based upon the results achieved, not on the old type of performance indicators like attendance, hours worked, or items processed per period. Specific goals are set for the Self-Managed Employee and performance is measured based upon meeting these goals. If the employee meets these goals, he is left up to the individual as long as the approach used meets the ethical practices and values of the organization. This has resulted in a greatly expanded span of control for a manager. In the Self-Managed Employee environment, a manager can have 100 to 500 employees reporting to him or her and still do an excellent job.

Ernst & Young is one of the organizations that has led the movement to Self-Managed Employees. In 1990, Ernst & Young was a hierarchical organization; organized around the partners. Each partner served as a manager of a group of consultants (6 to 18 employees), and partners were selected to manage groups of partners. The partner's job was to develop the consultants assigned to him or her and maximize the profits and customer satisfaction level generated by the group. Each employee had an office close to the partner who managed him or her, and when they were not at the client's office, they were expected to be in their office.

Today, many Ernst & Young management consultants are operating in a much different role. A single manager is assigned to a large area (e.g., Northern California,
Washington, Oregon, and Nevada) and all of the employees in that area report to this manager, not the location office partner in the city they are assigned to. This has allowed Ernst & Young to establish large resource pools that the partners select from to meet the specific needs of the individual engagement. The result is that their clients are provided with better service because the partner can select just the right individual to meet the specific needs of the engagement.

In addition, there is no longer a need for the consultants to be in close proximity to a specific partner. This has allowed Ernst & Young to go to a process they call “Hoteling.” In this process, only partners and principals have offices permanently assigned to them. When a consultant wants to come into work, he or she lets the secretary know that an office will be required, and one is assigned. The consultant’s phone is also set up to ring within the assigned office. Prior to this change, many office areas were empty most of the time because the consultants were out with their clients. This consolidation has reduced the office area required by about 30 percent. In addition, the consultants have been provided with supporting portable tools that allow them to stay at home and work when they are not with a client. This reduces travel time, pollution, and allows the consultants who are away from their families much of the time to spend as much time as possible with their loved ones.

From the consultant’s standpoint, goals are very clear. Each consultant has three primary measurements:

- **Realization**: The percentage of their chargeable rate per hour that is actually realized.
- **Utilization**: The percentage of time that is charged to a client.
- **Customer Satisfaction Level**

Each employee’s salary relates directly to how much the client is billed for the consultant. It is easy therefore, for each consultant to multiply “realization” times “utilization” to determine if they are making a profit or loss for Ernst & Young. The employees have two factors to work with—realization and utilization. The clients that pay based upon a fixed-price contract or value-of-the-job contract provide the consultant with an opportunity to exceed 100 percent realization, which means that they could be profitable for the organization with a lower percentage of utilized hours. Of course the more profitable the consultant is to Ernst & Young, the more money Ernst & Young can pay the individual, so the consultants are highly motivated to keep realization and utilization high. The consultants are also motivated to expand their knowledge of methodologies by attending Ernst & Young schools so that they can be considered for more assignments, thereby keeping utilization high. The other factor that impacts utilization is how satisfied clients have been with their performance. Partners want consultants on their engagements who have proven high customer satisfaction ratings.

The consultant’s performance is evaluated by each partner in charge of a project that the consultant is assigned to, as well as by the customer that the consultant works with. This means that most consultants are evaluated many times each year by different partners and customers. These accumulated evalu-
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actions, plus the consultant’s self-performance evaluation, are used to define the individual’s performance.

To keep this process from being cold and impersonal, each partner and principal are assigned a group of employees for whom they will serve as career counselor and mentor. Whenever the employee has need of advice and/or guidance, they can contact this individual to obtain the help that they need.

Another critical factor to the success of this new management process is excellent 5-way (star) communication. Effective use of voice mail, E mail, newsletters, business status reports, and social events is a very important part of enhancing the consultant’s feeling of belonging.

A Self-Managed Employee process will not work without well-trained, knowledgeable employees and an environment in which there is a high degree of trust between both management and the employees. It is a process where bureaucracy has a hard time surviving.

Although there was a degree of concern at first, the pilot programs went smoothly at Ernst & Young and the results obtained have been well worth the effort. Not only are the consultants pleased with the added freedom they have been given, but there has been a step function improvement in Management Consulting profitability in Ernst & Young, allowing them to hire more consultants. This is a good example of how creativity, organizational realignment, and technology can be combined to better serve the employee, the customer, management, the owner, and the community.

Summary

Excellence in an organization occurs when each employee goes home at night and looks into the mirror, thinking, “I did a great job today.” For the organization to excel, the individual needs to excel. It is for this reason that management around the world are investing more and more money in developing their human resources. Technology, tools, and teams make the difference between failure and success, but it is the individual’s personal trust, commitment, and creativity to make the organization a world leader.

Now, let’s discuss some of the ways different organizations look at individual employees:

Education and Training

Losers: Use on-the-job training only.

Survivors: Use on-the-job training and problem-solving training. Average about 15 to 20 hours per year in formal training classes.

Winners: Design training processes to meet the business and growth needs of the individual. Encourage individuals to take outside courses. Develop a learning environment where 40 to 60 hours per year is devoted to formal training of each employee, and the employees volunteer, on their own, an equivalent or greater amount of time.
Risk Taking

Lose: No room for risk-taking at lower management levels or by nonmanagers.
Survivors: Risk-taking is a desired trait, but you had better be right.
Winners: Risk-taking is required, and the organization realizes that along with risks is an exposure to failure that serves as a learning experience.

Appraisals

Lose: Management gives appraisals. Most people are above average.
Survivors: Performance objectives are prepared jointly by management and employees. A formal appraisal is given once a year that documents performance to objectives.
Winners: Performance appraisals are linked to individual projects. The project objectives are used to evaluate the individual’s performance. Input from the employee’s customers has a major impact upon the evaluation. Many evaluations are conducted each year and are averaged out to define overall performance.

Career Planning

Lose: The organization is not involved in employee career planning.
Survivors: Career planning is used only with high potential employees.
Winners: All employees have a career plan that meets the organization’s and the employee’s needs and expectations. Career paths are well-defined and established.

Hiring

Lose: New employees are usually hired at the last minute when they are needed on a specific job. Little time is allocated to orientation and formal job training up front.
Survivors: Many applicants are considered and selection is based upon their ability to do the specific job. Heavy emphasis is placed upon grades and the quality of the school they attended.
Winners: Applicants are evaluated to ensure their personality and background fit with the organization’s values and vision statements. Applicants are considered for a wide range of assignments and need to be acceptable for many of them. Total activities in school (social and scholastic) are considered and weighted. Candidates recommended by employees with good work ethics and demonstrated commitment to the organization are given priority consideration.

Pay

Lose: Pay is based upon the job and time on the job.
Survivors: Pay is based upon the job and performance on the job.
Winners: Pay is based upon the individual’s knowledge and total value to the organization. Management realizes that individual performance will vary based upon experience in the assignment and personality traits. Management feels a responsibility to have a good match between the work assignment and personality.
traits. When this is not possible, management does not penalize the employees, because management has chosen not to utilize the individual's skills and traits as well as they can be used.

Trust in Employees

Losers: Employees are viewed as individuals who will take advantage of the organization if they are not watched.

Survivors: Employees need to be watched because they make errors, and a small percentage of them are dishonest.

Winners: The organization realizes that 99.9 percent of the employees will do the right thing if they are left to their own devices, so they should be trusted. The 0.1 percent of the people that cannot be trusted should be released from the organization.

Individual excellence results from people who take pride in their work and dedicate their physical and mental efforts to upgrading themselves, their jobs, and the organization. Their pride and self-esteem result from management's interest in them—in their creative solutions to today's problems, and their suggestions that prevent errors from occurring. The key elements that establish an environment where this behavior pattern flourishes are:

- Improvement ideas are a specified part of everyone's performance expectations.
- Rewards and recognition systems encourage creativity and risk-taking.
- Management balances the need to have an effective team with the individual's need to excel.
- Employees are empowered as their responsibilities and accountabilities are aligned.
- Management accepts the fact that they do not know all the problems or have all the answers.
- Employee careers are important to the organization.
- Both small and breakthrough improvements are important.

The organization can develop an environment where individual excellence can flourish, but as individuals, we need to take on the responsibility for our own work and the solutions/ideas we develop. To increase our ability to be more and more creative, we should continuously challenge our minds with things like:

- Take on a new assignment.
- Expand our self-image by taking on projects and setting goals for our personal and professional development.
- Expand our view outside of the organization by increasing our professional activities.
• Learn a new language.
• Read job- and non-job-related books, magazines, and articles.
• Listen to music to relax, but vary the type of music you listen to. Pleasant background music helps improve your thinking and creative skills.
• Set improvement goals for yourself and measure your progress against these goals.
• Play mind games with yourself and others.
• Train yourself to dream in color rather than black and white.
• Use meditation to clear your mind so that new thoughts can evolve.
• Always have something new that you are learning/studying.
• Exercise your body to help stimulate your mind.
• Measure your progress on a monthly basis. Set new monthly goals to use different tools to stimulate your creativity than you used the previous month.

Suggested Reading

There are many books available on every aspect of creativity. Let me offer some titles to you that we have found to be particularly helpful. We have put them in categories to help in your selection according to somewhat arbitrary levels of creativity. It is not necessary to follow the sequence exactly as we have shown.

Senior Set
(Everyone should read)

_A Whack on the Side of the Head_
Roger von Oech, Ph.D. Menlo Park, CA: Creative Think, 1983
* A book on creativity written in a creative way, one of the best, easy to read.

_Puzzles_
* Nice collection of mind exercises. Good warm-ups for the thinking process.

Intermediate Set
* everyone should be aware of contents, then read as appropriate

_Brain Power_
* Similar to “Brain Games,” but more in-depth brain info. Discusses brain skills, patterns, how to make changes.

_Spark Creativity_
* Updates and combines Lateral Thinking and Six Thinking Hats giving a step-by-step approach to creativity. The author is recognized as one of the modern-day “gurus” of creative thinking.
References

2. IBM Think, Issue 1, 1992.
directions from above, atypical, uncooperative behavior from other departments or divisions, and unenthusiastic “it’s not my job” attitudes among themselves.

Nonetheless, when teams do emerge in such environments, they have often had to overcome strong obstacles, as in the case of the Burlington Northern Informal Team. This tends to make them more resilient, more conscious, and even more heroic. As a result, they can have a disproportionately positive influence on the performance ethic and environment for teams that follow them. As a result, teams are among the brightest hopes those organizations have for pulling themselves out of their stagnation. As we will explore more fully in the next chapter, teams play a significant role in bringing about “major change,” that is, significant improvements in performance capability that depend on broad-based behavioral change.

And since a company’s performance ethic is really the summation of its collective managerial values and behaviors, any strengthening of that ethic ultimately depends on behavioral change.

As a result, leaders in companies like 3M or GE can often make a major difference in their situation by simply identifying a few key performance challenges and getting potential teams to pursue them. Moreover, in our experience, despite the impact of a weak performance ethic, there are always enough Bill Perkinists around who, if asked, will suspend their disbelief and try again. The opportunity to make a difference does not just go to people; it keeps them coming back even when experience cautions them to do otherwise. But if the sponsoring leaders do not demand and then relentlessly support a fearless pursuit of performance by the teams involved, the efforts will produce nothing except more cynicism, more frustration, more risk aversion, and more playing it safe. If, on the other hand, even one of these teams succeeds, especially if it is a team that runs something, it can help an indifferent or confused company begin to clarify direction and recover an overall sense of performance.
A "yes" answer to questions 1 and 2 and a "no" to 1 and 4 indicate a major change situation. As our colleague John Phillips has noted, managing major change requires a set of actions diametrically opposed to those of normal managerial approaches. For example, normal change involves managing exceptions and outliers while allowing the "system" to take care of the bulk of the work. Managing major change, by contrast, requires working directly on what most people do day to day because that is the only way to foster new behaviors, routines, and capabilities. Normal change involves monitoring established routines and processes to ensure that they achieve the purpose for which they were designed. Managing major change requires intentionally detailing and finding replacements for such activities. Finally, normal management involves relatively limited risk taking at the point where the cost and value of products and services are determined, especially at the customer interface. But managing major change demands radical new approaches and experimentation aimed directly at the most critical activities of the company itself.

Through our client work as well as research, we have become familiar with dozens of major change efforts. Interestingly, none of the companies we know believes it is finished yet, much like General Electric and Motorola that seem to be succeeding. Thus, we think it is premature to advocate any single, best path to managing major change. But we do see a useful pattern emerging that distinguishes the leaders. First, as one leading change expert Steve Dichter suggests, nearly every prominent major change effort appears to attack change along three critical dimensions: top-down culture-shaping initiatives, bottom-up goal achievement and problem-solving initiatives, and cross-functional redesign and integration initiatives. Second, the leading change efforts have moved along all three dimensions simultaneously and iteratively instead of sequentially. Third, and most important for this book, teams have played a critical role in all three dimensions.

General Electric provides a good illustration of all three dimensions of major change. Jack Welch and his top management have initiated a number of top-down culture-shaping changes, including
• Establishing a clear, performance-driven vision that commits GE to become either number one or number two in each of its chosen industries by building a culture based on “speed, simplicity, self-confidence, and boundarylessness.”

• Emphasizing organizational simplification through depersonalization, and another process called “Work-Out” aimed at eliminating unnecessary work, and another process called “Best Practices” that seeks to spread success stories.

• Providing corporate resources and attention to support people at all levels—especially, the front lines—with essential problem-solving, decision-making, and interactive skills.

In addition to these top-down initiatives, General Electric has made great strides both in bottom-up activities and cross-functional redesign and integration. A good example of both can be seen in the redesign of GE’s Salisbury, North Carolina, plant, which makes lighting panels and other switching gear.

Prior to the mid-1980s, Salisbury employees approached their jobs like workers in most large, traditional hierarchies. They worked nine to five, did what they were told, avoided anything that was not their job, and otherwise generally played by traditional command-and-control rules. Salisbury had five levels, from plant manager to front-line worker, arranged through orders, rules, and procedures; measured quality in terms of compliance; compensated based on narrowly defined job classifications; and focused accountability on the individual.

That Salisbury no longer exists. As a result of an effort led by GE’s Phil Swank, the plant now has three levels, is organized around self-managing teams of multi-skilled individuals, compensates and rewards the teams for the performance of the entire redesigned process through which the plant makes and delivers more than 70,000 product variations, and measures quality in terms of customer expectations. The plant now runs without supervision and has reduced costs by more than 30 percent, shortened delivery cycles from three weeks to three days, and reduced customer complaints by a factor of ten.

Similarly, the team at GE believe they are “out of the woods” of major change. Still, their progress is impressive. They have reported significant performance gains since 1986. In 1991, these included a fifth consecutive annual improvement in working capital turnover, an all-time high in operating margins, and a fourth consecutive year of more than 4 percent gain in productivity. In the view of GE’s leaders, none of these performance results was possible without broad-based behavioral changes among people throughout the company.

As top management concluded in its 1990 letter to shareholders:

These are numbers that couldn’t be improved as significantly as they have been by the actions of the top one hundred, or one thousand, or even five thousand people in a company our size. They can only be moved by the contributions of tens of thousands of people who are coming to work every day looking for a better way. (Emphasis added.)

As companies like GE grapple with major change, they inevitably discover the unique role teams play in energizing top-down, bottom-up, and cross-functional initiatives. Team dynamics relating to focus, direction, size, skill, and mutual accountability promote both performance and behavioral change. As we illustrate with the examples in this chapter, such characteristics are essential to one of the three dimensions of major change.

TEAMS AND TOP-DOWN CULTURE SHAPING

To illustrate the impact of teams on top-down culture-shaping initiatives, we will compare the change efforts at two leading professional service firms: the well-known accounting firm of Deloitte, Haskins & Sells (“DH&S,” now merged into Deloitte and Touche) and a distinguished firm we will call the advertising agency of “Scient Grive” (S&G). In both cases, a concern about how to succeed the managing partner initiated a series of events that ultimately opened up much more profound opportunities for change. In DH&S’s case, guided by a steering committee and task force that each became real teams, the firm shifted its basic identity, including the strategy it followed, the services it offered, and the professional skills it emphasized. It also significantly upgraded performance by
improving its market position, taking millions of dollars out of overhead, and reversing years of declining profitability. By contrast, S&C attempted to stimulate the skill and behavioral changes it needed with structural modifications, individual assignments, and new management processes. Teams played no role. Several years later, S&C had yet to demonstrate any marked change in the behaviors critical to its ongoing performance—not had its performance results improved.

DH&H

By the early 1980s, the accounting profession was under increasing profit pressure because clients no longer valued the annual audit as highly as they once had. This particularly affected DH&H, which was known throughout the industry as the “accountant’s accountant,” a high-quality, premier position that increasingly failed to translate into premium billings or profits. Responding to the pressures, DH&H expanded its practice to include new services in tax, consulting, and information technology, all eight major accounting firms, including DH&H, accelerated their pursuit of service diversification and industry marketing strategies. However, the DH&H Management Committee (which ran the firm) believed the problem was endemic to the industry and that DH&H was doing as well as anybody at booking the necessary adjustments. The most significant action was to modify the management-by-objects program to set individual goals in nonaudit services for every partner.

A few years after this decision, the issue of management succession arose in the normal course of events. By then, however, DH&H’s market position had fallen to dead last among the profession’s Big Eight. When three senior partners were asked by the Management Committee to address the succession issue, they quickly discovered widespread dissatisfaction in the firm. Partners complained that DH&H lacked a clear and compelling diversification strategy, that the management-by-objectives program had failed, and that they really disliked being at the bottom of their field.

Confronted by all this, the three senior partners decided to take the unusual step of asking for a broader charter. They wanted the opportunity to convince the Management Committee and the firm at large that DH&H faced a significant performance challenge, one that might demand a fundamentally different strategic and organizational approach. In particular, they requested that the Management Committee name them as a Steering Committee and allow them to assemble four other task forces to look at client needs, competitive positions, economics, and organizational effectiveness.

With the Management Committee’s approval, the Steering Committee tapped fifteen of the firm’s most highly regarded partners for the task forces and also brought in outside advisors. The effort began tangibly. The four task forces were confused about how their respective initiatives were supposed to join together; the fifteen DH&H partners were unsure what value the outsiders would add; and many of the fifteen believed he had much time to continue to do the work.

Many were unenthusiastic about the assignment. For example, Bill Stenstrom, who later became a key leader of the change, recalls, “It felt a lot like when I was a junior accountant on prestigious audits and I was pulled off to help with some small assignment. I remember thinking, ‘Why me? I’d rather keep working on major accounts.’”

A few key early events reversed this inauspicious beginning. The first happened a month later when the four groups came together for a joint working session. The meeting began after lunch, stretched through dinner, and went on to midnight. Few of the partners involved, many of whom were senior and well established, had ever worked so late on nonaudit business. As one person later recalled, “The effect of looking out over the New York harbor at midnight and realizing we were the only ones in this building somehow infused us with a sense of purpose that had been missing up until then.”

The second galvanizing event was far less dramatic. The economics task force came up with an analysis that showed real earnings per partner at DH&H had declined steadily by about 2 percent per year for at least the previous decade. Up until now, the fifteen partners on the task force, like partners throughout the firm, had a general sense of stagnating performance. But now they had hard, bottom-line proof of an unhealthy firm.

The more the four task forces worked, the more the fifteen partners realized that reversing the performance decline in real profits per
partner was not only urgent, but would require significant behavioral changes throughout DHK&S. Hundreds of partners and associates would have to learn a variety of new skills concerning client development and mustered-related services. The task forces recognized they would have to undertake a massive communications and support effort aimed at helping all DHK&S professionals get involved in understanding the needs for and direction of change. There was simply no other way to “make this a firm we can all be proud of again”...words the team used to capture its broadening sense of purpose.

With their common sense of purpose, the task forces also developed a common approach with three key aspects. First, they agreed to work as a single team as well as four separate subteams. Therefore, they gathered periodically as a full team to synthesize findings. These meetings were open-ended and hard work. They tended to last all day and ultimately yielded full consensus and strong commitments. Second, they insisted on full ownership of the work. For example, they decided DHK&S people, not outside experts, had to do as much real analytic work as possible so that their analyses would be more credible to themselves and their colleagues. Third, they decided to reach out to the rest of the firm through workshops designed to engage as much of the partnership at an early and often as possible in the cause for change.

After four months of intensive effort, they went before the Management Committee. By then, the specific recommendations provided a powerful top-down picture of what and how DHK&S would have to change. For example, in articulating and synthesizing the essence of changing DHK&S from an “audience listening” to “true business advice,” the task force established a new basic direction. By focusing on client service quality as well as profits per partner, they provided the balanced client performance measures by which to gauge progress. In holding workshops among small groups of partners throughout the firm, they fueled the interactive communication, involvement, and support necessary to build a sense of urgency for major change.

In addition, both the fifteen-partner task forces and the three-man Steering Committee had become teams that were determined to lead the change. In the words of one task force member, “we were fifteen realists” who would not be denied. Their initial hesitation about how much time to commit to the effort had faded; many were now routinely using nights, weekends, and holidays to do their tasks. All were determined to continue in whatever role would promote and expedite the needed changes. Their commitment and accountability spread to the Steering Committee team as well, one of whom said, “If we fail to make these recommendations happen for the task force, I will feel worse than if I were letting down my own children.”

The Management Committee could feel this strong sense of shared purpose and mutual accountability. They approved the recommendations, and as the change got under way, several members of both teams took on new roles. Michael Cook, who was the most junior member of the Steering Committee, for example, became managing partner of the firm and made the change effort his number one priority. Indeed, Cook’s selection by his predecessor, Charles Steele, symbolized how the commitment to change started at the very top of the firm. Bill Stevens, who had headed up the task force on competition, worked throughout most of the 1980s as the chief implementor of the overall change program that grew out of the task force efforts.

When asked today about the role of teams in the change, both Cook and Stevens agree that teams were the determining factors. According to Cook, without the team approach the firm could not have generated the widespread involvement, buy-in, and commitment necessary for such broad-based behavioral changes. Cook also notes that the firm continued to use the team approach for a number of subsequent initiatives critical to the overall change, including reducing overhead costs, revamping the firm’s compensation systems, and dealing with the merger with Touche & Ross. Moreover, Cook says that the experience on the teams allowed high-potential partners like Stevens to develop faster and more broadly than they might have otherwise. Stevens agrees with Cook’s assessment, and adds the more critical contribution of the teams, namely a deep sense of personal camaraderie and satisfaction that lasts to this day. “We’re not unlike World War II veterans I’ve heard about,” he says. “We all get together every chance we get to relive the experiences we had.”
S&C

On the surface, there are similarities between DRI&S and the change efforts of the advertising firm of Scimit & Cleve. Both were triggered by concern over top management succession, both recognized that performance ultimately depended on successfully unleashing behavioral changes throughout the partnership group, and both emphasized lots of discussion and participation by people throughout the firm. Unlike at DRI&S, however, the managing partner of S&C chose to bring about the change with a series of structural modifications, new individual responsibilities, and different management processes. Teams played no role either in shaping the recommendations or in implementing them.

By the mid-1980s, S&C faced the same disparat trends that affected other advertising agencies. For most of the previous decade, large clients such as packaged goods companies, had hired their own MRAs to work on many of the tasks that once were the province of the agencies. As a consequence, the agencies saw their job content shift to producing "words and pictures" and buying media space and time. With the diminished role came diminished revenues.

In response, the agencies fashioned a strategy that asked clients to have their brands "speak with one voice to the market." For example, this strategy would encourage a company like Procter & Gamble to engage the same agency for media, public relations, direct mail, promotions, and all other advertising for a product like Pampers. This, in turn, required the agencies to become full-service houses, which set off a wave of mergers and acquisitions throughout the industry.

Thus, when S&C's top three officers began to think about succession, they recognized that many broader issues were in play in addition to naming a new leader. They commissioned an effort to examine a reorganization of the agency, and involved many people throughout the firm in developing recommendations. The effort lasted nearly a year, during which the top three executives became even more convinced that S&C's future success would depend on broad-based behavioral changes.

In shaping organizational responses to their challenge, however, the top three leaders chose to use approaches more typical of major change than minor change. They restructured the top management committee of the agency, assigned a handful of individuals to crucial new roles, and called for some new management processes aimed at encouraging joint account planning. No team-based contributions emerged during the year-long period prior to the reorganization, and no teams were asked to have any role following its. The change focused strictly on individual accountability.

The impact of S&C's reorganization, through positive, paid in comparison to the changes at DRI&S. Several years later, S&C continued to face the need for major change. Not surprisingly, its performance also continued to shift, buffeted by continually changing winds in the advertising industry. The lack of teams does not explain this entirely, but it certainly marks a critical difference between these two major change initiatives.

BOTTOM-UP GOAL ACHIEVEMENT

In major change situations, bottom-up efforts must focus on shaping new values and changing behaviors at the front lines where the value and the costs of a company's products and services are determined, including the customer interface. Of the literally dozens of major change efforts we know well, we do not know a single successful example that did not include using teams in bottom-up initiatives. Where teams fail to flourish, frontline behavioral changes either never start or falter once underway; where teams are successful, the needed skills and values-plus the desired performance-happen.

The frontline change effort at Sealed Air Corporation illustrates this critical insight into the role of teams. Sealed Air is a medium-sized company that, among other things, makes the sheets of plastic bubbles that little kids—and grown up "kids"—like to pop. In 35 plants worldwide, the company also manufactures polyethylene foam packaging material, Pri-Loc absorbent pads that supermarkets use for meat and poultry, jiffy protective wrappers, and foam packaging systems.
But that is not all this company "makes." In a more fundamental sense, it makes its customers happy with unique products and services; it makes lots of money for its investors; and it makes employees both productive and satisfied with their jobs. In other words, Sealed Air has a well-balanced performance ethic.

Throughout the 1970s and early 1980s, Sealed Air's sales and earnings each grew at just under 20 percent a year by bringing technology and innovation to bear on the packaging needs of a number of different markets that the company entered through acquisitions. By the middle to late 1980s, however, Sealed Air's chief executive, Herman Dunphy, recognized this strategy was not going to work as well as it had in the past. Parents, for example, were beginning to turn to others, and fewer acquisition candidates were available.

Dunphy believed performance was dependent as much on productivity as on innovation. In order to build this new productivity capability, he intentionally pointed Sealed Air into a corner that forced both a significant performance challenge and a real sense of urgency. He did this by recapitalizing the company, paying a huge dividend to shareholders, and then challenging himself and all other Sealed Air employees to work themselves out from under the resulting mountain of debt. He also launched an exciting new strategy based on becoming a world-class manufacturer that emphasized customer service, quality control, just-in-time manufacturing, and employee involvement. Clearly, Dunphy set up a major change challenge at Sealed Air.

Not surprisingly, teams have become a vital part of making Dunphy's strategy work. Interestingly, there was never a concerted effort to form teams per se. As Dale Wootwood (senior vice president) said, "If there was a conscious change in that direction, it was not 'Let's have teams.'" Teams have been a natural progression caused by the need to increase productivity and achieve WCM world-class manufacturing goals.

In other words, as management challenged people to meet specific performance goals, teams just turned out to be one of the most practical ways to make that happen. More specifically, potential teams have sprung up all over Sealed Air-on the shop floor and throughout management levels. Some include hourly workers only, some combine both hourly workers and managers, some have members from several plants, for issues like safety, and some include customers as members. Not all of these groups have been equally effective, nor are all real teams yet.

After visiting several Sealed Air plants, we are convinced that each location's relative progress toward the world-class manufacturing goal in large part reflected the number of potential teams who had become real teams. For example, at the company's Ft. Worth, Texas, plant, several real teams have emerged since the plant was built in the late 1980s. After losing money the first year, the plant turned a profit in the second year and has not turned back. It now has the highest operating margin in the whole company. Among other contributors to this performance, teams have set cycle-time records, come up with dramatically innovative ways to use recycled materials, moved toward self-management, and begun cross-training many workers. Lots of real teams are evident.

By contrast, Sealed Air's Totowa, New Jersey, plant has been more successful at stimulating employee involvement than forming real teams. Performance in the plant is up because of numerous helpful employee suggestions. But Totowa has yet to make the kind of quantum leap in performance seen at Ft. Worth. Nor does it have many real teams yet. Meanwhile, a third Sealed Air plant, in Rockingham, North Carolina, lies somewhere in between Totowa and Ft. Worth. It has made more dramatic performance advances than Totowa, though it still trails Ft. Worth. Also, fewer of its potential teams have become real teams than at Ft. Worth, but it has more real teams than Totowa.

Like performance, the一线line skills and behavioral changes Sealed Air needs to become a world-class manufacturer reflect the number of teams at each plant that have moved up the team performance curve. These skills include technical and functional mastery over multiple tasks and manufacturing processes. They also include problem-solving, decision-making, interpersonal, teamwork, and leadership skills. In each case, more employees have developed such skills at Ft. Worth than at Rockingham, and more at Rockingham than at Totowa.

Teams certainly are not the only explanatory variable at work. For example, unlike Ft. Worth, both Totowa and Rockingham have been troubled in the past by drug and alcohol problems, low turnover,
CROSS-FUNCTIONAL REDESIGN AND INTEGRATION

Major change, by its nature, is intentionally disruptive and largely unpredictable. In comparing the management of major versus minimal change, one top executive said, "It used to be like I-75. You'd fly it out from Toledo to Tampa. Now it's more like a white-water raft ride. You try to get the right people in the raft and do the best you can to steer it. But you never know what's just around the bend." This description captures the heart of the change challenge, namely, to "unfreeze" an organization and then guide it through the multiyear period usually necessary to learn the new behaviors, skills, and values required for performance.

During this "raft ride," integration and coordination across the functions and activities of a company are critical. Part of this coordination comes from the top-down vision and direction. Effective change managers and champions pay major attention to focusing on a few, well-chosen themes of change: "Six Sigma" at Motorola, "speed, simplicity, and self-confidence" at GE, "world-class manufacturing" at Sealed Air, "innovation" at JM, "superior client service" at DH&S, "quality" at Ford—all are examples of uniting change themes that have been thoroughly communicated for years.

In addition to such top-down focus and communication, much of the required integration comes in how well companies redesign the cross-functional and cross-cutting processes necessary to their change efforts. Broadly speaking, two categories of such processes exist. The first includes standard processes like compensation, training, and planning that support everyone in an organization. The second includes cross-organizational work flows like new product development, integrated logistics, brand management, and order generation through fulfillment that, taken together, provide a "customer-back" picture of what the organization does.

Each of these standard processes and broader cross-functional work processes must reinforce the broad-based behavioral changes that drive performance. Thus, DH&S used a team-based approach to redesign its compensation approach, GE and Motorola emphasize teams and team skills in their training, and the Tallahassee Democrat used a team approach to planning, budgeting, and review.

We have also seen a number of examples of how teams have redesigned work flows to make them more performance driven and effective. The ELITE Team literally reengineered the entire work flow by which the Democrat sold, produced, and serviced advertising. Motorola's Government Electronics Group redesigned its supply management approach and then built the new organization around teams. Similarly, helped by the Zebra Team, Kodak has organized in black and white manufacturing activities around what it calls a "flow" that cuts across formerly isolated functions and departments.

CONCLUSION

During periods of major change, the performance aspirations of a company depend on many people throughout the organization learning new, specific values and behaviors. The most effective efforts simultaneously provide top-down direction, bottom-up goal achievement and problem-solving actions, and cross-functional systems and process redesign. In addition, two other patterns distinguish the best major change programs. First, all initiatives, taken as
driven by performance results. A new organization structure, a new management information or compensation system, or even a new strategy do not become ends in themselves, but rather are means to the end of balanced performance. Second, the underlying performance goals of the change programs or processes themselves practice the behavioral changes they are trying to bring about. If new levels of customer service are critical to performance, for example, then the change programs emphasize the identification, practice, and measurement of specific customer service behaviors from the outset. They do not just train people in preparing for better customer service and then sit back and wait for good things to happen.

This all-important link between performance and behavior change explains why teams contribute so much to major organizational transformations. Real teams powerfully join specific determinants of behaviors—commitment, skills, and accountability—to specific performance purposes and goals. Accordingly, teams can help identify and build the particular behavioral changes demanded by performance for any specific company. Teams were as effective helping oil & gas shape new, nonauditing skills as they were promoting world class manufacturing at Sealed Air, customer service at the Tallahassee Democrat, and supplier partnerships and total quality at Motorola’s Government Electronics Group.

Naturally, management should use organizational approaches in addition to teams to stimulate change. But no approach matches the flexibility, unique performance, and behavioral characteristics of teams. To understand why, we suggest looking at the common pattern of behavioral changes often predicted as necessary to meet the performance challenges of the future for many companies (see Table 10.1). Real teams reflect these “to” behaviors. Conversely, teams cannot exist if their members are stuck in the “from” patterns. Such, however, is not the case with other approaches to bringing about change or getting work done. New divisional, SBU, or functional arrangements, for example, that stimulate needed performance in important ways, too often do not produce the “to” behaviors that the exercise is expected to bring about.

<table>
<thead>
<tr>
<th>FROM</th>
<th>TO</th>
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<tr>
<td>Individual accountability</td>
<td>Mutual support, joint accountability, and trust-based relationships in addition to individual accountability</td>
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<tr>
<td>Dividing those who think and decide from those who work and do</td>
<td>Expecting everyone to think, work, and do</td>
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<tr>
<td>Building functional excellence through each person executing a narrow set of tasks ever more efficiently</td>
<td>Encouraging people to play multiple roles and work together interchangeably on continuous improvement</td>
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<tr>
<td>Relying on managerial control</td>
<td>Getting people to buy into meaningful purpose, to help shape direction, and to learn</td>
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<tr>
<td>A fair day’s pay for a fair day’s work</td>
<td>Aspiring to personal growth that expands as well as exploits each person’s capabilities</td>
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“to” behaviors for success. As a result, neither structural design modifications nor individual realignments will, by themselves, necessarily require people to understand or practice the new behaviors demanded by performance. And because practicing new behaviors is how adults best learn to modify their behaviors, these more traditional approaches to organization change can end up short. It is no accident, then, that every single major change effort we know has depended on teams.
Learning Objectives

- Analyze the characteristics, dysfunctions, and current status of the bureaucratic model.
- Discuss the classic organization concepts and structural characteristics of centralization/decentralization, flat/tall, departmentation, and line/staff.
- Explain the modern organization theories of open systems, information processing, contingency, ecology, and learning.
- Present the modern project, matrix, network, virtual, and horizontal designs of organizations.

In this chapter, the inductive conceptual framework moves to the extreme micro level of analysis for organizational behavior. This chapter is concerned with organization theory and design. Organization structure represents the skeletal framework for organizational behavior. As the discussion of the conceptual framework in Chapter 1 points out, the organization structure is the dominant environmental factor that interacts with the person and the behavior. This chapter presents the organization from the viewpoint of classical and modern theory and design. The bureaucratic model of organization dominates the classical approach. After presenting and discussing this model, the chapter gives an overview and analysis of some of the extensions and modifications represented by the concepts of centralization and decentralization, flat and tall structures, departmentation, and line and staff.

Although the classical approach is still much in evidence today, as Chapter 1 points out, information technology, global competition, and the concern for total quality have had a dramatic impact on organization structure. New theories, designs, and networks have emerged to meet the contemporary situation. For example, recently well-known companies, such as General Electric, have been eliminating vertical structure and adopting a horizontal design, and Xerox now develops new products through multidisciplinary teams that work in a single process instead of vertical functions or departments! In general, the modern approach to organization theory and design is more flexible and recognizes the interaction of technology and people. For example, one modern organization theorist has noted. "Organization structure is more than boxes on a chart; it is a pattern of interactions and coordination that binds the technology, tasks, and human components of the organization to
ensure that the organization accomplishes its purposes." There is also a renewed recognition for the role that structure (or lack of structure) plays in innovation, change, and learning in today’s and tomorrow’s organizations.

Before getting into the newer organization theories and designs, there is a need to have a thorough understanding of classical concepts. First, the bureaucratic model is presented and analyzed. This discussion is followed by a description of the widely recognized concepts of centralization/decentralization, flat/staff, departmentation, and line/staff. These classical concepts serve as a point of departure for examining the modern organization theories (open systems, information processing, contingency, ecology, and learning) and designs (project, matrix, network, virtual, and horizontal).

CLASSICAL ORGANIZATION THEORY AND DESIGN

The classical organization is most often associated with bureaucracy. Even though organizations are undergoing dramatic, some would say radical, changes, bureaucracies still exist and must be understood to move toward and interpret some of the new theories and designs. For example, even though IBM has undergone a total reorganization and has implemented some of the newest structural designs, a recent critical analysis concludes that “IBM’s stifling corporate bureaucracy remains a barrier to change.” The starting point of any analysis of organization theory and design still remains the bureaucratic model.

The Bureaucratic Model

Bureaucratic theory and design are attributed to Max Weber, one of the pioneers of modern sociology. He formalized this approach to organization in the early 1900s, and his work was first translated from German to English in the 1940s. Weber presented what he thought was an ideal organization structure that he called a bureaucracy. His concern for the ideal was a natural extension of his interest in the development and change of Western society. Specifically, Weber believed that rationalization is the most persistent cultural value of Western society. On an organizational level, the bureaucracy represented a completely rational form.

Weber specified several characteristics of his ideal organization structure. The four major ones are the following:

1. Specialization and division of labor. Weber’s bureaucracy contained a specified sphere of competence. This involves (a) a sphere of obligations to perform functions which has been marked off as part of a systematic division of labor (b) the provision of the incumbent with the necessary authority. (c) That the necessary means of compulsion are clearly defined and their use is subject to definite condition. This statement implies that Weber recognized the importance of having the authority and power to carry out assigned duties. In addition, the bureaucracy must know the precise limits of their sphere of competence so as not to infringe upon those of others.

2. Positions arranged in a hierarchy. Weber stated, “The organization of offices follows the principle of hierarchy; that is, each lower office is under the control and supervision of a higher one.” This bureaucratic characteristic forces control over every member in the structure. Some organization theorists, such as Herbert Simon, have pointed out that hierarchy is the natural order of things. An example
lies in the biological subsystems, such as the digestive and circulatory systems, these are composed of organs, the organs are composed of tissues, and the tissues are composed of cells. Each cell is in turn hierarchically organized into a nucleus, cell wall, and cytoplasm. The same is true of physical phenomena such as molecules, which are composed of electrons, neutrons, and protons. In a manner analogous to the biological and physical structures, hierarchy is a basic characteristic of complex organization structures.

3. A system of abstract rules. Weber felt a need for "a continuous organization of official functions bound by rules." A rational approach to organization requires a set of formal rules to ensure uniformity and coordination of effort. A well-understood system of regulations also provides the continuity and stability that Weber thought were so important. Rules persist, whereas personnel may frequently change. They may range from no smoking in certain areas to the need for board approval for multi-thousand-dollar capital expenditures.

4. Impersonal relationships. It was Weber's belief that the ideal official should be dominated by "a spirit of formal impersonality, without hatred or passion, and hence without attention or enthusiasm." Once again, Weber was speaking from the viewpoint of ideal rationality and not of realistic implementation. He felt that in order for bureaucracies to make completely rational decisions, they must avoid emotional attachment to subordinates and clients/customers.

The four characteristics just described are not the only ones recognized and discussed by Weber. Another important aspect of the ideal bureaucracy is that employment is based on technical qualifications. The bureaucrat is protected against arbitrary dismissals, and promotions are made according to seniority and/or achievement. In total, it must be remembered that Weber's bureaucracy was intended to be an ideal construct; no real-world organization exactly follows the Weber model. The widely recognized organization theorist Peter M. Drucker summarizes Weber's thinking as follows:

Weber dealt with bureaucracy as what he termed an ideal type. This methodological concept does not represent an average of the attributes of all existing bureaucracies (or other social structures), but a pure type, derived by abstracting the most characteristic aspects of all known organizations.

It has been pointed out that the classical, rational approach to structure is of value to managers of formal work organizations that have no conflict or whose subordinates have no power, but, of course, this is the ideal, not reality. In this age of complex, highly conflicting relationships, and empowered employees, this bureaucratic mode is only the starting point, not the end, of organizational analysis.

Bureaucratic Dysfunctions

With the exception of Weber, sociologists and philosophers have been very critical of bureaucracies. For example, Karl Marx believed that bureaucracies are used by the dominant capitalist class to control the other, lower social classes. According to Marx, bureaucracies are characterized by strict hierarchy and discipline, veneration of authority, incompetent officials, lack of initiative and imagination, lack of responsibility, and a process of self-aggrandizement. This interpretation of bureaucracy is basically exactly opposite to what Weber proposed. The Weber model can serve equally well in analyzing either the functional or the dysfunctional ramifications of classical organization structure.
The Dysfunctions of Specialization. The Weber bureaucratic model emphasizes that specialization enhances productivity and efficiency. The model ignores, but can be used to point out, the dysfunctional qualities of specialization. Empirical investigation has uncovered both functional and dysfunctional consequences. In other words, specialization has been shown to lead to increased productivity and efficiency but also to create conflict between specialized units, to the detriment of the overall goals of the organization. For example, specialization may impede communication between units. The management team of a highly specialized unit has its own terminology and similar interests, attitudes, and personal goals. Because "outsiders are different," the specialized unit tends to withdraw into itself and not fully communicate with units above, below, or horizontal to it. Performing a highly specialized job is also a major cause of employee boredom and burnout—blue-collar blues and white-collar woes.

The Dysfunctions of Hierarchy. What was said of specialization also holds true for the other characteristics of a bureaucracy. The functional attributes of a hierarchy are that it maintains unity of command, coordinates activities and personnel, reinforces authority, and serves as a formal system of communication. In theory, the hierarchy has both a downward and an upward orientation, but in practice, it has often turned out to have only a downward emphasis. Thus, individual initiative and participation are often blocked, upward communication is impeded, and there is no formal recognition of horizontal communication. Personnel who follow only the formal hierarchy may waste a great deal of time and energy.

The Dysfunctions of Rules. Bureaucratic rules probably have the most obvious dysfunctional qualities. Contributing to the bureaucratic image of red tape, rules often become the ends in themselves, rather than the means for more effective goal attainment. The famous management consultant Peter Drucker cites the following common misuses of rules that require reports and procedures:

First is the mistaken belief that procedural rules are instruments of morality. They should not determine what is right or wrong conduct.

Second, procedural rules are sometimes mistakenly substituted for judgment. Bureaucrats should not be mesmerized by printed forms, forms should be used only in cases where judgment is not required.

The third and most common misuse of procedural rules is as a punitive control device from above. Bureaucrats are often required to comply with rules that have nothing to do with their jobs—for example, plant managers who have to accurately fill out numerous forms for staff personnel and corporate management which they cannot use in obtaining their own objectives. 

Drucker would like to see every procedural rule put on trial for six to eight years. He cites the case of an organization in which all reports and forms were totally done away with for two months. At the end of the suspension, three-fourths of the reports and forms were deemed unnecessary and were eliminated.

The Dysfunctions of Impersonal Characteristics. The impersonal quality of the bureaucracy has even more dysfunctional consequences than specialization, hierarchy, and rules. Behaviorally oriented organization theorists and researchers have given a great deal of attention to the behavioral dysfunctions of bureaucratic structures. Much discussion in this text is critical of the impersonal characteristics of
bureaucracies. The same is true of today's consumers and employees. Everyone has heard horror stories and everyday irritations dealing with impersonal bureaucracies.

The Modern View of Bureaucracies

The acknowledged bureaucratic dysfunctions have led most people to readily accept Parkinson's popular "laws" (for example, bureaucratic staff increase in inverse proportion to the amount of work done!4) and the popular "Peter principle" (managers rise to their level of incompetence in bureaucracies!3). These laws and principles have received wide public acceptance because everyone has observed and experienced what Parkinson and Peter wrote about. But as one organizational scholar has noted:

These two writers have primarily capitalized on the frustrations toward government and business administration felt by the general public, which is not familiar with the processes necessitated by large-scale organization. Parkinson and Peter make a profit on their best sellers; they added little to the scientific study of organizations.12

In addition to the popularized criticisms of bureaucracy, a more academic analysis also uncovers many deficiencies. Bennis summarized some of them as follows:

1. Bureaucracy does not adequately allow for personal growth and the development of mature personalities.
2. It develops conformity and groupthink.
3. It does not take into account the informal organization and the emergent and unanticipated problems.
4. Its systems of control and authority are hopelessly outdated.
5. It has no judicial process.
6. It does not possess adequate means for resolving differences and conflicts between ranks and, most particularly, between functional groups.
7. Communication and innovative ideas are thwarted or distorted as a result of hierarchical divisions.
8. The full human resources of bureaucracy are not being utilized because of mistrust, fear of reprisals, etc.
9. It cannot assimilate the influx of new technology or scientists entering the organization.
10. It modifies personality structure in such a way that the person in a bureaucracy becomes the dull, gray, conditioned "organization man."11

Parkinson, Peter, and Bennis represent the extreme critics of bureaucratic organization. Nevertheless, during the past few years popular writers, scholars, practitioners, and the general public have felt increasing dissatisfaction and frustration with classical bureaucratic structures. This discontent is reflected in the consumerism movement, which is largely a grassroots reaction to the impersonality of large bureaucracies, and the tremendous appeal of best-selling books such as "The Search of Excellence: Lessons from America's Best-Run Companies" and "Reengineering the Corporation," whose basic theme is that organizations must be more flexible and less bureaucratic, and must undergo constant change and learning. For example, another recent book, "Transforming Organizations," argues that
and itself. Systemic change implies that its major components—strategies, technologies, human resources, and internal structures—require simultaneous transformation. 18

Obviously, such needed organizational change cannot be handled by the traditional bureaucratic form and may call for drastic action. For example, in Tom Peters’s latest book, he colorfully describes how he would like managers to engage in bureaucratic bashing:

Rant and rave. Tear up papers. Refuse to read them. Don’t attend meetings. . . . Be outrageous. Get rid of all your file cabinets. . . . Put big cardboard boxes around your desk, and throw all the junk you receive into them—unread. Put a big red label on the boxes: “This week’s unread paperwork.”

He recognizes that such radical behavior may jeopardize one’s career, but feels that unless it is done, organizations depending on bureaucratic structuring—especially those which use vertical processing of information—will not be competitive or even, in the long run, survive.

Taken in perspective, the argument is not necessarily that the classical bureaucratic model is completely wrong but, rather, that the times have rendered many of those concepts and principles irrelevant. Bureaucratic organization is thought to be too inflexible to adapt readily to the dynamic nature and purpose of many of today’s organizations and public needs. Flexibility, adaptability, and learning are necessary requirements for modern organization structures. The increasing size of organizations (as a result of both mergers and internal growth), information technology, the concern for total quality, globalization, and the huge social and economic upheavals in recent years are but a few of the things which have contributed to a new organizational environment. There has even been a call for Mikhail Gorbachev’s concept of perestroika (openness) to be applied to restructuring American corporations. One thing is certain, the traditional bureaucratic organization structure has not been able to deal with these dramatic changes. Something else is needed. The rest of this chapter discusses this “something else” besides bureaucratic principles that can be and is being used to structure today’s organizations.

MODIFICATIONS OF BUREAUCRATIC STRUCTURING

The classical bureaucratic model has served as a point of departure for modified vertical and horizontal structural arrangements. Vertical analysis concentrates on centralization versus decentralization and on flat versus tall structuring. These characteristics represent modifications of the classical principles of delegation of authority and limited span of control. Decentralization expands the principle of delegation to the point of an overall philosophy of organization and management. A tall organization structure means a series of narrow spans of control, and a flat structure incorporates wide spans. The bureaucratic principle of hierarchy is also closely related to the vertical concept.

Horizontal structural analysis is concerned with organizing one level of the hierarchy. The concepts of departmentation and of line and staff represent this approach. They are derived chiefly from the bureaucratic doctrine of specialization. Departmentation concentrates on organizing each level to attain optimum benefits from high degree of specialization. The staff concept attempts to resolve the vertical and horizontal conflict that appeared in the classical scheme. In general, the concept
discussed next carry the bureaucratic concepts one step further. They give greater weight to the human element and recognize that simple, mechanistic structural arrangements are not satisfactory for modern organizations.

Centralization and Decentralization

The terms centralization and decentralization are freely tossed about in management and organization theory literature and in actual management and organization design. Most often, both the scholar and the practitioner neglect to define what they mean by the concept.

Types and Meaning. There are three basic types of centralization and decentralization. The first type is geographic or territorial, concentration (centralization) or dispersion (decentralization) of operations. For example, the term "centralized" can be used to refer to an organization that has all its operations under one roof or in one geographic region. On the other hand, the dispersion of an organization's operations throughout the country or the world is a form of decentralization. This type of centralization-decentralization has become particularly relevant as organizations today begin to create international structures. The word "geographic" is often not stated, which adds to the confusion.

The second type is functional centralization and decentralization. A good example is the human resources function of an organization. A separate human resources department that performs functions such as selection or training for the other departments is said to be centralized. However, if the various functional departments (for example, marketing, production, and finance) handle their own human resources functions, then human resources is considered decentralized. Both geographic and functional centralization and decentralization are descriptive terms rather than analytical terms.

The third type is the only analytical use of the concept. This is where the two terms "centralization" and "decentralization" refer to the retention or delegation of decision-making prerogatives or command. From an organization theory and analysis standpoint, this third type is the most relevant use of the concepts of centralization and decentralization. They are relative concepts because every organization structure contains both features, and the concepts differ only in degree.

Contrary to common belief, it is not possible to determine whether an organization is centralized or decentralized merely by looking at the organization chart. The determining factor is how much of the decision making is retained at the top and how much is delegated to the lower levels. This amount of retention or delegation is not reflected on the organization chart.

Optimum Degree of Decentralization. Traditionally, the implication has been that decentralization is somehow better than centralization. In truth, neither concept is an ideal or intrinsically good or bad. Generally speaking, decentralization is much more compatible with the behavioral aspects of management. This relevancy is due in part to the lower-level participation in decision making and the currently popular notion of empowerment of employees that results from decentralization. Increased motivation is an extremely important by-product. Besides the behavioral benefits, more effective decisions are possible because of the speed and firsthand knowledge that decentralization provides. Decentralization also affords invaluable experience in
decision making for lower-level executives. Finally, it allows more time for top
management to concentrate on policymaking and creative innovation. In other
words, the concept of decentralization, which has been around for a number of years,
is very much a part of the highly touted new organizational forms that are associated
with empowerment and pushing the decision making down to the lowest level
possible.

Many organizations are still experiencing success in moving from centralization
to decentralization. For example, under the leadership of General W. L. (Bill)
Czech, the Tactical Air Command (TAC) moved from a highly centralized to a
highly decentralized structure. By making subunits more autonomous and creating
pride of ownership, he was able to turn the Air Force's worst command into its
best.24 As a result of his success, the Pentagon now gives commanders new authority
to abolish regulations, streamline procedures, and do whatever is necessary to get the
job done.

In business, a good example is Johnson & Johnson, the highly successful and
largest U.S. pharmaceutical firm, with 165 units worldwide. Each unit has consider-
able autonomy. Although corporate headquarters in New Jersey sets overall corpo-
rate policies on financial and certain administrative matters, the unit presidents, many
in their late thirties and early forties, have full responsibility for their unit's research
and development, manufacturing, marketing, and sales. For example, Johnson &
Johnson sent thirty-eight-year-old Carl Spalding to head up its consumer products
unit in South Africa. He not only independently ran the business but also had to hire,
train, and promote black employees, even build housing for them, often in violation
of local traditions.25 This is decentralization in action.

It is fair to say that, overall, decentralization has supported, and in some cases
has stimulated, the behavioral approach to management. At the same time, there is
little doubt that a wide discrepancy exists between the theory of decentralization and
its practice. Yet, because of its wide acceptance, decentralization has had a definite
impact on developing a managerial attitude favoring the implementation of behavior-
tal concepts in organizations. However, it is now recognized that a third dimension
such as cooperation may also be structurally needed, in addition to centralization and
decentralization. Teamwork or cooperation may even be added to create a triangular
design so that the organization becomes a function of three variables—autonomy
(decentralization), control (centralization), and cooperation (teamwork).26 It is these
cooperative, team-oriented organizations that have emerged in recent years.

Flat and Tall Structures

Chapter 3 discusses the impact that information technology has had on the flattening
of organizations. In addition to the impact of information technology, there is also
rethinking on the span of control (the number of subordinates directly reporting to a
manager) which has a direct impact on the number of levels of structure. A recent
analysis noted:

The conventional theory is that an executive can only adequately supervise five to ten
direct reports; today this concept is being rethought as companies consider whether
stabilizing subordinate functions will better quality talent, and charged with clear
responsibility and authority, will reduce the extent of executive oversight required of
subordinates, thus enabling senior officers to exercise a much wider control
horizon.27
In organizational analysis, the terms flat and tall are used to describe the pattern of spans of control and levels of management. Whereas the classical principle of span of control is concerned with the number of subordinates one superior can effectively manage, the concept of flat and tall is more concerned with the structural arrangements for the entire organization. The nature and scope are analogous to the relationship between delegation and decentralization. In other words, span of control is to flat and tall structures as delegation is to decentralization.

The tall structure has very small or narrow spans of control whereas the flat structure has large or wide spans. In tall structures, the small number of subordinates assigned to each manager allows for tight controls and strict discipline. Classical bureaucratic structures are typically very tall.

Advantages and Disadvantages. Tall structures assume a role in assessing the value of flat structures similar to that of centralization in assessing the relative merits of decentralization. Tall structures are often viewed negatively in modern organizational analysis. More accurately, there are advantages and disadvantages to both flat and tall structures. Furthermore, flat and tall are only relative concepts; there are no absolutes.

Both flat and tall structures could have the same number of personnel. However, the tall structure could have four levels of management, and the flat only two levels. The tall structure has the definite advantage of facilitating closer control over subordinates. Notice that the term "closer," not "better," was used. The classicists, of course, equated closer with better; the more behaviorally oriented theorists do not. The very nature of flat structures implies that managers cannot possibly keep close control over many subordinates. Therefore, they are almost forced to delegate a certain amount of the work. Thus, wide spans structurally encourage decentralization. The behavioral theorists would say that this opens up the opportunities for individual initiative and self-control.

Behavioral Implications of Flat Versus Tall Structures. One behavioral implication that is often overlooked in analyzing flat versus tall structures is the opportunity that tall structures offer for more personal contact between managers and subordinates. This contact is generally assumed to be negative and conflicting, but it need not be. In a tall structure, the manager may create a positive rapport with his or her subordinates that may not be possible in a flat structure.

Another consideration besides personal contact is the levels of communication in the two structures. In the flat structure there are few levels, which means that both downward and upward communication are simplified. There should be less distortion and inaccuracy. The red tape and endless communication channels associated with a bureaucratic tall structure are not present in a flat structure. On the other hand, the increased equality that exists between subordinates in a flat structure may lead to communication problems. If no status or authority differentials are structurally created, a heavy burden is placed upon horizontal communication. As Chapter 13 brings out, the horizontal communication system is notably deficient in most organizations. The problem may be compounded in flat organizations, where more dependence is placed on this type of communication, but it is not structurally facilitated. For example, the chief financial officer of IBM recently noted that "the key management problem at IBM is horizontal communications across a highly complex company." Also, coordination may be seriously impaired by a flat structure for the same reason.
Overall, the flat structure, at least from a behavioral standpoint, is generally preferable to the tall structure. It can take advantage of the positive attributes of decentralization and personal satisfaction and growth. Although managers who have wide spans will have to give a great deal of attention to selecting and training subordinates, a flat structure has the advantage of providing a wealth of experience in decision making.

Together with these advantages, however, it must be remembered that flat structures only encourage decentralization and individual responsibility and initiative. The supervisor of a small span does not always keep close control and may occasionally decentralize, and the supervisor of a large span does not always create an atmosphere of self-control decentralization. The degree of centralization or its reverse depends on the overall management and organization philosophy and policies and on individual leadership style and personality. All a flat or a tall arrangement does is structurally promote, not determine, centralization or decentralization and the approach taken toward the behavioral aspects of managing.

Departmentation

Departmentation is concerned with horizontal organization on any one level of the structure, and it is closely related to the classical bureaucratic principle of specialization. There are several types of departmentation. Traditionally, however, the functional and product have dominated.

Functional Departmentation. By far the most widely used and recognized type of departmentation is functional in nature and may be found in all types of organizations. For example, in a manufacturing organization the major functions usually are production, marketing, and finance—the vital functions that enable a manufacturing concern to operate and survive. On the other hand, in a railroad organization the major functions may be operations, traffic, and finance, and in a general hospital they may be medical service, housekeeping, dietetics, and business. Although the titles are different, the railroad and hospital functions are nevertheless analogous to the manufacturing functions in terms of importance and purpose. The titles of various functional departments may differ among industries and even in organizations within the same industry. All businesses, hospitals, universities, government agencies, and religious organizations, as well as the military, contain vital functions and can be functionally departmentalized.

The greatest single advantage of functional departmentation is that it incorporates the positive aspects of specialization. Theoretically, functionalism should lead to the greatest efficiency and the most economical utilization of employees. In practice, however, certain dysfunctions that were discussed with regard to specialization may also negate the advantages of functional departmentation. For example, functional empires may create a conflict to the point of destroying from overall goal attainment.

A typical case is that of the salesperson who is guided by the sales department goal of maximizing the number of units sold. In order to sell 2000 units to a customer, the salesperson may have to promise delivery by the end of the week and require no money down. The production department, on the other hand, has a goal of keeping costs as low as possible and therefore does not carry a very large inventory. It cannot possibly supply the customer with 2000 units by the end of the week. Finance has still another goal: it must keep bad-debt expense at a minimum.
and therefore must require substantial down payments and thorough credit checks on every customer. In this situation, the sales department is in conflict with production and finance. If the salesperson goes ahead and makes the sale under these conditions, the customer may not receive the order on time, and if the order is received, the customer may not be able to pay the bill. To either outcome, the company goals of customer goodwill and minimization of bad-debt expense will suffer because of the salesperson’s action.

It is easy to place the blame in the above example on the individual salesperson or on the lack of management coordination and communication. They are both definitely contributing factors. However, an equal, if not overriding, difficulty is the subgoal loyalties that are fostered by functionalization. A true story told by Peter Drucker provides an example of this mentality:

A commuter train company reported a $10,000 per year cost item for broken glass doors in their passenger stations. Upon investigation it was found that a young accountant had “saved” the company $300 by limiting each station to one key for the rest room. Naturally, the key was always lost and the replacement cost only 25 cents. The catch, however, was that the key cost was set up by financial control to be a capital expenditure which required approval from the home office. This home office approval accompanied by the appropriate paperwork took months to accomplish. On the other hand, emergency repairs could be paid immediately out of the station’s cash account. What bigger emergency than not being able to get into the bathroom? Each station had an axe and the result was $20,000 for broken bathroom glass doors.9

The presentation of such examples does not imply that conflict is always bad for the organization. In fact, as Chapter 10 points out, many modern organization theorists think that conflict has a good effect on the organization that, in fact, outweighs the bad. Yet, as in the cases cited above, where functionalization causes conflict that hinders overall goal attainment, conflict is detrimental. This negative aspect has led an increasing number of organizations to abandon functionalization for a series of processes. This new perspective was recently stated as viewing the business “as a set of activities that collectively produce value to customers, rather than as an aggregation of functional departments.”10 The old idea of doing one’s job in a specialized function and then “throwing it over the wall” to the next function is being replaced by the network and horizontal organization, which are covered at the end of the chapter.

Product Departmentation. At the primary level, many organizations have chosen to organize along product or unit rather than along functional lines. The product form of departmentation is particularly adaptable to the tremendously large and complex modern organizations. It goes hand in hand with profit-centered decentralization. It allows the giant corporations, such as General Motors, General Electric, and Du Pont, to be broken down into groups of self-contained, smaller product organizations. Thus, the advantages of both large and small size can occur in one large organization.

The classical principle of specialization was earlier said to be the greatest benefit derived from functional departmentation. Although often ignored, specialization can also be applied to product departmentation. This was brought out as follows: “The executive who heads a battery manufacturing department generally knows more about production than other functional executives, but he also knows more about batteries than other production executives.”11 However, a greater advantage of organization on a product basis is the matter of control. Because of their self-
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contained nature, product departments are very adaptable to accounting-control 
techniques and management appraisal. Product department performance, measured 
according to several different criteria, can usually be objectively determined. Another 
adventure is that product departments can be readily added or dropped with a 
minimum of disruption to the rest of the organization.

As a structural form, product departmentation is very compatible with the 
behavioral approach. Many of the conflicts that exist in the upper level under 
functional departmentation are generally resolved by product departmentation. 
Under product organization, however, the functional conflicts may disappear at the 
upper levels but reappear in the lower levels that are functionalized. Yet, from the 
standpoint of overall organizational goals, functional conflicts at lower levels may be 
preferable. Besides reducing the potential for conflict, product division can provide 
many of the same behavioral advantages offered by decentralization and flat struc-
tures. These include more opportunity for personal development, growth, and self-
control. Once again, this is not a universal truth, because the advantages still depend 
on many other personal and organizational variables. All in all, however, product or 
unit organization, because of its self-contained characteristics, is potentially more 
structurally adaptable to the behavioral aspects of organization than functional 
departmentation is.

The Staff Concept of Organization

Staff organization goes way back in history. The military is given credit for its 
development. As early as the seventeenth century, Gustavus Adolphus of Sweden 
used a military general staff. The Prussians, with some influence from the French, 
refined the theory and practice of this concept. At the beginning of the twentieth 
century, the European version of military staff was installed in the U.S. armed forces. 
However, it was not until after the Great Depression that the staff concept was 
widely adapted to American business and industry.

Staff is not a clear-cut organizational concept. It often creates confusion and 
problems for the organization. Many of the problems stem from conflicting defini-
tions regarding line and staff and the hybrid forms of staff used by many organiza-
tions. The military has escaped some of these problems because it has precisely 
defined and successfully implemented a pure staff system. Under the "pure" military 
approach, line carries command or decision-making responsibilities, whereas staff 
gives advice.

Almost every type of modern American organization has attempted to adopt to 
some degree the military staff concept. In contrast to the military, however, business, 
hospital, educational, and government organizations have not given proper attention 
to defining operationally the difference between line and staff. In the military, there 
definitely exists an informal, implied staff authority, but everyone understands the 
system and realizes that conflicts can be resolved by reversion to pure line-staff 
relationships. Unfortunately, this is generally not the case in other types of organiza-
tions. What usually develops is a lack of understanding of the line-staff roles and 
relationships, which often results in a breakdown of communication and open 
conflict. A typical example is the business corporation which has a myriad of line-
staff roles and relationships. It is not unusual to find many lower and middle 
managers who do not really know whether and when they are line or staff. One 
reason is that they generally wear more than one hat. Normally, managers are line 
within their own departments and become line or staff when dealing with outside
departments. The manager's functional authority is often not spelled out in the policies of the organization. As a result, personal conflicts and dual-authority situations are rampant. Chapter 10 gives specific attention to the problems of role ambiguity and conflict that can result from such line-staff relationships.

Although these weaknesses exist in a hybrid staff concept, benefits have also been derived. The larger, more technologically complex organizations depended a great deal on staff specialization during the 1970s. However, in manufacturing in the 1960s and in the service sector in the 1990s, many of these staff positions have been eliminated through downsizing, in many cases permanently replaced by information technology. For example, Peters and Waterman noted that their "excellently managed" companies had comparatively few corporate staff personnel. Emerson Electric has 34,000 employees, but fewer than 100 in its corporate headquarters; Dan's has 33,000 employees, but decreased its corporate staff from about 500 in 1970 to around 100 today; and Schlumberger, a $6 billion diversified oil service company, runs its worldwide empire with a corporate staff of 92.22 Because of the success of these companies with small staffs and the need to cut back on personnel costs as a result of the poor economy, all companies today are taking a hard look at their need for corporate staff personnel, and many continue to drastically reduce them.23 They are beginning to look at more radical alternatives, rather than just modifications of classical structures. The next section presents these alternative ways of theorizing and of structuring organizations.

MODERN ORGANIZATION THEORY

There are some recent arguments that Weber's view of the classical bureaucratic model was mistranslated and that he really did intend for it to be an ideal type of structure. Instead, he was merely using bureaucracy as an example of the structural form taken by the political strategy of rational-legal domination.24 In other words, some of the original theories of classical structure may contain underpinnings for modern organization theory.

Historical Roots

The real break with classical thinking on organizational structure is generally recognized to be the work of Chester Barnard. In his significant book, *The Functions of the Executive*, he defined a formal organization as a system of consciously coordinated activities of two or more persons.25 It is interesting to note that in this often cited definition, the words "system" and "persons" are given major emphasis. People, not roles, are an organization's focus, make up a formal organization. Barnard was critical of the existing classical organization theory because it was too descriptive and superficial.26 He was especially dissatisfied with the classical bureaucratic view that authority should come from the top down. Barnard, using a more analytical approach, took an opposite viewpoint. As Chapter 13 points out, he maintained that authority really came from the bottom up.

Besides authority, Barnard stressed the cooperative aspects of organizations. This concern reflects the importance that he attached to the human element in organization structure and analysis. It was Barnard's contention that the existence of a cooperative system is contingent upon the human participants' ability to communicate and their willingness to serve and strive toward a common purpose.27 Under

...
such a premise, the human being plays the most important role in the creation and perpetuation of formal organizations.

From this auspicious beginning, modern organization theory has evolved in several directions. The first major development in organization theory was to view the organization as a system made up of interacting parts. The open-systems concept, especially, which stresses the input of the external environment, has had a tremendous impact on modern organization theory. This development was followed by an analysis of organizations in terms of their ability to process information in order to reduce the uncertainty in managerial decision making. The next development in organization theory is the contingency approach. The premise of the contingency approach is that there is no single best way to organize. The organizational design must be fitted to the existing environmental conditions. The cultural environment even plays a role in organization structure. The accompanying International Application Example: Organization Epigrams by Country humorously depicts this cultural impact in its hypothetical structures by country.

One of the newer theoretical approaches is a natural selection—or ecological—view of organizations. This organizational ecology theory challenges the contingency approach. While the contingency approach suggests that organizations change through internal transformation and adaptation, the ecological approach says that it is more a process of the "fittest survive"; there is a process of organizational selection and replacement.

Finally, the newest theoretical approach that has emerged is organizational learning. Covered in Chapter 2, the learning organization is based largely on systems theory, but emphasizes the importance of generative over adaptive learning in fast-changing environments. All these modern theories serve as a foundation for the actual designs of practicing organizations, which are covered at the end of this chapter.

The Organization as an Open System

Both the closed- and open-systems approaches are utilized in modern organization theory and practice. However, in today's dramatically changing environment an open-systems approach is becoming much more relevant and meaningful. The key for viewing organizations as open systems is the recognition of the external environment as a source of significant input. In systems terminology, the boundaries of the organization are permeable to the external environment (social, legal, technical, economic, and political).

The simplest open system consists of an input, a transformation process, and an output, which is depicted thus:

\[
\text{Input} \rightarrow \text{transformation process} \rightarrow \text{output}
\]

A system cannot survive without continuous input, the transformation process, and output.

There are many types of inputs, transformation processes, and outputs. For example, one kind of input actually enters the open system in the "closed" sense. In other words, this type of input has a direct effect on the internal system rather than an outside effect—in systems jargon, it loads the system. Another type of input affects the system in an "open" sense. Generally, this input would consist of the entire environmental influence on the system. Still another kind of input takes the
form of replacement or recycling. When a component of the system is either removed or leaves, the replacement becomes an input. This recycling process perpetuates the system. Specific examples of inputs into a business organization include monetary, material, and human resources.

At the heart of the open system are the processes, operations, or chains which transform the inputs into outputs. Here is where the internal organization design plays an important role. The transformation process consists of a logical network of subsystems, which lead to the output. The subsystems are translated into a complex system network that transforms the inputs into the desired outputs.

The third and final major component of any simple open system is the output. This is represented by the product, result, outcome, or accomplishment of the
system. Specific examples of the outputs of a business organization system that correspond to the inputs of monetary, material, and human resources are profit or loss, product sales, and role behaviors.

The simple open-systems concept has universal applicability. Any biological, human, social, economic, or technical phenomenon can be conceptualized in open-systems terms. As has been shown, an economic institution receives inputs of people, raw materials, money, laws, and values. The system then transforms these inputs via complex organizational subsystems into outputs, such as products, services, taxes, dividends, and pollution. From an organization structure standpoint, the critical factor is the design of the transformation process. Oddly, this transformation design involves a closed-systems analysis. In other words, the closed system is a subsystem of the open system. The closed-systems aspects of the transformation process are concerned with the interrelated and interdependent organizational subsystems of structure, processes, and technology. These subsystems must be organized in such a way that they will lead to maximum goal attainment or output.

Although the approach has decreased in popularity in recent years, it has been pointed out that, to date, very little research on organizations has been guided by open-systems thinking. It is not that the open-systems approach has proved to be wrong or lacking in some way but rather that "in order to most fruitfully utilize the systems paradigm of organizations, scholars in the field must re-examine their beliefs about the paradigm and, perhaps, re-educate themselves about how they should think about and study organizations as systems." As has been pointed out, a new type of systems thinking has resurfaced recently in terms of organizational learning. As Peter Senge recently noted:

What is changing today is the scope of systems thinking skills required. As power and authority are distributed more widely, it becomes increasingly important that people throughout the organization be able to understand how their actions influence others. To do so, local areas need better information systems so they can be aware of system-wide conditions.

This need for information is reflected in the organization theory discussed next.

**Information Processing View of Organizations**

The view of organizations as information processing systems facing uncertainty serves as a transition between systems theory, which has just been discussed, and contingency theory, which is discussed next. The information processing view makes three major assumptions about organizations:** First, organizations are open systems that face external, environmental uncertainty (for example, technology or the economy) and internal, work-related task uncertainty. Jay Galbraith defines task uncertainty as "the difference between the amount of information required to perform the task and the amount of information already possessed by the organization." Second, the organization must have mechanisms and be structured in order to diagnose and cope with this environmental and task uncertainty. In particular, the organization must be able to gather, interpret, and use the appropriate information to reduce the uncertainty. Thus, the second assumption is as follows: "Given the various sources of uncertainty, a basic function of the organization's structure is to create the most appropriate configuration of work units (as well as the links between these units) to facilitate the effective collection, processing, and distribution of information." In other words, organizations are information processing systems.
The final major assumption of this view deals with the importance of the subunits or various departments of an organization. Because the subunits have different degrees of differentiation (that is, they have different time perspectives, goals, technology, and so on), the important question is not what the overall organization design should be but, rather, "(a) What are the optimal structures for the different subunits within the organization (e.g., R&D, sales, manufacturing)? (b) What structural mechanisms will facilitate effective coordination among differentiated yet interdependent subunits?"

Taking these questions as a point of departure, Tushman and Nadler draw on the extensive relevant research to formulate the following propositions about an information processing theory of organizations:

1. The tasks of organization subunits vary in their degree of uncertainty.
2. As work-related uncertainty increases, so does the need for increased amounts of information, and thus the need for increased information processing capacity.
3. Different organizational structures have different capacities for effective information processing.
4. An organization will be more effective when there is a match between the information processing requirements facing the organization and the information processing capacity of the organization's structure.
5. If organizations (or subunits) face different conditions over time, more effective units will adapt their structures to meet the changed information processing requirements.

The above propositions summarize the current state of knowledge concerning the information processing view of organizations. "The key concept is information, and the key idea is that organizations must effectively receive, process, and act on information to achieve performance." Although the focal point of this approach is the interface between environmental uncertainty—both external and internal—and information processing, it is very closely related to systems, contingency, and organizational learning theories, and some organization theorists would argue that it could even be subsumed under one of these.

Contingency, Ecological, and Learning Organization Theories

The most recent organization theories focus even more on the environment than do the open systems and information processing views. However, the modern contingency, ecological, and learning organization theories treat the environment differently. Contingency theories are proscriptive and are analogous to the development of contingency management as a whole; they relate the environment to specific organization structures. More specifically, the contingency models relate to how the organization structure adjusts to fit with both the internal environment, such as work technology, and the external environment, such as the economy or legal regulations.

Some organization theorists feel that contingency theory should be replaced by an ecological view. This new approach is best represented by what is called "population-ecology." Very simply, this population-ecology approach can be summarized as follows:
1. It focuses on groups or populations of organizations rather than individual ones. For example, for the population of grocery organizations after World War II, there was an even split between "mom and pop" stores and supermarkets. The environment selected out the small "mom and pop" operations because they were not efficient and only the supermarkets survived.

2. Organizational effectiveness is simply defined as survival.

3. The environment is assumed to be totally determining. At least in the short or intermediate term, management is seen to have little impact on an organization's survival.

4. The carrying capacity of the environment is limited. Therefore, there is a competitive arena where some organizations will succeed and others will fail.42

Obviously, this ecology theory is a much different view of organizations than the classical or even modern approaches. A more rational, proactive approach to management that is able to adapt the organization structure to fit the changing demands of the environment is more accepted and practical than environmental determinism. Yet, in recent years, many organizations have not been able to keep up with the dramatic changes they are facing. For example, a recent widely read cover story in *Fortune*, called "Dinosaurs?" about General Motors, IBM, and Sears would support the ecological view of organizations.43

The key to understanding the potential organizational dinosaurs of recent years is not necessarily that they did not change or attempt to adapt to their new environment. For example, no one can accuse GM, IBM, and Sears of not changing in the late 1980s and early 1990s. But the key is that these firms and most others were in a reactive mode; they did not anticipate change or stay ahead of change. In terms of organizational learning, discussed in Chapter 3, the potential dinosaurs exhibited only single-loop, or adaptive, learning, not double-loop, or generative, learning.44

In order for today's organizations to gain a competitive advantage and, according to ecological theory, to even survive in the long run, they must be able to learn how to learn (double-loop) and through generative learning be creative and innovative to be ahead of and anticipate change.

This double-loop, generative learning view has emerged as the latest widely accepted view of organization theory. However, other theories such as radical humanism and chaos also have advocates claiming the best understanding of today's organizations. For example, a radical humanist argument would use a neo-Marxist conceptualization to give workers significant control or empowerment over their own environments and working conditions.45 Chaos theory would argue that prediction and control of systems behavior is unobtainable, even in extremely simple and deterministic structures, let alone in the increasingly complex and changing organizations of modern times.46

Obviously, all the theories discussed so far have merit. However, they also point out that it is very difficult to have a unified theory in the study of organizations. In addition, recent studies have shown that ideology influences organization structure47 as do recent pragmatic developments such as mergers and acquisitions,48 diversification strategies,49 and downsizing.50 All these factors have imposed scientific progress in the field because, as Pfeffer recently pointed out, "the study of organizations is arguably paradigmatically not well developed, in part because of values that emphasize representativeness, inclusiveness, and theoretical and methodological diversity."51
MODERN ORGANIZATION DESIGNS

Along with organization theorists, many practicing managers are becoming disillusioned with traditional ways of designing their organizations. Up until a few years ago, most managers attempted only timid modifications of classical structures and balked at daring experimentation and innovation. However, many of today's managers have finally overcome this resistance to making drastic organizational change. They realize that the simple solutions offered by the classical theories are no longer adequate for many of their complex problems. In particular, the need for flexibility, adaptability to change, creativity, innovation, and the ability to overcome environmental uncertainty are among the biggest challenges facing a growing number of modern organizations.

At first, the alternatives to the bureaucratic model of organization structure included project and matrix designs. More recently, network, virtual, and horizontal structures have emerged. The following sections describe and analyze these modern organization designs.

Project Designs

From a rather restricted beginning in the aerospace industry and in those firms having contracts with the Department of Defense, the use of project designs has increased in all organizations that require a great deal of planning, research, and coordination. In addition to the aerospace industry, project designs are becoming widely used in other industrial corporations and also in financial institutions, healthcare facilities, government agencies, and educational institutions. Projects of various
degrees of importance and magnitude are always under way in modern organizations. The project structure is created when management decide to focus a great amount of talent and resources for a given period on a specific project goal.

There are different ways in which the project approach can be designed. Figure 17.1(a) shows that the project managers under this design have no activities or personnel reporting directly to them. The project manager, along with the heads of quality control, research and development, contract administration, and scheduling, acts in a staff capacity to the general manager. The project manager must rely on influence and persuasion in performing a monitoring role, with direct line authority exercised only by the general manager.

Another type is shown in Figure 17.1(b). Here, project managers have all the personnel necessary for the project. They have staff and functional line personnel reporting directly to them. Figure 17.1(b) shows that the project managers under the aggregate design have full authority over the entire project. In reality, the aggregate project organization is very similar to the traditional product or unit form of departmentalization, which is presented earlier in the chapter.

There are other possible variations beside the two shown in Figure 17.1, and the project organization almost always coexists with the more traditional functional structure. But project experts stress that even though there are many similarities between project and functional organizations, project managers must take a new approach to their jobs:

1. They must become reoriented away from the purely functional approach to the management of human and nonhuman resources.

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**FIGURE 17.1(a)**
Types of project designs.
2. They must understand that purposeful conflict may very well be a necessary part of life as they manage their projects across many vertical organizational lines.
3. They must recognize that project management is a dynamic activity in which major changes are almost the order of the day. 

These three statements make it clear that the project concept is a philosophy of management as well as a form of structural organization. The same is true of its behavioral perspective. Here are some suggestions for putting a project team together: "Don't put on the team an expert who will dominate its deliberations. And make sure that service on the project represents a career plus, that people detailed to it go on to jobs better than the ones they left." In other words, the project viewpoint is quite different from the functional one.

Matrix Designs
When a project structure is superimposed on a functional structure, the result is a matrix. Sometimes the matrix organization is considered a form of project organization, and the terms are used interchangeably. However, a more accurate portrayal would show that the matrix organization is a project organization plus a functional one. Figure 17.2 shows a very simplified matrix organization. Here, the functional department heads have line authority over the specialists in their departments (vertical structure). The functional specialists are then assigned to given projects (horizontal structure). These assignments are usually made at the beginning.
TABLE 17.1 Determinants of the Evolutionary Stages of Matrix Designs

<table>
<thead>
<tr>
<th>Organization Design</th>
<th>Determinants</th>
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| Functional          | 1. Efficiency is the major objective.  
                      | 2. Competitive advantage is along a single parameter such as technology, price, performance, or delivery.  
                      | 3. Markets are relatively stable and predictable.  
                      | 4. There is a narrow range of products with long-term perspectives. |
| Project             | 1. There are several simultaneous objectives (for example, performance, cost, price, schedule, technology, and efficiency).  
                      | 2. There is moderate market change.  
                      | 3. There are differentiated clients/customers and markets.  
                      | 4. There is a moderate number of products or projects.  
                      | 5. There are specific time horizons for each client/customer or project.  
                      | 6. There is interconnectedness between outside and local organizations. |
| Product/matrix      | 1. Innovation is the major objective.  
                      | 2. There are differentiated products, markets, and customers' needs.  
                      | 3. High variability and uncertainty characterize the product-market mix.  
                      | 4. The time perspective for projects varies from medium to long. |
| Matrix              | 1. There are the same determinants as for product/matrix. |


of each project by a collaboration between the appropriate functional and project managers.

It has been argued that the matrix structure evolves as shown in Table 17.1. Once the company has reached the matrix stage, there are also stages or degrees of this form of organization. This first stage of the matrix is usually just a temporary task force; this is followed by the creation of permanent teams or committees organized around specific needs or problems. The last stage occurs when a manager is appointed and held responsible for coordinating the activities and inputs of the teams or committees. Similar to a project manager, the matrix manager needs negotiation skills and a high tolerance for ambiguous power relationships. There is also recent support for the use of matrix designs as being appropriate and responsive to the strategies of diversified multinational corporations.

Direct Violation of Classical Principles. Matrix designs violate the classical organizational principles. The hierarchy principle and the principle of unity of command are flagrantly violated. Furthermore, the matrix concept does not coincide with the usual line-staff arrangements discussed earlier in the chapter. Obviously, a great deal of conflict is generated in matrix organizations. An organizational specialist with IBM has observed that besides fostering conflict, the matrix structure discourages informal groups and the nurturing of supervisor-subordinate relations. After the years of experience with the transition from traditional hierarchical to matrix organizations, he concluded that the matrix structure "has seemingly reduced participant motivation for all but the most aggressive personalities and has reduced corporate loyalty and identification with the organization." An extensive empirical investiga-
tion of the engineering division of an aircraft manufacturing firm found that the matrix structure led to a decrease in the quality of communication and negative effects on relevant role perceptions, work attitudes, and coordination. These disadvantages are balanced by many positive aspects of the matrix organization.

Advantages of Matrix Designs. The matrix organization attempts to combine the best of both worlds. In an eclectic manner, it includes the positive aspects of both the functional and the project design. These advantages can be summarized as follows:

1. The project is emphasized by designating one individual as the focal point for all matters pertaining to it.
2. Utilization of personnel can be flexible because a reservoir of specialists is maintained in functional organizations.
3. Specialized knowledge is available to all programs on an equal basis; knowledge and experience can be transferred from one project to another.
4. Project people have a functional home when they are no longer needed on a given project.
5. Responsiveness to project needs and customer desires is generally faster because lines of communication are established and decision points are centralized.
6. Management consistency between projects can be maintained through the deliberate conflict operating in the project-functional environment.
7. A better balance between time, cost, and performance can be obtained through the built-in checks and balances (the deliberate conflict) and the continuous negotiations carried on between the project and the functional organizations.

Theorists who advocate a matrix structure maintain that these advantages outweigh the inherent disadvantages. In particular, "Matrix organizations tend to have high levels of performance in dealing with complex, creative work products. Also, because of the amount of interaction among members in matrix structures, and the high levels of responsibility they possess, matrix organizations usually have greater worker job satisfaction."[9]

Many contemporary organizations which are facing tremendous structural and technical complexity have no choice but to move to a matrix arrangement. The critical need for coordination and functional interrelationships can be met by adding a horizontal dimension to the functional structure.

Network Designs

The newly emerging network designs go beyond matrix structures and totally abandon the classical, hierarchical, functional structure of organization. The classical model worked fine in the previous era when there was less competition and more stable and expansive market conditions. Specifically, the classical model worked well for GM, before Honda; for AT&T, before deregulation; for GE, before Sony; for Siemens, before German unification; for Xerox, before Canon; for IBM, before Fujitsu and Microsoft; etc. To meet the challenges of evolutionary changes, these and other organizations are moving toward network structures.

Network organizations have been discussed in the academic literature for a number of years. For example, organization theorists Miles and Snow identified what they call the dynamic network. This involves a unique combination of strategy, structure, and management processes. They also suggest that new insights and terminology, such as vertical desegregation, internal and external brokering, and full-disclosure information systems, will become commonplace.[1]
With the advent of teams and outsourcing (concentrating on core competencies and forming outside partnerships to do the peripheral activities and functions of the organization), network designs are actually being used by practicing organizations. Tapscott and Caston note that such networked organizations are "based on cooperative, multidisciplinary teams and businesses networked together across the enterprise. Rather than a rigid structure, it is a modular organizational architecture in which business teams operate as a network of what we call client and server functions." Table 17.2 compares the various dimensions and characteristics of the traditional, hierarchical organization with this newly emerging network organization.

The Virtual Organization

Closely related to the network organization is the so-called virtual organization. The term "virtual" as used here does not come from the popular "virtual reality," but from "virtual memory," which has been used to describe a way of making a computer's memory capacity appear to be greater than it really is. The virtual organization is a temporary network of companies that come together quickly to exploit fast-changing opportunities.

Different from traditional mergers and acquisitions, the partners in the virtual organization share costs, skills, and access to international markets. Each partner contributes to the virtual organization what it is best at. Briefly summarized, here are the key attributes of the virtual organization:

1. **Technology.** Informational networks will help far-flung companies and entrepreneurs link up and work together from start to finish. The partnerships will be based on electronic contracts to keep lawyers away and speed the linkups.

2. **Opportunism.** Partnerships will be less permanent, less formal, and more opportunistic. Companies will band together to meet all specific market opportunities and, more often than not, fall apart once the need evaporates.

3. **No borders.** This new organizational model redefines the traditional boundaries of the company. More cooperation among competitors, suppliers, and customers makes it harder to determine where one company ends and another begins.

<table>
<thead>
<tr>
<th>TABLE 17.2 Traditional Hierarchical Versus the New Network Organization</th>
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<tbody>
<tr>
<td><strong>Dimension/ Characteristic</strong></td>
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<tr>
<td><strong>Structure</strong></td>
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<tr>
<td><strong>Scope</strong></td>
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<tr>
<td><strong>Resource focus</strong></td>
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<td><strong>Scale</strong></td>
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<td><strong>Personnel focus</strong></td>
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<td><strong>Key Drivers</strong></td>
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<tr>
<td><strong>Direction</strong></td>
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<td><strong>Base of action</strong></td>
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<td><strong>Individual motivation</strong></td>
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<tr>
<td><strong>Learning</strong></td>
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<tr>
<td><strong>Base for compensation</strong></td>
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<tr>
<td><strong>Attitudes to management</strong></td>
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<tr>
<td><strong>Employee attitudes</strong></td>
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<tr>
<td><strong>Decisional responsibilities</strong></td>
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4. Trust. These relationships make companies far more reliant on each other and require far more trust than ever before. They'll share a sense of "co-decision," meaning that the fate of each partner is dependent on the other.

5. Excellence. Because each partner brings its "core competence" to the effort, it may be possible to create a "best-of-everything" organization. Every function and process could be world-class—something that no single company could achieve.

This type of organization has already arrived at companies such as AT&T, MCI, and Motorola, but will undoubtedly become even more popular in the new environment facing organizations.

**Horizontal Organizations**

All the modern designs, whether matrix or network, emphasize the importance of horizontal over traditional vertical structuring of the organization. The advanced information technology and total quality emphasis, discussed in Chapter 1, also suggest the use of horizontal structure to facilitate cooperation, teamwork, and a customer rather than a functional orientation. The accompanying Application Example: Managing Across Rather Than Up and Down gives some of the background and applications of this newly emerging horizontal type of organization.

Frank Ostroff, a McKinsey & Company consultant, along with colleagues, Douglas Smith, is given credit for developing some of the guiding principles that define the horizontal organization design:

1. **Organization revolves around the process, not the task.** Instead of creating a structure around the traditional functions, the organization is built around its ability to live core processes. Each process has an "owner" and specific performance goals.

2. **The hierarchy is flattened.** To reduce levels of supervision, fragmented tasks are combined, work that fails to add value is eliminated, and activities within each process are cut to the minimum.

3. **Teams are used to manage everything.** Self-managed teams are the building blocks of the organization. The teams have a common purpose and are held accountable for measurable performance goals.

4. **Customers drive performance.** Customer satisfaction, not profits or stock appreciation, is the primary driver and measure of performance.

5. **Team performance is rewarded.** The reward system is geared toward team results, not just individual performance. Employees are rewarded for multiple skill development rather than just specialized expertise.

6. **Supplier and customer contact is maximized.** Employees are brought into direct, regular contact with suppliers and customers. Where relevant, supplier and customer representatives may be brought in as full working members of in-house teams.

7. **All employees need to be fully informed and trained.** Employees should be provided all data, not just sanitized information on a "need to know" basis. However, they also need to be trained how to analyze and use the data to make effective decisions.

Implementing such principles in the actual design of an organization is happening, but so far only on a limited basis. For example, some AT&T units are doing...
Managing Across Rather Than Up and Down

Since the turn of the century organizations’ structures have been hierarchical. (The Chinese are really given credit for inventing hierarchy in ancient times.) Under a traditional hierarchy, subordinates report to managers who, in turn, report to higher-level managers and so on up the structure. Now, there is a new organizational trend under way: the so-called horizontal organization, which does away with hierarchy and is designed around processes rather than tasks. For example, instead of bringing a new product to market by first having the people in research and development design it and then having the people in manufacturing build it, and finally having those in marketing sell it, a team of representatives from all these functions will be brought together and will work collectively and in harmony from beginning to end. Moreover, in the past many firms would build products in-house and then bring them to market in the hope that there were interested buyers. The horizontal organization sidesteps this potential huge problem by conducting marketing research and finding out the type of product customers want to see designed and built. Other characteristics of the horizontal organization include establishing close working relationships with suppliers and other outsiders, training and involving personnel in all key aspects of the project, and perhaps most important, rewarding team performance.

The horizontal organization represents the wave of the future, but there are a number of firms that are already using such an approach. For example, AT&T’s Network Systems Division has reorganized its entire business around processes and awards bonuses to employees on the basis of customer evaluations. General Electric has scrapped the vertical structure that was in place in its lighting business and replaced the design with a horizontal structure that is characterized by over 100 different processes and programs. The Government Electronics group at Motorola has redesigned its supply management organization so that it is now a process structure geared toward serving external customers. At Xerox new products are now developed through the use of multidisciplinary teams; the vertical approach that had been used over the years is now gone. Ryder Systems follows a similar pattern, repurposed by the approach it now uses in handling vehicle leasing. In the past there were fourteen to seventeen separate departments that had to sign off on documents that slowly made their way through the bureaucratic hierarchy. Now, at Ryder the entire process has been redesigned, the work flow shortened, the number of sign-offs reduced, and the time needed to lease vehicles has been cut by 33 percent.

Most firms still use a hierarchical functional approach to their organization structure. However, the horizontal organization offers so many advantages in terms of quality demands, flexibility, and responsiveness that its popularity is likely to continue, and more and more firms are going to find that their old hierarchical structures are no longer able to compete with these firms using a horizontal approach.

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budgets not based on functions, but on processes such as the maintenance of a worldwide telecommunications network. However, as discussed in the Application Example and the end of part Integrative Contemporary Case/Reading, AT&T is also rewarding its people based on customer evaluations of the teams performing these processes, and Motorola, Xerox, and Ryder, among other leading firms, are moving toward the principles of the horizontal design of organization. This is an entirely new way of organizing and may eventually replace the traditional structures.
Summary

Bureaucracy dominates classical organization theory and structure. Weber’s bureaucratic model consists of specialization, hierarchy, rules, and impersonal relationships. Weber believed that this model was an ideal organization structure that would lead to maximum efficiency. Unfortunately, it does not always turn out this way in practice. In fact, there are probably as many dysfunctions as there are functions of bureaucracy. Specialization or hierarchy can lead to organizational efficiencies, but other can provoke detrimental conflict and impede the communication process. Rules often become ends in themselves rather than means toward goal attainment, and everyone can attest to the dysfunctional consequences of the impersonal characteristic of bureaucracies. Because of these and a number of other dysfunctions, many of today’s theorists are predicting the decline and fall of the classical bureaucratic form of organization.

Decentralization, flat structures, departmentation, and staff organization have developed to extend and modify the pure bureaucratic classical principles of organization. In general, the behavioral approach is more compatible with the modified structural concepts, but the dramatic changes that have occurred in recent years have led to the search for new, alternative ways to organize.

Modern organization theory is presented from the perspective of systems, information processing, contingency, ecological, and learning approaches. Systems theory emphasizes the impact of the external environment. The information processing approach views the importance of information flows in an organization to cope with internal differentiation and external environmental uncertainty. Contingency theory gives specific attention to adapting to the environment by relating it to organization structure and design. The ecological theory assumes environmental determination; there is a natural selection and replacement of organizations. The most recent theoretical foundation for the learning organization draws upon systems theory and emphasizes the importance of not only adaptive learning but also generative learning, leading to creativity, innovation, and staying ahead of change.

Modern organization designs are a marked departure from the classical models. The more established project and matrix structures combine both hierarchical, functional elements and the newer horizontal, interfunctional dimensions. These modern designs flagrantly violate classical principles such as unity of command and equal authority and responsibility. However, to even better meet the new environment’s needs for flexibility and change are the network, virtual, and horizontal organization designs. These make a total departure from classical structures. Only time will tell whether the new structural forms are suitable replacements for the classical structure.

On the other hand, there seems little doubt that the new approaches have already proved themselves valuable enough to become a significant part of organization theory and practice.

Questions for Discussion and Review

1. What are the major characteristics of Weber’s bureaucratic model? Discuss the functions and dysfunctions of each.
2. What are the various kinds of centralization and decentralization? Which one is most relevant to organizational analysis? Why?
3. Critically analyze functional versus product (unit) departmentation.
4. Why are many companies today cutting back on their corporate staff? What will happen to the specialized functions they performed for line managers?
5. What was Chester Barnard’s contribution to organization theory?
6. How does the open-systems theory differ from the information processing, contingency, ecological, and learning approaches? How does the open-systems concept apply to organizations? How does the information processing concept apply to organizations? How does the contingency concept apply to organizations? How does the ecological concept apply to organizations? How does the learning concept apply to organizations?
7. What are two different types of project structures? How does the project manager differ from the traditional functional manager?
8. The matrix design of organization is variously said to rest on classical, behavioral, systems, information processing, and contingency bases. Explain how each of these approaches could serve as the basis for the matrix design.
9. Briefly define the network, virtual, and horizontal organization designs. How do these differ from the classical design? How do they better meet the challenges of the new environment?

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REAL CASE:
Two Out of Three “Bite the Dust”

Ten years ago, GM, IBM, and General Electric were all viewed as premier companies. In the mid-1990s only one of the three, GE, still has this reputation. What happened to the other two? Part of the answer is found in the way they structured their organization.

General Motors was once the envy of the world auto industry, with a domestic market share in excess of 50 percent. By 1993 this share had slipped to around 31 percent, while Ford’s and Chrysler’s shares were rebounding and stood at 25 and 15 percent, respectively. What went wrong? One thing was a structure that encouraged bureaucracy and failed to respond quickly to market demands. By 1993 the cost of building a car at GM was higher than that of a similar model at either Ford or Chrysler.

Recently, the head of GM, John Smith, has been trying to reduce this bureaucracy, promote teamwork, and take steps to drive down costs. Will it work? Many observers believe that if he is successful, it will be in spite of an entrenched bureaucracy that continues to drag its feet and try to do things the way they were done back in the 1970s and 1980s.

In many ways, IBM’s problems are similar to those of GM. For many years the company was simply the best computer firm in the world. However, as clones entered the marketplace during the 1980s and competitors challenged IBM’s position in every market niche from software to service, the company found itself in a structure that was unable to respond appropriately. As a result, both market share and profit margins dropped. By 1993 IBM’s profit margin was no higher than the industry average, and its costs in many areas were higher. In an effort to turn things around, the new CEO, Louis Gerstner, has set up an eleven-member executive committee to promote greater corporate cooperation and has formed a thirty-four-member worldwide management council to discuss operating results and company practices and problems. The firm is also introducing a new compensation program that rewards managers for company-wide performance rather than an individual unit’s performance. These decisions are designed to reduce the bureaucracy and create teamwork throughout the structure. If IBM can accomplish all this, it may once again be the premier firm in the industry.

In contrast to the above, GE has not suffered from an outdated structure. Under the leadership of CEO Jack Welch, the firm has carefully monitored its environment and changed accordingly. GE has continually examined its strengths and weaknesses and carefully designed a structure and strategy that have allowed it to become one of the most profitable large firms in the world. In particular, GE has focused on introducing and implementing organizational concepts that have revolutionized the firm. Some of these are as follows: (a) the number of levels in the hierarchy has been reduced; (b) there has been broadening of incentive systems to include more and more of the personnel; (c) cross-functional teams have been formed for the purpose of breaking down barriers
mensional walls and developing intracompany teamwork; (6) project teams have been used to focus on specific undertakings and ensure that they do not get lost in the shuffle; (7) GE customers and suppliers have been incorporated into the decision-making process in an effort to better serve the external market; and (8) customer service is continually monitored and the results used to make additional changes. These ideas have worked out so well for General Electric that the firm recently reported record annual revenues and profits.

1. Why do you think GE’s old bureaucratic structure is not working well? Identify and describe some of the major reasons.
2. In what way is IBM an open system? How will the company have to be restructured in order to adjust to this open system?
3. Why do you think GE’s organization design is so effective?

CASE:
The Grass Is Greener—or Is It?

Alice Jenkins had been a supervisor of caseworkers in the county social services department for nine years. The bureaucratic procedures and regulations became so frustrating that she finally decided to look for a job in private industry. She had an excellent education and employment record and soon landed a supervisory position in the production end of a large insurance firm. After a few weeks on her new job she was having coffee with one of the supervisors of another department. She said, “I just can’t win for losing. I quit my job with the county because I was being strangled by red tape. I thought I could escape that by coming to work in private industry. Now I find out that it is even worse. I was under the illusion that private industry did not have the bureaucratic problems that we had in social services. Where can I go to escape these insane rules and the impersonal treatment?”

1. Is Alice just a chronic complainer, or do you think her former job was as intolerable as her present job, as she indicates? Do you think Alice is typical of most employees in similar types of positions?
2. How would you answer Alice’s last question? Can you give an example of a large organization that you are familiar with that is not highly bureaucratized? Does the county social services department or the insurance company have to be bureaucratized?
3. Can the concepts of decentralization, flat structures, departmentation, and staff be used in a social services department or in the clerical area of a large insurance company? Give some examples if possible.

CASE:
The Outdated Structure

Jake Harvey has a position on the corporate planning staff of a large company in a high-technology industry. Although he has spent most of his time on long-range, strategic planning for the company, he has been appointed to a task force to reorganize the company. The president and board of directors are concerned that they are losing their competitive position in the industry because of an outdated organization structure. Being a planning expert, Jake convinced the task force that they should proceed by first determining exactly what type of structure they have now, then determining what type of environment the company faces now and in the future, and then designing the organization structure accordingly. In the first phase they discovered that the organization is currently structured along classical bureaucratic lines. In the second phase they found
2. What Is Organization Development?

Richard Beckhard*

Definition. Organization development is an effort (1) planned, (2) organizationwide, and (3) managed from the top, to (4) increase organization effectiveness and health through (5) planned interventions in the organization’s processes,” using behavioral-science knowledge.

1. It is a planned change effort.

An OD program involves a systematic diagnosis of the organization, the development of a strategic plan for improvement, and the mobilization of resources to carry out the effort.

2. It involves the total “system.”

An organization-development effort is related to a total organization change such a change in the culture or the reward systems or the total managerial strategy. There may be tactical efforts which work with subparts of the organization but the “system” to be changed is a total, relatively autonomous organization. This is not necessarily a total corporation, or an entire government, but refers to a system which is relatively free to determine its own plans and future within very general constraints from the environment.

3. It is managed from the top.

In an organization-development effort, the top management of the system has a personal investment in the program and its outcomes. They actively participate in the management of the effort. This does not mean they must participate in the same activities as others, but it does mean that they must have both knowledge and commitment to the goals of the program and must actively support the methods used to achieve the goals.

4. It is designed to increase organization effectiveness and health.

To understand the goals of organization development, it is necessary to have some picture of what an “ideal” effective, healthy organization would look like. What would its characteristics? Numbers of writers and practitioners in the field have proposed definitions which, although they differ in detail, indicate a strong consensus of what a healthy operating organization is. Let me start with my own definition. An effective organization is one in which:

a. The total organization, the significant subparts, and individuals, manage their work against goals and plans for achievement of these goals.

b. Form follows function (the problem, or task, or project, determines how the human resources are organized).

c. Decisions are made by and near the sources of information regardless of where these sources are located on the organization chart.

d. The reward system is such that managers and supervisors are rewarded (and punished) comparably for:

   Short-term profit or production performance.

   Growth and development of their subordinates.

   Creating a viable working group.

   Communication laterally and vertically is relatively undistorted. People are generally open and confrontive. They share all the relevant facts including feelings.

   There is a minimum amount of inappropriate win/lose activities between individuals and groups. Constant effort exists at all levels to treat conflict and conflict situations as problems subject to problem-solving methods.

There is high "conflict" (clash of ideas) about tasks and projects, and relatively little energy spent in clashing over interpersonal difficulties because they have been generally worked through.

The organization and its parts see themselves as interacting with each other and with a larger environment. The organization is an "open system."

There is a shared value, and management strategy to support it, of trying to help each person (or unit) in the organization maintain his (or its) integrity and uniqueness in an interdependent environment.

The organization and its members operate in an "action-research" way. General practice is to build in feedback mechanisms so that individuals and groups can learn from their own experience.

Another definition is found in John Gardner's set of rules for an effective organization. He describes an effective organization as one which is self-renewing and then lists the rules:

The first rule is that the organization must have an effective program for the recruitment and development of talent.

The second rule for the organization capable of continuous renewal is that it must be a hospitable environment for the individual.

The third rule is that the organization must have built-in provisions for self-criticism.

The fourth rule is that there must be fluidity in the internal structure.

The fifth rule is that the organization must have some means of combating the process by which men become prisoners of their procedures.1

Edgar Schein defines organization effectiveness in relation to what he calls "the adaptive coping cycle," that is, an organization that can effectively adapt and cope with the changes in its environment. Specifically, he says:

The sequence of activities or processes which begins with some change in the internal or external environment and ends with a more adaptive, dynamic equilibrium for dealing with the change is the organization's "adaptive coping cycle." If we identify the various stages or processes of this cycle, we shall also be able to identify the points where organizations typically may fail to cope adequately and where, therefore, con-

The organization conditions necessary for effective coping, according to Schein, are:

1. The ability to take in and communicate information reliably and validly.
2. Internal flexibility and creativity to make the changes which are demanded by the information obtained (including structural flexibility).
3. Integration and commitment to the goals of the organization from which comes the willingness to change.
4. An internal climate of support and freedom from threat, since being threatened undermines good communication, reduces flexibility, and stimulates self-protection rather than concern for the total system.

Miles et al. (1966) define the healthy organization in three broad areas—those concerned with task accomplishment, those concerned with internal integration, and those involving mutual adaptation of the organization and its environment. The following dimensional conditions are listed for each area:

In the task-accomplishment area, a healthy organization would be one with (1) reasonably clear, accepted, achievable, and appropriate goals; (2) relatively understood communications flow; (3) optimal power equalization.

In the area of internal integration, a healthy organization would be one with (4) resource utilization and individuals' good fit between personal disposition and role demands; (5) a reasonable degree of cohesiveness and "organization identity," clear and attractive enough so that persons feel actively connected to it; (6) high morale. In order to have growth and active changefulness, a healthy organization would be one with innovativeness, autonomy, adaptability, and problem-solving adequacy.2

Lou Morse, in his recent thesis on organization development, writes that:

The commonality of goals are cooperative group relations, continual integration, and commitment to the


goals of the organization (task accomplishment), creativity, authentic behavior, freedom from threat, full utilization of a person's capabilities, and organizational flexibility. 4

5. Organization development achieves its goals through planned interventions using behavioral science knowledge.

A strategy is developed of intervening or moving into the existing organization and helping it, in effect, "stop the music," examine its present ways of working, norms, and values, and look at alternative ways of working, or relating, or re-arranging . . . The interventions used draw on the knowledge and technology of the behavioral sciences about such processes as individual motivation, power, communications, perception, cultural norms, problem-solving, goal-setting, interpersonal relationships, intergroup relationships, and conflict management.

SOME OPERATIONAL GOALS IN AN ORGANIZATION-DEVELOPMENT EFFORT

To move toward the kind of organization conditions described in the above definitions, OD efforts usually have some of the following operational goals:

1. To develop a self-renewing, viable system that can organize in a variety of ways depending on tasks. This means systematic efforts to change and loosen up the way the organization operates, so that it organizes differently depending on the nature of the task. There is movement toward a concept of "form follows function," rather than that tasks must fit into existing structures.

2. To optimize the effectiveness of both the stable (the basic organization chart) and the temporary systems (the many projects, committees, etc., through which much of the organization's work is accomplished) by built-in continuous improvement mechanisms. This means the introduction of procedures for analyzing work tasks and resource distribution, and for building in continuous "feedback" regarding the way a system or subsystem is operating.

3. To move toward high collaboration and low competition between interdependent units. One of the major obstacles to effective organizations is the amount of dysfunctional energy spent in inappropriate competition—energy that is not therefore, available for the accomplishment of tasks. If all of the energy that is used by, let's say, manufacturing people deciding or wanting to "help those sales people," or vice versa, were available to improve organization output, productivity would increase tremendously.

4. To create conditions where conflict is brought out and managed. One of the fundamental problems in unhealthy (or less than healthy) organizations is the amount of energy that is dysfunctionally used trying to work around, or avoid, or cover up, conflicts which are inevitable in a complex organization. The goal is to move the organization toward seeing conflict as an inevitable condition and as problems that need to be worked on before adequate decisions can be made.

5. To reach the point where decisions are made on the basis of information sources rather than organizational role. This means the need to move toward a norm of the authority of knowledge as well as the authority of role. It does not mean that decisions should be moved down in the organization; it means that the organization manager should determine which is the best source of information (for combination of source of information to work a particular problem, and it is there that the decision making should be located.
Chapter 1

Introduction to Customer-Driven Project Management

Focus: This chapter describes why the customer-driven project management approach is needed today. It also outlines the customer-driven project management approach.

Introduction

An organization cannot survive and prosper in today's world without customers. Customers allow an organization to exist. Many modern organizations have lost sight of this fundamental principle. This failure to meet customer needs and expectations has contributed to the United States' lack of competitiveness in the global economy. In many cases, U.S. industry is providing the wrong product and services for domestic and global markets because these organizations have taken the customer out of design and development activities. Such organizations focus on pushing the product or service onto the customer, rather than on the customer pulling a product or service out of the organization. This is particularly true of organizations that provide a product or service as a result of project management efforts.

Many project management organizations have not developed an ability to respond rapidly to changing customer needs and expectations. Many excellent organizations have perfected the ability to "lock in" on specifications and produce a product within schedule and budget yet they have not developed the ability to listen to their customers. They seek to define the customers' project requirements rather than determining customers' needs and expectations. Project managers need to unlock in too early on the specifications. This frequently results in an isolation from the customer, with the ultimate
Today's world demands change

Adopting today's economic world with an eye on the future requires an organization to be fully responsive to customers. Specifically, the successful organization will be the one that can change to apply the new paradigms for prosperity in today's global environment. Table 1.2 lists the required changes.

Continuous improvement of processes, people, and products is essential. This is because all businesses need to continuously improve their operations and processes to remain competitive in today's fast-paced environment.

Table 1.2: The World Demands Change

<table>
<thead>
<tr>
<th>From</th>
<th>To</th>
</tr>
</thead>
<tbody>
<tr>
<td>Functional organization</td>
<td>Customer-driven organization</td>
</tr>
<tr>
<td>Sequential design and production</td>
<td>Concurrent design and production</td>
</tr>
<tr>
<td>Inspection of defects</td>
<td>Prevention of defects</td>
</tr>
<tr>
<td>Quality and inspection</td>
<td>Quality and process</td>
</tr>
<tr>
<td>Acceptance criteria</td>
<td>Business processes</td>
</tr>
<tr>
<td>Business management</td>
<td>Innovation</td>
</tr>
<tr>
<td>Bureaucracy</td>
<td>No bureaucracy</td>
</tr>
<tr>
<td>More hierarchical layers</td>
<td>Few hierarchical layers</td>
</tr>
<tr>
<td>Complex</td>
<td>Simple</td>
</tr>
<tr>
<td>Individual performance</td>
<td>Team performance</td>
</tr>
<tr>
<td>People-oriented, controlled, illuminated</td>
<td>People-oriented, flexible, empowered</td>
</tr>
<tr>
<td>Leading only at the top</td>
<td>Leadership everywhere</td>
</tr>
<tr>
<td>Short-term objectives</td>
<td>Long-term vision</td>
</tr>
</tbody>
</table>

Customer-driven projects often become a reality when the management team is focused on the customer and the organization's processes. The team must be able to continuously improve the organization's processes to remain competitive in today's global market.
and creating new ones are critical for future survival. Economic considerations dictate not only what is available but also what is possible and best able to respond rapidly to customers' changing demands. Higher structures must enable fast enough to keep pace with a turbulent marketplace, whereas an organization with only a few layers has the "lean and mean" structure needed to contend in today's world. Customers will no longer accept the cost of the huge waste created by large bureaucratic organizations. Organizations must be flexible to the absolute core, with decentralization of empowerment to the people closest to the customer and the process. The organizational structure of an achieving organization has fewer managers.

Collaboration among governments, industries, companies, organizations, teams, and individuals is essential for survival. Comparing
among government, industry, labor, and education is critical in a high-growth, high-wage economy. In addition, management and labor
must learn to cooperate for a prosperous economy. Further, departments and functional organizations must break down barriers to optimize organizational productivity. Also, individuals need to work together in teams to respond rapidly to customers. In addition, organizations must develop supplier partnerships and customer relationships. All competitive efforts aim at winning solutions instead of the win-lose situation fostered by competition. Only through cooperative relationships can global success be realized.

Teams, especially teams, are the organizational structures of choice. Although individuality is important, teams multiply the capabilities of each team member. In today's complex workplace, teams are the only structure capable of providing the high level of performance, flexibility, and adaptability necessary to respond rapidly to customers and to provide deliverables that delight them.

People are the most important, flexible, and versatile resource capable of adding customer value to a product or service. Empowered people are the only resource with the ability to respond quickly to customers by optimizing the output of a process based on a thorough analysis of the customer requirements and the process. Therefore, specializing or eliminating people greatly reduces an organization's ability to keep or gain customers, and that significantly decreases its chances for survival. People are the most important resource for gaining an advantage over competition. To optimize this essential resource, forward-thinking organizations must strive to provide a high-quality work environment where both the people and the organization's needs are satisfied while striving to delight customers.

Strong leadership at the top and at all levels is needed, instead of strong management. Guiding people to achieve a common goal is the future of improved performance in any organization. Strong management is still required to ensure that a project is completed as required, but leadership is essential to maximize the human potential to care about and satisfy customers. Managers simply ordering accomplishments will not make an excellent organization. Leadership involves the sustained, active, hands-on participation of all leaders, continuously setting the example, coaching, training, mentoring, and facilitating empowered people.

A long-term view needs to replace the emphasis on short-term results. Frequently, the emphasis on a short-term outcome has a long-term consequence. For example, the turnover of an organization by another may bring short-term financial rewards. In the long term, the turnover can result in many people losing their jobs. In another case, a short-term focus on stock can cause an organization to reduce investment in capital equipment and/or training of its people, possibly having an adverse effect on the long-term survival of the business.

The viewpoint of the organization must be targeted on the long-term future to stay in business. The advanced organization has a vision for the future with a strategic plan for achieving that vision.

The reward and recognition system must shift from individual merit to team-performance systems. A team-performance reward and recognition system provides the incentives for optimizing the results of teamwork to accomplish a mission. The team-performance system should credit the individual's contributions to the success of the team while at the same time providing a reward for effective teamwork. All reward and recognition systems should be given to each individual team member wanting to contribute to the best of his or her abilities for the ultimate successful outcome of the team.

An education and training investment for everyone in the organization is critical. The conversion of any organization using a continuous improvement system to perseverance is significant in today's environment. People must be improved continually through education and training, with an eye toward the future. High-growth labor markets demand people with specific higher-level education and skills. These conditions require organizations to adopt a viewpoint that people truly make the difference in the competitive world economic environment, and such organizations must make an investment to create a lifelong learning system.

Customer satisfaction through its processes and deliverables must drive an organization. A focus on profit as the primary purpose of an organization is obsolete. As shown in Fig. 11, the successful organization that drives to meet customer expectations through continuous improvement of its processes, people, and products focusing on total...
prises an approach to confront these challenges today and in the future.

Today's world

Today's world is radically different from that of the recent past. It is a new environment where old solutions no longer work. The "same old way" simply does not bring about the necessary results. Technology is not the panacea it once was. Changing consumer expectations demand a change in the way we think about the world to achieve success.

Some of the major considerations in today's world compared with yesterday's issues are shown in Table 1. These conditions require a demand for change.

There are many players in the competitive global economy. Japan has replaced the United States as the new world economic leader. In addition, there are many more formidable players. This fresh competitive playing field requires managers to re-examine their management philosophies, principles, methods, and techniques to fit into a management system that allows everyone to work smarter to improve rapidly to satisfy customers.

Radical change is the way of the world. Both business and service offerings are being redefined. Customer service is more important than ever. Customer satisfaction is the basis for all competing organizations. The organizations that can answer customers' needs and desires will succeed in this new environment of radical competition.

Unpredictability is now always a concern. With a rapidly changing world order, certainty can no longer be taken for granted. No organization is safe from some sort of distress. External factors affecting the organization are progressively out of control. The organization's managers are constantly requiring updating to optimize productivity, quality, and costs. New or improved products and services are perpetually being introduced. Stronger competition is increasingly the norm.

In addition, customer needs are continuously changing. Continuous vigilance of all factors affecting the organization, the product/service, the competition, and customers is a necessity.

Economic pressures are a fact. They make it necessary to cut costs and budget a factor today and tomorrow. Lowest possible cost is the aim of all internal processes. It is no longer good enough to strive for reasonable cost. Everyone has the same technological advantages to make use of economics of scale, automation, and other production and service techniques to reduce costs. Customer satisfaction and profits in today's world depend on providing a product and/or service at the optimal, lowest-possible cost.

In addition, economic pressure makes optimizing budgets an everyday reality. Currently, budgets are shrinking in most organizations, causing a reassessment of priorities to stress more than ever "more for the buck." Economic pressures will continue to dominate choices and decisions in public and private organizations. This demand for increasing value for less cost will continue into the next century.

Rapidly changing technology makes stability impossible. Falling to keep pace with the latest technology can bring destruction within a short period of time. Many products today have a short life cycle. The impact of new technology, especially in information processing and communications, may determine supremacy.

Conservation of limited resources is a necessity. Global competition for scarce resources will only increase in the new global marketplace. The need to protect and preserve the environment is a waste of resources. With many nations competing for few resources, coupled with concern for the environment, waste and loss are everyone's enemies. Organizations must learn new techniques of quality, productivity, and project delivery, focusing on elimination of variation to optimize all resources.

Reasonable production times no longer meet customers' needs. Accelerated production times are essential in many industries. The organization first to the marketplace is usually the winner. In today's world, speed is a competitive advantage.

Customer-driven quality is critical to long-term growth. Since customers define quality by their satisfaction, the supplier forcing a deliverable on a customer does not foster customer satisfaction. Customer satisfaction pulls quality from the supplier. Today, the customer's or consumer's voice must bear every aspect of the deliverable. This is the only way to ensure quality.
planning, controlling, and delivering successful deliverables. The target is to gain and keep customers for the long-term prosperity of the organization. Customer-driven project management applies in any activity where:

- A project deliverable can be defined.
- A customer or customer's voice can be identified.

In CDPM, a project deliverable includes any product, service, or combination provided to a specified customer to satisfy a particular need at a certain time. Projects include three kinds of planned, short- term activities: (1) those producing complex technical products, capital, or information systems requiring traditional project management approaches; (2) those producing quality improvements of any kind from teamwork, and (3) those resulting from natural work teams. In any of these project categories, the approaches and techniques described here will be useful. One of the cultural benefits of broaching this definition is that it introduces project management technique to a whole universe of users than in the past, building on its wide application in engineering and construction firms performing contract work.

Customer-driven project management works for large and small businesses, manufacturing and service industries, and public and private organizations.

Why Customer-Driven Project Management?

Customer-driven project management expands both project management and total quality management approaches to meet the challenges of the global economic environment. Customer-driven project management provides a management approach adaptable to the new world of rapid change, rising complexity, and rapid competition. Today, political, technological, social, and economic changes are swift. In the short period since the end of the 1980s, the world has been turned around. For instance, the former USSR empire has crumbled. The Berlin wall has been torn down. Japan has become the world's number one economic power. The United States is just one of many players in the global marketplace. The technological advances, especially in computers and telecommunications, have brought about a rising complexity in the processes used to perform our work. Competition on a global scale is a fact of life. Everyone is competing for the new global markets. With competition fierce in all aspects—technology, cost, product quality, and service quality—new approaches must be sought in order to be competitive and share...
and creating new uses are critical for future survival. Economic considerations drive the making of what already is available. Such an approach targets innovative enhancements of existing systems and deliverables as a major method of satisfying requirements.

Flexible organizational structures with few layers as possible are best able to respond rapidly to customers' changing demands. Rigid structures cannot react fast enough to keep pace with a formidable competition, whereas an organization with only a few layers has the "team and team" structure needed in today's world. Customers will no longer remain the usual end of the value chain created by large bureaucratic organizations. Organizations must be known to be open to the absolute care, with decentralization and empowerment to the people closest to the customer and the processes. The organizational structure of an achieving organization has fewer managers.

Cooperation among peers, units, industries, competition, organizations, teams, and individuals is essential for survival. Cooperation among government, industry, labor, and education is critical to a high-growth, high-wage economy. In addition, management and labor must learn to cooperate for a prosperous economy. Further, departments and functional organizations must break down barriers to optimize organizational productivity. Also, individuals need to work together as teams to respond rapidly to customers. In addition, organizations must develop supplier partnerships and customer solutions.

All cooperative efforts aim at solving solutions instead of the win-lose situation fostered by competition. Only through cooperative relationships can global success be realized.

Groups, especially teams, are the organizational structure of choice. Although individualism is important, teams multiply the capabilities of each team member. In today's complex workplace, teams are the only structure capable of providing the high level of performance, flexibility, and adaptability necessary to respond rapidly to customers and to provide deliverables that delight them.

People are the most important, flexible, and versatile resource capable of adding customer value in a product or service. Empowered people are the only resource with the ability to respond quickly to customers by optimizing the output of a process based on a thorough analysis of the customer requirements and the process. Therefore, specialized in researching people greatly enhances an organization's ability to keep customers, and not significantly decrease its chances by rewards. People are the most important resource for gaining an advantage over competition. To optimize this essential resource, forward-thinking organizations must strive to provide a high-quality work environment where both the people and the work

Strong leadership at the top and at all levels is needed, instead of strong management. Guiding people to achieve a common goal is the focus of improved performance in any organization. Strong management is still required to ensure that a project is completed as required, but leadership is essential to maximize the human potential to care about and satisfy customers. Managers simply ordering accomplishment will not make an excellent organization. Leadership involves the sustained, active, hands-on participation of all leaders, continuously setting the example, coaching, training, mentoring, and facilitating empowered people.

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An educational and training investment for everyone in the organization must be the cornerstone of any organization using a continuous improvement system to survive in today's environment. People must be improved continuously through education and training, with an eye toward the future. High-growth labor markets demand people with specific higher-level education and skills. These conditions require organizations to adopt a viewpoint that people truly make the difference in the competitive world economic environment, and such organizations must make an investment to create a lifelong learning system.

Customer satisfaction through its processes and deliverables must drive an organization. A focus on profit as the primary purpose of an organization is obsolete. As shown in Fig. 1.1, the successful organization strives to meet customer expectations through continuous improvement of its processes, people, and products focusing on total
Customer-driven project management focuses on the future. Although every organization is unique, there are certain objectives, strategies, tactics, and operations that will work for organizations striving for a vision of the future. Figure 1.2 shows the vision, overall mission, objectives, strategy, tactics, and operations necessary for any organization to prosper today with a view toward the future.

The vision is always aimed toward excellence. The objective is total customer satisfaction, both internal and external. This means meeting or exceeding customer expectations, and requires establishing and maintaining a customer-driven organizational culture focused on adding whatever it takes to add value for the customer. Creating a customer-driven organizational culture requires vision and the leadership to make that vision a reality; involvement of everyone and everything in a systems approach; continuous improvement of people, processes, and products; training and education for everyone; ownership with empowerment; an appropriate reward and recognition system; and years of commitment and support—all aimed at total customer satisfaction.

![Diagram of customer expectations, success, and best practices]

This promotes one of the best business practices, which leads to excellent business systems and provides total customer satisfaction. The chain reaction starts with the customer expectations, and total customer satisfaction is the focus of all efforts. The result is a successful organization. The specific definition of success varies by organization, but this is the vision. It can mean survival or growth, profits, returns on investment, and stockholder dividends. The view of total customer satisfaction applies to both external and internal customers. The entire organization must be aligned at satisfying the ultimate user of the product or service. Within the organization, each process feeds the next process in the chain. Everyone works with an internal supplier and customer relationship to improve the process for total customer satisfaction of both internal and external customers.
Customer Driven Project Management

Customer driven project management (CDPM) provides a flexible and responsive management approach that is able to react to the ever-changing needs of today's dynamic marketplace. This customer-driven approach focuses on an organization's internal and external environments in order to improve quality, increase productivity, and reduce costs to satisfy its customers. It is centered on customer satisfaction through the highest possible delivery, while maintaining service at the lowest life-cycle costs to remain competitive in the global environment. Customer-driven project management streamlines unneeded training and education, tightens and streamlines businesses, and lowers the cost of product and service delivery.

Customer driven project management lowers the cost of product and service delivery. The human resource is the most significant resource in a business. Customer driven project management involves the adoption of the latest technologies and people to achieve a competitive advantage. Customer driven project management is a management approach for today and tomorrow.

Customer driven project management background

Full exploitation of the concept of customer-driven project management requires an understanding of what has happened over the years to change some of the traditional theories of management, the classic management. Customer driven project management borrowed heavily from a diverse set of many "old school" management, quality, and project management concepts.

Historically, management concepts have focused on the functions of organizational control, including planning, organizing, staffing, directing, leading, structuring, coordinating, budgeting, evaluating, inspecting, and reporting. These concepts were derived primarily from industrial and corporate firms. However, many other organizations were influenced by these theories, including government and nonprofit organizations. This has led to the wide acceptance of these management principles.

The logic of these principles was that managers were paid to exercise control over the organization's resources, including people, to ensure that they met the objectives of management. Scientific principles such as unity of command, uniformity, centralization, delegation, discipline, and work flow were emphasized. This scientific approach to management was derived and promoted during the early twentieth century by Frederick Taylor, Henry Ford, and Max Weber to support the concept of efficiency and control. Production was more important than people, and people were "divided" into job functions. The management of things was the emphasis. In this environment, people were specialized or eliminated. The production output was the major focus. Project management grew out of this kind of thinking.

Then the psychologists, including Elisear Giletnith, following the famous of the industrial revolution, began to focus on the human element in the workplace. They concluded that it was not the monotony of the work that caused employee dissatisfaction, but rather management's lack of interest in the workers. Then Elie May (1927) defined the organization as a social system and concluded that work groups determined attitudes and behaviors, not top management, and that productivity was directly related to employee satisfaction and particularly to the amount of attention paid to employees (the "Mayo effect"). Many others then tried to integrate the productivity and the human elements, including Peter Drucker (1954) through management by objectives and Blaha and Mouton (1968) through the managerial grid. Douglas MacGregor (1960) defined theory X managers as authoritarian who believed that people are inherently lazy and do not want to perform and theory Y managers as nurturant, who believe that people are reasonably responsible and capable of exercising initiative and making worthwhile contributions. Other behavioralists worked to explain motivation in the workplace.

At this management approach transformed from the turn of the century, quality technologies began to evolve after World War II. The concepts that were to emerge into total quality management began...
with the statistical quality concepts of Dr. Walter Shewhart, as published in 1931 in his book, "Economic Control of Quality of Manufactured Products." His statistical approach to quality control laid the foundation for the total quality management approach. This approach was refined by many practitioners during World War II to improve the quality and productivity of America's war products.

This quality approach has evolved continually in today's total quality management concept. Total quality management (TQM) includes a wide range of management practices, methods, tools, and techniques. Since TQM is a collection of the best of many disciplines focusing on the actions required to achieve and promote in the environment of global competition, there are many contributors. Some of the major contributors include W. Edwards Deming, Joseph M. Juran, Armand V. Feigenbaum, Kano Taiichi, Uenichi Toguchi, Philip B. Crosby, Peter Drucker, Tom Peters, H. James Harrington, A. Richard Shen, and many others in organizations such as the U.S. Department of Defense.

The total quality management approach proved to meet the needs of today's global environment, the result of world economics since World War II. After World War II, in a United States-dominated industrial world that had little competition from foreign manufacturers and service providers, quality was not seen as very important. Everything that was made was sold, almost regardless of quality, since the United States was in most cases the only producer. Quality in the post-World War II years continued to be a "second-class citizen." First priority was placed on quantity and production—getting the products out the door. Companies employed inspectors at the end of the process to find defects and rework them.

Then in Japan, in the 1950s, W. Edwards Deming introduced the Japanese to his 14 "points," including use of statistical techniques, measurement, continuous improvement, leadership, elimination of fear as a motivator, and the development of leadership. Deming revealed that the cost of poor quality was a lower market share and lower profitability and higher cost inventories.

J. M. Juran published his "Quality Control Handbook," which outlined the application of scientific statistical control to business practices. The message was that our organizations were saddling people in command and control systems and that the workers did not feel empowered to think and act on the basis of their insights about how business was practiced and continue to serve. From these early teachings

During the late 1970s and early 1980s, the threat of competition forced some U.S. organizations to look for ways to improve their quality in order to be competitive. Many organizations in the United States turned to the original quality masters who helped Japan. In addition, they adopted ideas from many new experts. Tom Peters, Robert Waterman, Jr., and Philip Crosby were influential during this early period of the rebirth of American quality. Tom Peters and Robert Waterman, Jr., provided many ideas about the elements of success of the top companies in the United States in their book, "In Search of Excellence" (1982). Philip Crosby's zero defects program was implemented in many organizations.

As the 1980s progressed, many organizations developed their own management approaches based on previous concepts to meet their particular needs. These approaches have been consolidated under total quality management. The key significance of TQM is that it emphasizes customer satisfaction, continuous improvement, measurement, and employee involvement.

To turn to project management, its early history involves major systems and capital investments. Project management approaches became essential for certain activities in the United States after World War II. Project management originated to manage large, complex projects. The foundation of modern project management can be traced to the Manhattan Project. This project focused attention on the development of project management approaches that are continually being refined today.

Project management became necessary because traditional organizations structured around functional activities, such as engineering, manufacturing, sales, finance, and human resources, could not meet the demands of building an aircraft, developing a computer system, constructing a building, or producing other complex projects. Three types of projects required optimizing and integrating all the functions of the project. From its beginnings in mostly government and construction work, project management moved toward consumer products as well as one-time systems requiring a high degree of technical capability, such as computer systems. As technology increased, became the limits for economic development, project management became the dominant mode of organization in technology-oriented organizations for producing complex deliverables. This led to the establishment of a Project Management Institute to establish professional standards.

Project management techniques and processes are, to one degree or another, applicable in any organization faced with the need to ensure reliable scheduling, budgeting, and quality of measurable outputs.
Chapter One

Introduction to Customer-Driven Project Management

Figure 1.2 Linking TQM with project management.

Isfy the customer. It builds a "project learning" process that emphasizes developing the job efficiently and effectively, and it ensures the life span of the customer. This results in a system that optimizes resources and saves hundreds of public and private dollars in producing products and services that add value to the economy.

Definition of customer-driven project management:

Customer-driven project management is a management philosophy, a set of guiding principles, a methodology, and a set of tools and techniques that drive customer-driven deliverables, including products and services. It focuses on the performance and improvement of a project and the design and delivery of a product or service. It applies the driven techniques of project management, continuous improvement, measurement, people involvement, technology. It integrates project management, total quality management, and a customer-driven approach.
Customer-driven project management (CDPM) is a methodology that is entered into jointly by customers (whether inside or outside the organization) and project management suppliers. Customer-driven project management determines which projects to undertake in order to maximize customer satisfaction. It then breaks down projects through concept, definition, production, operations, and closeout using proven project management and total quality management tools and techniques within a customer-driven structure. CDPM is a process that is wholly driven by the customer of every turn and which places the customer in the role of project leader from start to finish.

The essence of CDPM is that quality is defined by the customer's total satisfaction. This simple and succinct definition of quality forms and shapes both the way projects are chosen and the way projects are implemented. Quality is defined in CDPM through a process that is controlled by the customer (either inside or outside the organization), who selects, plans, designs, and implements projects with the help of the CDPM team. The CDPM team is often a combination of several organizations. The essence of CDPM is an enhancement of the project management concept because it offers a new way of ensuring that the project is delivered in a quality deliverable. This occurs because the customer's drive pulls the deliverable from the supplier's organization through a quality-improvement process. In addition, the process through which a deliverable is actually produced—the customer-driven project management process—is itself named and improved continuously as the project progresses through its life cycle.

Customer-driven project management involves the following:

1. The project is determined by cooperation between customer and suppliers through a structural process.
2. The customer drives the project through customer-driven teams.
3. Customer-driven teams link the customer, process owners, and suppliers. Teams consist of the customer or customer's voice as a leader, a project facilitator, a program manager, process owners, and suppliers as appropriate.
4. Customer-driven teams are fully empowered to perform and improve the project.
5. A disciplined, customer-driven project management methodology is used.

Customer-driven means the customer as customer demands the focus of all efforts, providing the consistency of purpose vital to success.

Project is any series of activities that has a specific end or objective. Almost all activities in an organization can be defined in terms of a project.

Management involves optimizing resources, that is, getting the most out of both technology and people. The target is on managing the project and leading the people to a deliverable that achieves total customer satisfaction.

Customer-driven project management philosophy:

The customer-driven management philosophy requires a fundamental belief in the customer as the focus of all efforts in an organization. It requires a confidence in the development of a joint understanding of the customer needs and expectations along with internal processes of the supplier's organization. The philosophy stresses a systematic, integrated, consistent, disciplined approach involving customers, process owners, and suppliers through the whole phases of the project. Telecommunications and information systems make possible this integration. Terms must be the organizational structure of choice, with the customer as team leader. The discipline must empower each team to "own" its project to continuously improve it. The philosophy must stress metrics as the means to focus attention on meaningful outcomes for the customer. There must be a basic belief in cooperation as the primary means to success. Also, rewards and recognition must be acknowledged as essential elements. In addition, there must be a belief that designing in quality and long-term prevention is important. Relationships are vital. Involvement of everyone and everything needed in the project in a focused effort is essential. Vision and leadership are predominant values. Further, creativity and innovation must be encouraged. The intense desire of everyone in the organization to nurture supplier partnerships and customer relationships is a critical point of view. This philosophy must be adopted by everyone and require a passionate, dedicated, hard-working team to be successful.

Customer-driven project management principles:

The customer-driven project management principles are the essential rules required for success. Customer-driven project management requires the creation and maintenance of an environment of integrity, ethics, trust, open communications, teamwork, empowerment, and growth.
Chapter One

1. The role of the initial concept phase. The typical concept phase in current project management process involves assessment of the customer's needs and project objectives and development of a scope of work, resource needs, and other project details. In \textit{CQPM}, the concept phase is based on a quality-improvement process that goes through four defined steps of quality improvement before identifying the project:

2. a. Definition of the customer's quality issue.
3. b. Understanding and definition of the key process involved and its steps.
4. c. Identification and selection of key improvement opportunities.
5. d. Analysis of improvement opportunities to identify root causes and set priorities.

This is the way the project is selected in \textit{CQPM}. This team is initially early to go the full cycle from quality (customer) analysis to project development in project management.

4. The boundaries of team empowerment. Project teams are organized around work packages or tasks, and each team member is made accountable for a separate work package. The boundary of empowerment is basically set at the work-package level, and the evaluation of performance is typically on the basis of the quality, cost, and schedule of the work-package output produced. Integration of the work packages is assumed to occur in the development of the end deliverable. In \textit{CQPM}, each team member is fully empowered to contribute beyond the work-package level, to participate in broader decisions about the customer's needs and the progress of the project. Each team member has unlimited access to the customer through
The customer-driven project management process involves the following:

- A total quality management environment
- A project management system
- A customer-driven management team structure

The total quality management environment, project management system, and the customer-driven management team structure are integrated to form the customer-driven project management process.

The elements of the customer-driven project management are shown in Figure 14. First, the customer-driven project management process begins with the creation and maintenance of a total quality management system. An environment in which the entire organization is driven by its customer's needs is an objective to create total customer satisfaction. The customer-driven project management process involves the use of a project management system. The project management system provides a set of processes and the support system for controlling, planning, implementing, and evaluating a project throughout the entire project life cycle.

The second part of the customer-driven project management process connects the establishment of a customer-driven project management system to the project. This structure provides the framework for the customer to drive the project. It also links the project supplier and customer through customer-driven teams. Further, it integrates all the processes needed in the project supplier's organization to bring the project to a common focus.

![Customer-Driven Project Management](image-url)
Chapter One

The customer-driven project management life cycle

Customer-driven project management begins with a customer's expectations for a deliverable product and/or service. And a supplier's willingness to provide that deliverable. The life cycle continues as long as the customer drives. Customer-driven project management follows the typical project management life cycle of concept, definition, production, operations, continuous improvement, and eventually closure. The customer-driven project management cycle is shown in Fig. 1.5. The cycle includes concept, definition, production, operations, and continuous improvement. With customer-driven project management, the project starts with concept, the analysis part of the concept stage. It can continue indefinitely as long as the customer and supplier choose. This is the improvement part. The cycle may repeat indefinitely until eventually the project must be closed out. In customer-driven project management, the aim is to avoid closure as long as possible through continuous improvement. In fact, the original project may evolve many times, with the deliverable constantly changing to respond to the customer.

The customer-driven project management improvement methodology

The customer-driven project management improvement methodology is the disciplined, structured process for ensuring that a deliverable totally satisfies the customer. The customer-driven project management improvement methodology contains eight steps, as shown on the perimeter circle of Fig. 1.5. The eight steps are as follows:

1. Define the quality issue. This first step defines the customer needs to drive the team to meet its needs and produces a statement of the ultimate customer requirements. In this initial step, the customer defines the role of customer-driven project leader. The customer's role requires a shared focus of the outcome of the project between supplier and customer. This vision transcends the individual interests of both organizations involved. Under this system, the customer advises the team to become the leader of the customer-driven team. The customer-driven team is made up of a project team facilitator and team members. The team members are process owners, the program manager, functional representatives, and suppliers, as appropriate. The team members represent the supplier of the deliverable. The team output for this step is a project mission statement.

2. Understand and define the process. This step defines the impact of the customer-driven process. It focuses on defining continuous improvement opportunities. It identifies and documents opportunities for mutual benefit to both supplier and customer. This phase is designed to outline the basic project concept. It helps to justify the team's full view of all the processes involved in the project. The team's output for this step is improvement opportunities.
Step 3: Select improvement opportunities. During this step, the team selects high priority improvement opportunities. These improvement opportunities enhance the project’s performance to meet the customer’s needs and expectations. This step involves identifying and prioritizing the critical project processes and the enhancements that will make the project deliverables meet the customer’s needs. The team’s output from this step is a list of critical improvement opportunities.

Step 4: Analyze the improvement opportunities. In this step, the team examines the project processes to enhance the project’s performance. The project processes are analyzed by identifying the root causes of quality issues, determining the vital few causes, and looking for variation in the process. This is a diagnostic step, involving collecting, sorting, and examining information about the processes. The team asks “why” and then asks “why” again and again until it gets to the fundamental cause of the project’s performance in an optimal way. The team’s output from this step is the project objectives.

Step 5: Take action. This step delivers the project’s deliverables more closely to the traditional project management phases of concept, definition, and production. During this phase, actions are taken to explore alternatives, select the project concept, define the project deliverables, and identify the project deliverables. During this phase, the team identifies process improvement actions and produces the project deliverables. The team’s output from this step is the project deliverables for testing.

Step 6: Check results. This is the test and measure step, the team measures the project and the project processes. The performance of the project processes and the project deliverables is evaluated based on the metrics of customer satisfaction. The customer-driven project team’s output from this step is a validated project deliverable with a validated project process.

Step 7: Implement the improvement. Once the project and project process has been proven to be effective, the team ensures that the project deliverables and project deliverables are made a permanent part of the system.

Step 8: Monitor results for continuous improvement. The customer-driven team stays in business over several cycles of the target process to monitor performance, address unanticipated quality and productivity problems, and work for continuous improvement. This phase assumes a long-term relationship between customers and project management. Eventually, the project may be closed out.

Main Point:
Customer-driven project management borrows from a diverse set of many management, quality, and project management concepts.

Traditional management principles come from scientific and human relations theorists.

Quality management has its roots in many quality and productivity techniques developed in the United States during World War II.

The early quality management techniques emphasized statistics.

Quality-thinking concepts of continuous improvement, people involvement, measurement, and customer satisfaction evolved into today’s total quality management approaches.

Project management originated as a method to manage large, complex programs.

Typical project management focuses on completing a project on or before schedule, within cost, and at the specified level of quality.

Project management aims at a project that has a definite completion date.

Project management relies on resources on an as-needed basis.

Customer-driven project management is a management approach that stresses customer satisfaction as a primary driver.

Customer-driven project management uses an eight-step process while applying both project management and total quality management tools and techniques.

Customer-driven project management addresses both the performance and improvement of the project.

Customer-driven project management involves the following:
1. The project is determined by cooperation between customers and suppliers through a structured process.
2. The customer drives the project through customer-driven teams.
3. Customer-driven teams link the customer, process owner, and supplier. Team consists of the customer as the customer's voice.
Chapter 8

As leader, project facilitator, program manager, process owner, and supplier as appropriate.

4. Customer-driven teams are fully empowered to perform and improve the project.

5. A disciplined customer-driven project management methodology is needed.

The customer-driven project management philosophy is summarized as follows:

- Customers are the focus of all efforts.
- Understanding the customer and all processes is a must.
- System approach must be pursued.
- Teams are the organizational structure of choice.
- Ownership with empowerment is essential.
- Results must be used to gain attention.
- Encouragement of teams and individuals helps cooperation.
- Reward and recognition are keys to success.
- Designed in quality and prevention are important.
- Relationships are vital.
- Involvement of everyone and everything is critical.
- Focus on leadership is needed values.
- Encouragement of creativity and innovation is necessary.
- Packaging of outputs and customers is desired.

6. The principles of customer-driven project management are:

- Provide a “TQM” environment for project performance.
- Reward and recognize appropriate performance.
- Critical success factors and improvements.
- Join all key players on the team.
- Enforce cooperation and teamwork.
- Create and maintain a continuous improvement system.
- Train and educate everyone.
- Make the customer the driver.
- Act to ensure that everyone can perform and improve.
- Nurture supplier and customer relationships.
- Act to set the example.
- Get everyone focused on prevention.
- Emphasize quality in design.
- Measure processes meaningfully.
- Prevent the potential life cycle cost.

- Nurture leadership at all levels.
- Team the complete project.

Customer-driven project management is unique in the following areas:

- Projects are selected through a structured, cooperative process.
- The customer is the driver-leader of the project team.
- A quality analysis focusing on customer satisfaction is performed during the concept phase.
- Customer-driven teams are fully empowered to perform and improve the project to satisfy customers.
- The customer-driven project manager’s main role is as leader.
- Customer-driven project management stresses continuous improvement of the project and the deliverable.

The customer-driven project management process involves the following:

- Total quality management environment.
- Project management system.
- Customer-driven project management.

The customer-driven project management lifecycle includes:

- Concept.
- Definition.
- Production.
- Operations.
- Continuous improvement/cycles.

The customer-driven project management improvement methodology consists of the following eight steps:

1. Define quality issues.
2. Understand the process.
3. Select improvement opportunities.
4. Analyze the improvement opportunities.
5. Take action.
6. Check results.
7. Implement the improvement.
8. Measure the results for continuous improvement.
What OD Practitioners Believe

By Donald F. Van Emden, Allan Church, Robert F. Hurley, and W. Warner Burke

Some of us who work in organizational development sense that the values are changing. You can plot this evolution by comparing the OD values during its early development, in the late 1950s and early 1960s, with the OD values of today.

Traditionally, OD values have reflected three concepts—humanistic and organizational effectiveness. Efforts were made to humanize the workplace. OD practitioners sought to improve people’s quality of life in the workplace. And they sought to increase sensitivity to the social side of the sociotechnical concepts of organizations.

Organizational effectiveness is still important, but the emphasis has shifted from humanistic and organizational effectiveness to social values. OD practitioners are now working to improve people’s quality of life in the workplace. And they are focusing on the social side of the sociotechnical concepts of organizations.

The role of OD is changing as well. OD practitioners are now working to improve people’s quality of life in the workplace. And they are focusing on the social side of the sociotechnical concepts of organizations.

In order to find out what OD professionals believe, we surveyed 1000 experienced OD practitioners, including external and internal consultants. The survey was designed to determine what values are important to the field, and what values will shape the future of OD work.
The questionnaire was mailed to each of the 40 OD practitioners who run their own practices and who are members of the OD Network. The response rate was 39 percent overall, 35 percent from the OD Network, and 24 percent from ATO.

Question 1: What attracted you to OD?

Many of the respondents indicated that they were attracted by a desire to create change, have a positive effect on people, and enhance the effectiveness and productivity of organizations. This question was answered by all respondents.

Question 2: What values are associated with OD work today?

The respondents indicated that values such as effectiveness, productivity, open communication, and employee empowerment were important to them. This question was answered by all respondents.

Question 3: What values should be associated with future OD work?

The respondents indicated that values such as effectiveness, productivity, open communication, and employee empowerment were important to them. This question was answered by all respondents.

Overall findings

The respondents indicated that values such as effectiveness, productivity, and employee empowerment were important to them in the future. This question was answered by all respondents.
Looking at the value ratings, we discover the top five values that reflect the greatest disparity between what respondents believe motivate OD practitioners today and what we believe should motivate them.

The five values that rated high on Question 3 but low on Question 2 are as follows:

1. Promoting inquiry and continuous learning
2. Protecting the natural environment
3. Transferring OD skills and technologies to clients
4. Fostering corporate citizenship
5. Promoting concern for human dignity

The ratings of difference scores in this case, show that these values are seen as important, but not as predominant motivating factors for OD work at present. They may be weaker needs or desired values.

For example, the findings suggest that, ideally, the value, “promoting inquiry and continuous learning,” is important. But it doesn’t appear to be a prevailing motivation in OD work today. That also appears to be true of the value, “transferring OD skills and technologies to clients.” The value, “protecting the natural environment,” “fostering corporate citizenship,” and “promoting concern for human dignity,” also garnered high difference scores. Those ratings suggest that OD practitioners in general may feel there should be more emphasis on facing an organization’s responsibility for how employees and outside stakeholders are treated—should be, not is.

In addition to the shift in values from process to performance, there appears to be a shift from traditional performance values to more broadly defined ones, such as social accountability and citizenship. In other words, performance may no longer mean just financial performance.

What does it all mean?
A 39 percent survey-response rate may not be sufficient to make generalizations about all, or even most, OD practitioners. We have to wonder whether the practitioners who responded to the questionnaire are representative of the other 71 percent of our target group.

The demographic data indicate that the respondent group closely approximates the general population of OD practitioners. But the practitioners who responded may be the ones who adhere to more traditional OD values. Such practitioners might tend to be more willing to serve the field by answering the questionnaire.

Perhaps the other 71 percent didn’t answer the questionnaire because they’re not as humanitarian. Maybe they’re more representative of OD today. We can’t know for certain.

But we can interpret and speculate about our findings from those who did respond. Their responses suggest a disparity between what OD practitioners believe should ideally motivate their work and what they believe actually does motivate it. At the very least, that’s clearly the case among the survey respondents.

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For example, effectiveness and productivity are linked among the five most important values.

The findings suggest a gap in the OD field between what is and what should be. Possibly, OD has added in its missionary zeal a bottom-line pragmatism—born of increasing competitiveness, increasing pressure to demonstration results, and a rejection of being viewed by some as irrelevant. (See Daily Human Resource Management and Overcome Problems.

OD may be struggling to become "more relevant." As Dick Buckhout has said, "In other words, OD practitioners may be working to make significant improvements in organizational effectiveness, productivity, and profitability, but they may also seek to improve the quality of working life for employees.”

In the early days, we tended to believe that OD practitioners were in convincing managers that human factors are important to an organization's overall effectiveness. Linking OD interventions with competitiveness and profitability was almost taken as selling out—some thought it compromised our professional integrity.

Also, some early OD practitioners may have cared little about an organization's well-being. As long as they thought they were helping the employees, they failed to recognize the connection between humanization of the workplace and organizational effectiveness.

In their defense, there was no empirical evidence at the time to support the belief in a relationship between humanization and the bottom line. Today, growing evidence supports the link.

The challenge to OD is to find ways to be effective in satisfying many diverse values—such as enhancing performance, initiating more humane organizational processes, and advocating social and environmental values. Those are admirable ambitions. They may seem too ambitious to OD practitioners who just want to survive another day of change and pressure. But let us remember the OD founders. Their vision and sense of purpose imbued them with energy and resilience. And isn't that what it takes to accomplish any goal?

Donald Van Syden is an associate professor in the department of business administration at Trinity University in San Antonio, Texas. Allen Church is a doctoral candidate and Warner Burke is a professor of psychology and education, also at Teachers College, Columbia University, New York. Robert Wurty is a principal of W. Warner Burke Associates, 101 Wolfe Lane, Yonkers, NY 10603.

The study described here resulted from the American Society for Training and Development's 1990-1991 research grant for organization development.
Rebuilding Behavioral Context: Turn Process Reengineering into People Rejuvenation

Christopher A. Bartlett • Sumantra Ghosal

WHY ARE SOME COMPANIES ABLE TO REMAIN VITAL, EVEN AFTER EXTENSIVE REENGINEERING, WHILE OTHERS FLounder AND FAIL? THE ANSWER, ACCORDING TO THESE AUTHORS, LIES IN A COMPANY’S ABILITY TO REJUVENATE ITS EMPLOYEES BY ESTABLISHING A BEHAVIORAL CONTEXT WITH FOUR CHARACTERISTICS—DISCIPLINE, SUPPORT, TRUST, AND STRETCH. THE AUTHORS trace PPG industrial history to IDENTIFY THE PERNICIOUS QUALITIES THAT HAVE OUSTED MANY COMPANIES, USING THE EXAMPLE OF WESTINGHOUSE TO ILLUSTRATE AN OPPRESSIVE CONTEXT BASED ON THE ELEMENTS OF COMPLIANCE, CONTROL, CONSTRAINT, AND CONSTRAINTS. THEY ALSO SHOW HOW COMPANIES LIKE INTEL AND 3M HAVE BEEN ABLE TO RENEW THEMSELVES BY CREATING AN ENVIRONMENT IN WHICH PEOPLE ARE THE MOST IMPORTANT RESOURCE.

AFTER THE SLASH-AND-BURN ORGANIZATIONAL RESTRUCTURING OF THE PAST DECADE, ONE THING IS BECOMING INCREASINGLY CLEAR TO MANAGERS: IF A COMPANY IS TO PROSPER BEYOND THE SHRINKING SPIRAL OF DOWNSCALING AND RATIONALIZATION, IT MUST DEVELOP THE ABILITY TO CONTINUE SELF-RENEWAL. ITS REAL BATTLE LIES NOT IN REENGINEERING THE STRATEGY, RESTRUCTURING THE ORGANIZATION, OR REVAMPING THE SYSTEMS, BUT IN CHANGING INDIVIDUAL ORGANIZATION MEMBERS' BEHAVIOR AND ACTIONS. A SELF-RENEWING ORGANIZATION CAN BE BUILT ONLY ON THE FOUNDATION OF PEOPLE WHO ARE WILLING TO TAKE PERSONAL INITIATIVE AND TO COOPERATE WITH ONE ANOTHER. THOSE WHO ARE PROFICIENT IN A COMPLEX SET OF BEHAVIORS AND ACTIONS CAN BE ABLE TO MANAGE RELATIVELY ROUTINE TASKS WITH THE SAME PROFICIENCY AS THEY ARE WILLING TO LEARN NEW SKILLS AND WORK TO TAKE THE COMPANY TO THE NEXT STAGE OF ITS DEVELOPMENT.

What is not clear to many managers is whether it is possible to accomplish such behaviors in large global firms. Based on our recent research in twenty European, U.S., and Japanese companies, we believe that the answer is an unambiguous "yes." A number of companies we studied demonstrated an ability to shape and protect the required behavioral contexts for pro-active, proactive, and proactive leaders to work together. We have found that the key to success is the ability to adapt to changing circumstances and environments, while maintaining a strong sense of purpose, direction, and vision. Through a self-renewing approach, Intel has managed not only to survive in one of the most dynamic industries but also to thrive and grow.
...industries, but also to emerge as its leading

The company has mastered the prerequisite

ability to manage externally compressed product life cy-

cles. At the same time, it has shown remarkable agility

in navigating the semiconductor industry's many struc-

tural discontinuities brought about by intense competi-

tive pressure, the rapidly changing buyer structure in

the computer industry, technological revolutions, and con-

tinuous shifting industry alliances and coalitions. In the pro-

cess, it has evolved from a technology-driven memories

maker to a technology- and manufacturing-dominated

company, where manufacturing and now is becoming a func-

tionally balanced systems company.

What IBM and Intel and several other self-renewing

companies we studied, such as Kao Corporation, Catering,

and Consulting, and IKEA, have in common is a

sustainedly nurtured, deeply embedded corporate work ethic

that orients the individual-level behaviors of entrepreneur-

ship, collaboration, and learning that are the foundation

of organizational renewal. It is a subtle, complex charac-

teristic that we call the behavioral context. Difficult to

define and even more difficult to develop, it is neverthe-

less something easy to sense and experience; one man-

ager described it as the “smell of the place” manifested in

innumerable small details of how a company functions. It is

as pervasive and influential as climate — just as one can be

energized by the fresh, crisp air at a mountain resort in

spring, so too can the behavioral context of a company

provide people with a source of stimulation.

Unfortunately, over time, many large companies have

created a context more akin to the polluted, oppressive

environment of the inner city in mid-summer, sapping

and energy and creating conditions for apathy. The

challenges for managers of these companies, to quote one

of our interviewees, is “to throw a baseball through the

window to let in the life-giving fresh air.”

Pathologies of the Inherited Context

For years, Westinghouse has been a classic example of a

company in which employees were trapped in an oppres-
sive behavioral context from which they could not escape.

During the past decade or so, Westinghouse top manage-

ment has declared victory in its battle for strategic and

organizational renewal on at least three occasions, each
time to stumble and begin the process all over again.

After a massive restructuring spanning the entire second

half of the 1970s, then-CEO Robert Kirby announced

in 1979 that to the company’s history of “unpleasant

November and December surprises,” and the beginning of

an era of uninterrupted growth. By 1983, however, the

company’s financial results had sharply deteriorated, lead-

ing to another round of rationalization together with

many “Japanese-style initiatives” for continuous produc-
tivity improvement. By 1987, as returns on equity topped

20 percent, resembling that of arch-rival General Electric,

then-CEO Douglas Dominiannounced Westinghouse’s

entry into “the winner's circle” — one of the few elite cor-

porations with a reputation for consistently superior fi-
nancial performance and managerial excellence.

And even after setbacks in 1988, new CEO John Manous

announced his vision of turning Westinghouse “from a

good-corporation it is today to a great corporation,” trig-

gering a fresh round of radical change. By 1989, with
double-digit sales growth and a net profit of nearly a bil-

lion dollars, Manous’s vision appeared close at hand amid

external acclaim that the company had achieved “respect,

at last.” By 1991, however, even after announcing CEO Paul

Logo took over, an embarrassing mess at Westinghouse

Credit plunged the company into a 1992 loss position of

$1.7 billion and marked its stock down to half the level of

two years earlier. Unable to ride out the storm of criticism,
in mid-1993, Logo was replaced by Michael Jordan who

once again announced “a new beginning.”

Westinghouse is not an isolated example. After an orgy

of “transformation programs” in the 1980s, many large

corporations are waking up in the 1990s with little to show

for it except a massive hangover. In the United States,

corporations like Digital Equipment Corporation, Sears, and

Eastman Kodak have struggled for years to reverse their

fortunes despite their inspiring visions, dramatic restruct-

uring, and leveraged incentives. In Europe, once revered

names like Daimler-Benz, Bull, and Olivetti have made

headlines as examples of problems rather than role mo-

del. Even much admired Japanese companies like Mazda,

Yamaha, and Matsushita have attracted similar unwel-

come notoriety in their highly publicized but apparently

ineffective efforts to renew themselves.

The roots of such corporate woe lies in the behav-

ioral context: these companies have institutionalized in

their organizations. Nurtured by the persistence of

ment of seemingly boundless opportunities, companies

pursued aggressive diversification strategies, supporting

The challenge for managers of these companies is “to throw a

baseball through the window to let in the life-giving fresh air.”
Compliance

The first element of the traditional company’s managerial context is what we term ‘compliance’ — an important, even cultural characteristic in the post-war years when many companies diversified their activities into scores of inviting opportunities. As they began their rapid expansion into a diverse range of new businesses and markets, most found an urgent need to have widely dispersed employees complying with common policies and uniform practices in order to prevent powerful centrifugal forces from pulling their organizations apart. The classic military model of the authority that dominated the formal relationships between managers ensured that those deep in the organization would follow the leader’s direction.

But while this widespread contextual norm ensured unity of action at a time when top management’s challenge was to choose among competing opportunities, it was pathological form, it developed inflexible procedures and authoritarian intolerance of dissent that inhibited challenge of entrenched policies and shut down meaningful debate on top-down directives.

Ultimately, it was not the policies themselves but the effects they had on people’s day-to-day behaviors that made it so difficult for these companies to sense early warning signals and correct problems before they became disasters. One of the most devastating public charges leveled against Westinghouse CEO Paul Lego was that “there was no one to challenge him.” Although, for years, many in the company apparently could see the impending collapse at Westinghouse Credit (“Even the guys in the mailroom were saying that there would be a write-off,” said one former executive), Lego apparently remained unaware of the severity of the mounting problems. In a culture in which authority and order quashed dissent, top management was completely isolated from day-to-day operations. This tradition, built into the behavioral context of the 1970s, continued into the 1990s with massive unanticipated losses in financial services followed by major unforecasted problems in environmental services.

Control

The second common characteristic of the managerial context in large modern corporations is control — again, an organizational characteristic that allowed companies to expand operations rapidly yet efficiently in an earlier era. This deeply rooted norm that characterized strict hierarchical relationships was greatly strengthened with the introduction of the divisional organization structure. Corporate executives were willing to delegate substantial responsibility to a new level of general managers only if they had the mechanisms to hold them accountable. Strongly influenced by powerful corporate staffs, most companies developed sophisticated corporate-driven processes based on capital planning and operational budgeting systems to establish top-down control throughout their organizations.

While such systems proved highly effective in allocating funds and driving ongoing performance, they eventually contributed to a deterioration in interpersonal relationships. The objective-setting and forecasting processes often degenerated into a game-playing exercise between executives, and the monitoring activity frequently became an excuse for an increasingly powerful corporate financial controller to intervene in the operations of front-line managers.

In a management group dominated by engineers and accountants, the reliance on financial data has become a central characteristic of Westinghouse’s management style. The principle of tight control...
control was firmly reasserted after a decade-long experiment with free management created a serious performance decline in the mid-1970s. But the shorter, tighter leash placed on employees led to constant complaints about the nagging in the planning and budgeting processes. This highly sophisticated system was based on company-imposed estimates of capital costs and cash flows that became an endgame source of debate, and many felt the system was driving them to achieve short-term results at the expense of long-term business development. About the only topic on which there seemed to be general agreement was that the tightly administered processes were consuming an enormous amount of management time and energy.

Caste
In the traditional large-organization model, another strong influence on attitudes and behavior was the contractual nature of the relationship between the corporation and its employees. This characteristic was born of legalistic biases that became greatly strengthened by two more recent organizational trends: the highly incentive-leveraged compensation systems that reinforced the notion of a financial relationship between the company and its employees, and the massive restructuring, rationalization, and redundancy programs that underlined the fact that this relationship could be terminated at any time.

While the implicit or explicit contract between employee and employer initially served to define expectations and give the relationship clarity and stability, it eventually led to a formalization and depersonalization of how individuals felt about their companies. As widening compensation differences fostered resentment and increasing terminations bred fear, people began to distance themselves emotionally from an entity they felt had betrayed them. More and more, they felt like employees of an economic entity, and less and less like members of a social institution.

The familial relationship that once dominated the Westinghouse culture began eroding in the 1970s when CEO Robert Kirby resolved to revive the company’s sagging fortunes with massive layoffs and divestitures that cut the total work force by 30 percent in three years. However, more than the layoffs per se, what deserved any sense of familial loyalty at Westinghouse was how the layoffs were implemented. Any notion of an emotional relationship between the company and its people was firmly disputed by Kirby’s statement that he would fire his own mother if she were one of those producing the expected results. Twenty years later, a never-ending series of layoffs and divestitures reduced the work force from 200,000 in 1974 to 34,000 in 1994, and had long since eroded the once strong sense of company pride and loyalty.

Constraint
The other dominant characteristic common to the behavioral context of many modern corporations is its attribution of constraint. As companies expanded and diversified, top management found it increasingly important to develop clear, focused definitions of corporate strategy to provide the boundaries in which their subsidiaries could operate. Particularly in an environment in which opportunities for expansion exceeded most companies’ ability to finance them, such constraint was helpful in preventing diversification from dissipating resources and becoming unmanageable.

Eventually, however, as companies elaborated broad strategic objectives through detailed strategic plans and translated them into specific portfolio rules for different businesses, the constraints became confinements and the boundaries became barriers. Managers of businesses classified as mature began to think of themselves as mature.

The implicit or explicit contract between employee and employer eventually led to a formalization and depersonalization of how individuals felt about their companies.

...
cess. For example, because of Vabstrak, Westinghouse backed away from several tempting but overpriced acquisitions and avoided a number of risky contracts in the environmental cleanup business that later crippled some of its less disciplined competitors. Ultimately, however, top management's blind faith in Vabstrak deprived the business units of all flexibility and creativity. It reshaped behavior, both within individual businesses and across them, as each of the thirty-seven SBU's focused on its own business, attempting to maximize its own return on allocated equity. Vabstrak also reshaped the frontline managers' relationships with top management. It gave top managers the data to decide whether to continue to invest or to sell off the business. As they made seventy divestitures between 1983 and 1987 alone, the message to the organization was clear: deliver current performance or your unit will be sold.

When Michael Jordan replaced Paul Lego as CEO in mid-1985, he identified not only the massive challenges in reviving the company's sagging performance and restructuring its damaged strategic portfolio, but also the huge task of transforming an internal management culture that he described as "a throwback to the 1950s." Although a flint-based culture was ideal in the postwar era when a company's opportunities exceeded its ability to fund them, in an environment in which innovation, responsiveness, flexibility, and learning had become vital sources of competitive advantage, a management context driven by complacency, control, contract, and constraint became more a liability than an asset.

The Context for Renewal

The portrait we have drawn of the large corporation in the mid-1990s is not flattering one and, in some cases, it is one that we hope there are only a few companies in which all four elements of the management context have determined to the degree we have described; there are equally few that have emerged untroubled by any trace of such pathologies.

This historically evolved behavioral context has proven to be so debilitating because, as all four core characteristics arerophied, they drove management to become passive, compliant, and focused inward—capable of their glorious past, rather than explorers of a brave new future. The only enduring antidote to the pervasive disease of corporate sclerosis is to build a behavioral context that drives a company toward continuous self-renewal rather than a focus on refining existing capabilities and defending current positions.

To develop the kind of management understanding, belief, and commitment that drives the incessant need for renewal, companies have to build a very different behavioral context than the norms of compliance, control, contract, and constraint that hobbled Westinghouse and so many other large organizations. As we examined the management processes at 3M, Intel, E. I. Du Pont de Nemours, and other companies, we identified four common characteristics of their behavioral context—discipline, support, trust, and stretch (see Figure 2).

Discipline

In traditional organizations, management assumed that desired behavior could be induced largely through the formal reporting relationships of the structural hierarchy and the policies and procedures meant to reinforce them. Compliance to authority, or the rules that supported it, was a necessary requirement of overall cohesion in the system. A management context shaped by discipline, on the other hand, does not rely on authority relationships or management policies—either exclusively or even primarily—as the means for influencing individual behavior. Rather, self-discipline becomes integrated into the flow of the company's ongoing activities and is reflected in every aspect of corporate daily life. In disciplined organizations, people do more than follow directives and conform to policies; they also return phone calls promptly, arrive on time, refrain from questioning in the corridors decisions made in the conference room, and, above all, deliver on promises and commitments.

Discipline is an organizational characteristic evident to anyone attending a meeting at Intel. Every meeting has an agenda and closes with a decision, action plan, and deadline. Such a disciplined approach, however, does not imply that decisions are not made or discussion discouraged. But once an issue has been fully aired, decisions must be made, the company's stated philosophy is that people are expected to "agree or disagree, but commit."
In a culture based on discipline rather than compliance, individual behavior tends to be embedded — built from the bottom up rather than imposed or driven from the top down. In other words, discipline encourages all employees to strive voluntarily to meet and exceed their own commitments.

The indoctrination process at Andersen Consulting exemplifies the process of embedding discipline in individual behavior. As an organization that grew from a highly respected accounting and auditing partnership, the consulting firm inherited much of its parent’s obsession with quality, accuracy, and thoroughness. Its highly disciplined approach was built on careful socialization of all employees, principally through intensive education about the company. The first session in more than 1,000 hours of training during the new recruit’s first five weeks on the job is a six-week program that graduates compare to marine boot camp rather than to an executive education course. Eight-hour days, demanding assignments, and a strict dress code all create a norm of discipline and provide training in new analytic techniques. Although competitors publicly berate the “Andersen Androids,” there is a trace of envy in how they talk about the uniformly high standards of these individuals.

Discipline encourages all employees to strive voluntarily to meet and exceed their own commitments.

Coming is another company whose top management has been successful in shifting from a compliance mode to a self-discipline mode. In 1987, when he became CEO of the hundred-year-old glass company, Jamie Houghton inherited a demoralized company in the midst of a major recession. In an internal environment that the press likened to a country club, managers failed to meet the corporate budget for six consecutive years, despite the multiple demands created by the complex matrix structure and tight formal systems.

Rather than installing more compliance-driven systems and policies, Houghton focused on creating an internal culture that encourages managers to take more responsibility for their own performances. After shifting attention from the big top-down “do as we say” rules and profit budgets to more broadly defined incentive targets in both operating margins and return on assets, he challenged managers to develop and commit to their own budgets. To build self-discipline, Houghton would simply walk out on presentations when managers were unable to define exactly how they would meet their targets, and he refused to consider bonuses or promotions for those who did not deliver on promised performance.

In a couple of years, after what one manager described as “an almost Japanese retrenchment in getting people to agree and commit,” the organization clearly exhibited a new sense of self-confidence and self-respect. More important, as far as Houghton was concerned, it started routinely delivering on the ambitious targets it had set for itself.

Support

In most traditional organizations, the relationship between boss and subordinate is characterized by top-down control, a linkage almost guaranteeing that communication channels are dominated by formal reporting systems. In companies that have successfully institutionalized a renewal process, however, managers have rejected the assumption that the natural corollary of delegation is control. Instead, they view the appropriate complement as better defined through a relationship characterized by coaching, helping, and guiding.

At Andersen Consulting, for example, the partners see their primary role as strengthening the firm for those who follow them. This well-accepted value, which they call “trusteeship,” is evident in the commitment partners make to the development and support of the firm’s associates. When recruited into the firm, each new employee is assigned a counseling partner who accepts responsibility for meeting with the new member every six months to discuss performance, career interests, and developmental needs. In addition, project managers give associates feedback and support, evaluating their specific project performance every three months and coaching them during the project. Through such activities, Andersen guides its operations while simultaneously developing its capabilities.

But the context of support applies to more than just the vertical relationships traditionally dominated by control. It also frames the horizontal linkages among peers — relationships that became characterized more by cooperation and collaboration than by the competition and contention that often develops across organizational boundaries in companies with strong systems-dominated cultures.

Such horizontal relationships are clearly evident at Corning, where the company’s technology-based organization created a long tradition of team-based management, as did its substantial experience with joint ventures.
and alliance partners. When Houghton became CEO, he further underscored the importance of working in positive and intensive collegial relationships, preferring to manage key issues through teams and groups rather than by reconfiguring formal structure. He created a six-person management committee (immediately dubbed "the six-pack") that not only became the key top-level decision-making body but also became the role model for collaboration. Eventually, Houghton decided that such mutually supportive activity needed to be formally recognized in how people thought about the organization. He began to describe it as an egalitarian network operating as a mutually dependent family, as opposed to the more traditional paternalistic authority-driven hierarchy. It was an organizational model in which support clearly replaced control as a dominant element of the behavioral context.

A context of support tends to become a pervasive concept in self-renewing companies, mainly because it is built on layers of individual behavior and cultural norms rather than being superimposed through systems and reporting relationships, as control usually is. In the end, support becomes a central part of the ongoing management process; at Intel, the whole system is based on the notion that ideas develop at the front lines and form into championed proposals that bubble up through the organization, gathering both support and opposition. The Intel norm of commenting on a course of action only after the proposal has survived the aggressively challenging "constructive confrontation" process means that management can commit the organization's unreserved support, knowing that the decision is safeguarded by support from below rather than control from above. Such commitments may involve massive commitments of human and financial resources: the cost of R&D for a new generation of chips has ballooned to $5 billion, for example, and a new fabrication facility costs a further $1 billion. But Andrew Grove is confident that Intel's internal process of building support through challenges and only then the organizational knowledge but also makes the necessary commitment to the project vital to successful implementation.

Trust. The relationship between a company and its employees is defined by a mixture of determinist contract-like agreements — both explicit and implicit — as well as by a more organic family-like emotional bonding. While the former brings clarity and precision to the execution of objectives, the latter contributes a sense of commitment and dedication to pursuing the company's broader purposes. Historically, companies have drifted toward the contractual end of the spectrum, not only in defining the employee-employer relationship but also in interpreting linkages among organizational units, as departments negotiated with each other on price and delivery times and divisions contracted with their business units on sales objectives and profit targets. In the process, individuals and organizational units were motivated to protect their self-interests and maximize their side of the contract, with the typical net result being an increase in adversarial relationships and an erosion of mutual commitment.

In contrast, most companies that have been able to continually renew themselves have avoided the development of impersonal, distant relationships by building an element best described as trust into their management context. This is the characteristic of an organization that leads people to rely on each other's judgments and depend on each other's commitments.

Trust is most easily recognized in transparent, open management processes that give employees equity and involvement. At Kao, employees' access to information and decision-making is particularly striking, reflecting Chairman Yoshio Maru's belief in equality and commitment to continuous learning. Computer terminals throughout the company allow any employee access to the company's massive information system. "They can even check up on the president's expense account," said a beaming Maru. He is convinced that the increased creativity and more informed decision making stimulated by such access far outweigh the risk of confidentiality leaks.

Trust is also reflected in and reinforced by a sense of fairness in organizational processes and management practices. Although allocating partners' compensation is often a thorny issue in professional firms, particularly when the contributions to a worldwide profit pool vary widely, the smoothly operating process at Andersen Consulting is built on the strong trust that partners have developed in the overall system. A partner's fraction of the pool is derived from the number of "units" he or she is awarded, based on other partners' evaluation of quantifiable dimensions such as business generated or studies directed and on qualitative criteria such as practice leadership, associate development, and teamwork contributions.
trust is perhaps the most vital component of a management context for renewal because it is essential for risk taking.

In a company in which people feel stretched, they are constantly encouraged to see themselves and the organization not in terms of its past or present constraints, but in terms of its future possibilities. Kaos’s self-image focuses much more on its commitment to being a superior learning organization than on precisely defining the boundaries of the soap and detergent industry segments in which it competes. Its Buddhist-based organizational philosophy also focuses management on how the company can best serve society by applying innovative technology to create true consumer value. Driven by this challenging but unscrutinized sense of purpose, the organization seeks to have had little difficulty in seeing how its technological capability in fats, fine powders, and liquid crystal simulants, combined with its expertise in selling branded package products, could lead them from detergents into cosmetics.

A stretch environment, corporate leaders are willing to make substantial commitments to small resources and build capabilities ahead of clear opportunities. By creating a form of "supply-side economics," they build tension that is resolved only by creating new opportunities to meet the developed competencies and committed investments.

Andersen Consulting routinely uses this approach to help it "stay ahead of the commoditization envelope," as management puts it. In the 1980s, the young firm invested in building its own computer to develop internal expertise in automated payroll and compensated accounting. Andersen continued to use this approach, and, since the late 1980s, it has been making substantial investments to drive it into the emerging practice of business integration — a field that builds on its leading position in information systems consulting by linking more closely with business strategy and organizational change management. The firm has developed two new Centers of Excellence for Change Management and Strategic Services and hired and trained hundreds of new consultants very different from the traditional operations- and technology-oriented IS specialists. This major commitment has caused some internal stresses and strains, but, according to the firm’s partners, it is precisely the kind of change engine Andersen needs to keep growing and evolving.
assumptions and beliefs that companies develop about the nature of their industry and their place in it. It fight
the development of conventional wisdom and institutionalized versions of the assumptions of a static industry
environment or the durability of a strategy, replacing such comforting beliefs with scenarios of discontinuity
and norms of dynamic adaptation.

This energizing nervousness has long provided the intellect and emotional background for decision mak-
ing at Intel. Since the company’s earliest days, it has as-
sumed that it was constantly “on the brink of disaster,”
as cofounder Gordon Moore put it. He preached that
major breaktroughs simply provided breathing space
for the next frantic round of development in a business
where a new generation chip with four times the capac-
ty of its predecessor would replace it in three years.
Because he preached his message so convincingly — and
because it turned out to be so accurate — it became
known as Intel’s Moore’s Law and provided for a culture
that shunned complacency and rejected incremental-
ism. Reinforced by the practice of “buying options”
and by setting up competing teams for development
projects, these values led each new development to start
fresh with the explicit objective of making the designers’
latest achievements obsolete before anyone else did.

The resulting stretch, along with discipline, support,
and trust, provides the framework in which employees
are trained. Yet these four elements of the renewing com-
pany’s management context are far from independent and
far from static. Indeed, their interaction, the whole
organizational dynamic of self-renewal is created, an
issue on which we now focus.

Framing New Individual Behaviors

The power of this very different managerial context
comes from the internal tensions among the four foun-
dation characteristics. People seem to operate in an envi-
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ment that is, on one hand, highly disciplined and de-
manding, yet, on the other, trusting and secure — when
expectations are stretching and ambitious, yet within a
supportive, nurturing setting. And in the resolution of
these complementary yet often contradictory forces, the
organization develops the energy and direction to drive
its dynamic renewal process.

In the end, therefore, the power of the behavioral
context lies in its impact on the behavior of individual
organization members (see Figure 3):

• The ability and willingness of people to take initia-
tive is rooted in the tension between stretch and discipline;
the former is the source of energy and the latter converts
that energy into tangible and timebound action. Stretch
without discipline leads to daydreaming, while disci-
pline without stretch locks the company into an ever-
narrowing spiral of refining existing operations without
the courage to make any creative leaps.

• Similarly, the combination of trust and support motiv-
ates cooperation and collaboration. Trust makes cooper-
ation desirable; support enables individuals to convert
their desire into action. Each is a necessary element in the
organizational glue, but only in combination do they cre-
ate a sufficient condition for integrating the disparate ac-
tions of dispersed people.

• Beyond initiative and cooperation, renewal also re-
quires some other behaviors — openness to learning,
the courage of confidence, the willingness to commit, and
the ability to execute. The same four attributes of con-
text, in different combinations, provide the enabling con-
ditions for each behavior.

To illustrate how a broad organizational context can
create and sustain the individual behaviors that are the
foundation of continuous renewal, we use the example
of a small team in 3M’s optical systems business. The
team’s creation of a highly successful computer privacy
screen shows the ways the induced organizational value
and management processes influenced individual behav-
ior. (For a brief description of how the attributes of dis-
cipline, support, trust, and stretch have been embedded
at 3M, see the sidebar.)

In 1985, Andy Wong became lab manager of 3M’s
Optical Systems (OS) business unit, and four years later,
he was promoted to head of the young operation. During
the next few years, he assembled a team, focused on
finding the applications and developing the capabilities
to turn the struggling unit around, and eventually brought
a successful new product to market.

Wong found the initial challenge of building a team
difficult because the OS unit had generated losses and
was uncompetitive despite its decade-long attempts to
As one of the world’s most consistently innovative companies, 3M has been able to take the confluence of its mature industrial base and constantly renew itself by introducing such diverse products as lasers imaging equipment, Scotch-free acrylate pads, thousands of drug-delivery systems, and more.

The unique work environment required to create and sustain the energy, creativity, and determination that results in such an enviable capability has been carefully built and nurtured over many years. Much of it is rooted in values and practices laid down decades ago by William McKnight, the company’s strategic planner, and CEO from 1925 to 1966.

But even today provides a classic example of a management context for self-renewal. The 3M Foundation is a deeply embedded belief in and commitment to entrepreneurship that provides the basis of an organizational environment that, according to one senior executive, "stimulates ordinary people to produce extraordinary performance.

This strong belief system is reflected in the organizational norms and management practices that encourage employees to push themselves to achieve. For example, the "15 percent rule" allows employees to devote up to 15 percent of their time pursuing ideas of interest to them. They believe these initiatives have potential value for the company. The legends about those who have developed creative new products or innovative technologies and the stories of how innovation has evolved into the Carlson Society, 3M’s elite club of outstanding scientists and technologists, inspire many. Others are driven by the stretch target that has long demanded every division to ensure that 25 percent of sales come from products introduced in the past five years, a high hurdle recently raised to 30 percent of sales from the past four years’ new products.

Discipline. The new-product introduction target is one of several that drive 3M managers. In addition, they must achieve 10 percent growth in sales and earnings, 20 percent return on equity, and 27 percent return on capital employed. Equally important, all parts of 3M’s diverse business portfolio are held to this standard. Said one ex-CEO: "We recognize some of our businesses is established, but none of them as mature, and we expect none of them—nor even the oldest—from achieving our standards for growth and profitability.

But these high standards of performance are not achieved through formal systems and controls. In fact, the company’s strategic planning system was not even put in place until the early 1980s. Management expectations rather than controls, and organizational norms of meeting commitments more than formal rewards, give these objectives their power. These attributes of 3M’s management process provide an internal discipline that prevents individuals from degrading into organizational anarchy.

Support. Few divisions can meet 3M’s tough objectives without the broad-level support that is provided in a corporation explicitly committed to "a respect for the individual and a commitment to developing that potential where innovation flourishes.

This value is reflected in a hierarchical relationship built more on support and coaching than on direction and control. CEO Dick DeGarmo commented: "That requires managers to have respect for ideas coming up from below. They have to ask, ‘What do you think? What do you see?’" On the basis of a well-established norm to "make a little, sell a little, manage is inclined to fund the bottom-up proposals, even when the end cost is not clear, letting the market be the final judge."

Another deeply-embedded belief is that the "products belong to divisions, but technology belongs to the company." Encourages a norm of mutual support and ensures the finding and leveraging of the company’s numerous pockets of knowledge and expertise. The supportive cultural norms are reinforced by a variety of organizational processes such as cross-unit career path programs, a sophisticated network of electronic directories and e-mail linkages, and the highly effective Technology Forums, a body created to build and strengthen informal contact and mutual support among 3M scientists and technologists.

Trust. 3M’s ability to encourage its employees to take the risks required by its ambitious eccentrications, give the effort demanded by its tough targets, and make commitments to its collaborative activities based on a trust in the organization and its values. Early in the company’s history, McKnight articulated a belief in people’s ability and a belief that they sometimes need to fail in order to learn. "Mistakes will be made, but if a person is essentially right, the mistakes he or she makes is not as serious in the long run as the mistakes management will make if it is incorrect...[or] destructively critical."

In this context, management accords and even celebrates "wild and unorthodox ideas" and stories of how new products or ideas are successful suggestions eventually successful are a large part of 3M lore. One recently celebrated "failure" was the development of an extremely weak adhesive by a scientist searching for precisely the opposite. This rejected product subsequently inspired the development of the immensely popular Post-it® Notes. The message to the organization is clear: take a chance, reach for the right objective, and contribute to a worthwhile experiment. Genuine effort and risk taking will be applauded, not punished.

Find commercial applications for its inherited optical technologies, some of which had been around for more than twenty-five years. He was able to get first-rate scientists, engineers, and marketers to collaborate because they could see that, despite its difficulties, the business unit had continued to receive funding from the division and support from several higher level executives who believed in the technology potential. Furthermore, they all completely trusted that their personal credibility and future career with the company would not be compromised if they took up new ventures. For example, Ron Niederer, the marketing manager, Wong, reaped from another situation. acknowledges that while the business looked like a gamble, it also presented an exciting opportunity that would provide good experiences for his new assignment.

The same nurturing context that facilitated the unit’s ability to obtain collaboration from other units. The corporate norm of mutual support and the overarching value of institutional trust made such cooperative activity integral to the ongoing management process.

If collaboration provides one foundation for a self-renewing company, intrinsic processes another. After satisfying his and supplementing his own "vision," Wong created an environment in which individual, enterprise and group
energy combined to generate numerous new proposals and alternatives. 3M's stretching corporate goal, which required each division to generate 35 percent of its sales from new products, was further intensified by internal competition among five emerging businesses, including Optical Systems, that made up the Safety and Security Systems Division (SSSD). The raw creativity unleashed by such an ambition-driven environment was channeled and focused by the disciplined demands of the company's strict financial objectives implemented by Paul Guelder, the new division general manager. When he took over SSSD in October 1990, Guelder's first objective was to "clean up Optical Systems," a unit he thought needed more structure and definition. By turning up the heat on the unit, Guelder forced a reality check and created a sense of urgency to the process that Wong had unleashed. In this environment of both stretch and discipline, Nourian generated and then rapidly focused the list of potential applications until the unit finally decided to develop the privacy screen.

The challenge of finding a successful application for an old technology in a unit that had been bleeding red ink for more than a decade was likely to be demotivating. Yet, within the OS unit, there was a widely shared, highly energizing sense of confidence that the new project would be successful. This spirit had been fueled by Guelder's insistence that the team commit its ideas to paper, add multiple scenarios, and, most of all, articulate and defend its ideas. The discipline of refining and testing the plans served to reinforce the belief in the project's viability. Furthermore, despite the long, checkered history of both the technology and its sponsoring unit, Wong and his team remained confident that the project would not be killed or the unit disbanded, as long as they could, according to Wong, "Keep our management in the boat by demonstrating steady progress and by painting a picture of the cathedral we were building." Their trust in the system's fairness and in management minimized their willingness to plan boldly.

Beyond a motivating sense of confidence, Wong and his team developed a deep sense of commitment to the privacy-screen project. This became a viral organizational attribute for a unit with limited credibility and developed genuine excitement for the challenge of the stretching objective the new product represented. But the less certain the project's outcome, the more its sponsors had to believe that the organization would not punish them for taking risks. And while 3M's stretching and demanding environment created excitement within OS, its managers were never distracted from their commitment to keep the project alive by worrying about their own jobs.

Despite the unit's commitment to the privacy-screen project, the task of developing and bringing the product to market was complicated by numerous problems, obstacles, and challenges that demanded continual adjustment and refinement. The ongoing learning capability was encouraged by the business unit's self-imposed stretching challenge, framed not only by Wong's expectations of his team, but also by Guelder's more urgent demands. An institutionalized support system gave the team access to technological input from experts in other divisions and to top management backing, particularly from Wong's mentor, Ron Munch, a group vice president whose faith in the project and the OS team never flagged. Through this push and pull, the unit was able to continually adjust and adapt to product design and marketing strategy after the first two versions met with lukewarm market acceptance. But supported by unflagging confidence and unwavering commitment, the unit developed a third generation of the product, which it proposed for approval in early 1992.

Finally, the example of the OS unit demonstrates how the management context framed a commitment to execution — a bias for action and an ability to implement. The complementary tension between discipline and support that encouraged such institutionalized behavior was embodied in what Guelder described as his "give and take" management philosophy. He supported and invested in the privacy-screen project but, at the same time, took resources away and forced the unit to meet its financial objectives. His approach was well understood at 3M and reflected in CEO DeSimone's comment, "[Managers] may have to close their eyes for a while... but in the end, there has to be performance. We can't allow every project to continue indefinitely. So we start to slave it. We force it to show it can survive."

Individualizing the Corporation

In the aftermath of the restructuring gains accrued through downsizing, divesting, and reengineering, many companies have suffered a major setback. Not only have the organizations become too procedurally strained and mass-mindlessly executed to maintain the momentum of improvement,

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but employees’ day-to-day behavior has reverted to old, familiar patterns. We suggest that, while corporate renewal may be initiated by a structural revolution, it endures only if it is supported by a cultural transformation. Top management’s role, therefore, is not only to refine the configuration of organizational actors and responsibilities, but also to redefine the context of individual attitudes and behaviors.

Because this implies a fundamental redefinition of the management philosophy at the foundation of a company’s ongoing relationship with its employees, the change we describe is profound. In a fast-growing industrial era in which capital was the scarce resource, a company’s employees were often managed as if they were just another set of inputs: factors of production to be deployed and controlled to maximize the efficiency of a capital-intensive system. The work environment was deliberately designed to ensure that employees’ behavior was as predictable and controllable as machines they supported. By minimizing the idiosyncrasies of human activity, a behavioral context of compliance, control, contract, and constraint fostered the development of what William H. Whyte described as “the organization man” — employees who were shaped and molded to ensure that they operated in clearly defined boundaries and that they did things “the company way.”

In defining the behavioral context around the dimensions of discipline, support, trust, and stretch, however, top management is not only refining the organization’s values and expectations, it is redefining the nature of the relationship between the corporation and its employees. The old notion of “the organization man” that forced the individual to conform to tightly defined corporate norms is being replaced by a concept that we describe as “the individualized corporation.” In a radical twist, the company must adjust and find ways to tap advantage of each employee’s unique knowledge and individual capabilities.

This fundamental shift in management philosophy is behind the waves of decentralized, empowering, and empowering sweeping across today’s organization. Rather than managing through the abstraction of plans and controls, top-level managers are recognizing that their key task is to create a work environment that stimulates the company’s valuable human resource to be more motivated, creative, and entrepreneurial than its competitors’ employees. Only when they liberate and motivate their people to develop and leverage their knowledge and expertise will they have created a dynamic, self-renewing corporation.

References

1. For a brief discussion of this study and others of its type, see Henry Mintzberg, The Structuring of Organizations, 1973.


Organizational theorists have preferred the labels of climate and culture. See:

E.H. Schein, Organizational Culture and Leadership (San Francisco: Jossey-Bass, 1985); and


5. For a recent review of these literatures, see D.R. Denison, “What Is the Difference Between Organizational Culture and Corporate Culture? A Strategic Point of View on a Debate of Paradigm Wars,” Academy of Management Review, Fall 1989, pp. 33-66.

6. This decade-long history of ups and downs in Winnebago has been chronicled in detail in the business press. The following summary will provide the basis for our analysis:


M. Schecter, “The Outcome and Aftermath of Winnebago’s Fall,” Business Week, 2 March 1992, pp. 48-50, and


4. Such concepts appear perhaps the simplest assumption of how control is exercised and the normative prerequisites for designing responsibility in the decentralized corporation. See:


5. For a rich analysis of the pathologies of the planning and control systems in large companies, see

pickers, the package shoppers. In many companies, direct labor costs may be down, but overhead costs are up—way up. Most companies today, in other words, are paying more for the glue than for the real work—a recipe for trouble.

Inflexibility, unresponsiveness, the absence of customer focus, an obsession with activity rather than result, bureaucratic paralysis, lack of innovation, high overhead—these are the legacies of one hundred years of American industrial leadership. These characteristics are not new; they have not suddenly appeared. They have been present all along. It is just that until recently, American companies didn’t have to worry much about them. If costs were high, they could be passed on to customers. If customers were dissatisfied, they had nowhere else to turn. If new products were slow in coming, customers would wait. The important managerial job was to manage growth, and the rest didn’t matter. Now that growth has flattened out, the rest matters a great deal.

America’s business problem is that it is entering the twenty-first century with companies designed during the nineteenth century to work well in the twentieth.

We need something entirely different.
Reengineering: the Corporation

How does a company recognize its business processes? Where does it begin? Who gets involved? Where do the ideas for radical change come from?

We have watched companies use trial and error to answer these questions about radical change. We have served as advisors to companies that have made such changes and have observed others. Out of their experiences and our own emerged the concept of business reengineering, which we have developed into a process for reinventing a company. To perform this process, we and the companies with which we have worked have developed a body of techniques. These are not formulas, but tools that companies can use to reinvent the way their work gets done.

Our experiences and those of our clients with these techniques are encouraging. Used properly—that is, with intelligence and imagination—they work and can lead to breathtaking improvements in performance. The balance of this book is about business reengineering and how people can make it succeed in their companies.

Reengineering Formally Defined

Let's begin, then, with a better definition. "Reengineering," properly, is "the fundamental reconceptualization and radical redesign of business processes to achieve dramatic improvements in critical, contemporary measures of performance, such as cost, quality, service, and speed." This definition contains four key words.

Key Word: Radical

The second key word in our definition is radical, which is derived from the Latin word "radix," meaning root. Radical redesign means getting to the root of things: not making superficial changes or patching with what is already in place, but throwing away the old. In reengineering, radical redesign means disregarding all existing structures and procedures and inventing completely new ways of accomplishing work. Reengineering is about business reconceptualization—not business improvement, business enhancement, or business justification.

Key Word: Dramatic

The third key word is dramatic. Reengineering isn't about making marginal or incremental improvements but about achieving quantum leaps in performance. If a company falls 10 percent short of where it should be, if its costs are 10 percent too high, if its quality is 10 percent too low, if its customer service performance merits a 10-percent boost, then the company does not need reengineering. More conventional methods, from exhausting the troops to establishing incremental quality programs, can dig a company out of a 10-percent hole. Reengineering should be brought into play only when a need exists for heavy blasting. Marginal improvement
We sometimes explain the distinctions among these three kinds of companies this way: Companies in the first category are desperate; they have hit the wall and are lying injured on the ground. Companies in the second category are cruising along at high speed, but see something rushing toward them in their head lights. Could it be a wall? Companies in the third category are out for a drive on a clear afternoon, with no obstacles in sight. What a splendid time, they decide, to stop and build a wall for the other guys.

**Key Word: Processes**

The fourth key word in our definition is processes. Although this word is the most important in our definition, it is also the one that gives most corporate managers the greatest difficulty. Most businesspeople are not "process-oriented"; they are focused on tasks, on jobs, on people, on structures, but not on processes.

We define a business process as a collection of activities that takes one or more kinds of input and creates an output that is of value to the customer. We illustrated a process in Chapter 1 when we talked about order fulfillment, which takes an order as its input and results in the delivery of the ordered goods. In other words, the delivery of the ordered goods to the customer's hands is the value that the process creates.

Under the influence of Adam Smith's notion of breaking work into its simplest tasks and assigning each of these to a specialist, modern companies and their managers focus on the individual tasks in this process—receiving the order form, picking the goods from the warehouse, and so forth—and tend to lose sight of the larger objective, which is to get the goods into the hands of the customer who ordered them. The individual tasks within this process are important, but none of them matters one whit to the customer if the overall process doesn't work—that is, if the process doesn't deliver the goods.

We will use three examples of reengineering to illustrate how it works and what it can accomplish for companies. In reading these examples, it is helpful to keep in mind the four key words that...
characteristic reengineering—fundamental, radical, dynamic, and process—but especially process. Task-based thinking—the fragmentation of work into its simplest components and their assignment to specialists who has influenced the organizational design of companies for the last two hundred years. The shift to process-based thinking is already underway, and that shift is illustrated in the radical changes that numerous companies such as

IBM Credit, Ford Motor, and Enka have made.

Example: IBM Credit

Our first case concerns IBM Credit Corporation, a wholly owned subsidiary of IBM, which, if it were independent, would rank among the Fortune 100 service companies. IBM

Credit is in the business of financing the computers, software, and services that the IBM Corporation sells. It is a business of

which IBM is proud, since financing customers' purchases is an extremely profitable business.

In its early years, IBM Credit's operation was positively

Dickenson. When an IBM field salesperson called in with a

request for financing, he or she reached one of fourteen people sitting around a conference room table in Old Greenwich,

Connecticut. The person taking the call logged the request for

a deal on a piece of paper. That was step one.

In step two, someone cardboard that piece of paper upstairs to the

credit department, where a specialist entered the information into a computer system and checked the potential borrower's creditworthiness. The specialist wrote the results of the credit check on the piece of paper and dispatched it to the

next link in the chain, which was the credit process department.

The credit process department, step three, was in

charge of modifying the original form in response to customer request. Business practices had its own computer

system. When done, a person in that department would attach the special forms to the request form.

Next, the request went to a printer, step four, who keyed the

data into a personal computer spreadsheet to determine the appropriate interest rate to charge the customer. The process,

wrote the rate on a piece of paper, which, with the other

papers, was delivered to a clerical group, step five.

There, an administrator turned all this information into a

quotation letter that could be delivered to the field sales representative by Federal Express.

The entire process consumed six days on average, although it sometimes took as long as two weeks. From the sales reps' point of view, this turnaround was too long, since it gave the customer six days to find another source of financing, to be solicited by another computer vendor, or simply to call the whole deal off. So the rep would call—and call and call—to ask, "Where is my deal, and when are you going to get it out?"

Naturally, no one had a clue, since the request was lost somewhere in the chain.

In their efforts to improve this process, IBM Credit tried

several fixes. They decided, for instance, to install a control

desk, so they could answer the rep's questions about the status

of the deal. That is, instead of each department forwarding

the credit request to the next step in the chain, it would return it to

the control desk where it was originally taken. There,

an administrator logged the completion of each step before sending the paper out again. This fix did indeed solve one

problem: The control desk knew the location of each request

in the system and could give the reps the information be as

was asked. Unfortunately, the information was purchased at the cost of adding more time to the turnaround.

Eventually, two senior managers at IBM Credit had a

brainstorm. They took a financing request and walked it

themselves through all five steps, asking personnel in each

office to put aside whatever they were doing and to process

the request as they normally would, only without the delay

of having it sit in a pile on someone's desk. They learned

from their experiments that performing the actual work took

in total only ninety minutes—one and one half hours. The

remainder—now more than seven days on the average—was
constituted by handing the infant off from one department to the next. Management had begun to look at the heart of the issue, which was the overall credit issuance process. Indeed, if by the wave of some magic wand the company were able to double the personal productivity of each individual in the organization, total turnaround time would have been reduced by only forty-five minutes. The problem did not lie in the tools and the people performing them, but in the structure of the process itself. In other words, it was the process that had to change, not the individual steps.

In the end, IBM Credit replaced its specialists—the credit checkers, process, and so on—with generalists. Now, instead of sending an application from office to office, one person called a deal structurer processes the entire application from beginning to end: No handoffs.

How could one generalist replace nine specialists? The old process design was, in fact, founded on a deeply held (but deeply flimsy) assumption: that every bid request was unique and difficult to process, thereby requiring the intervention of four highly trained specialists. In fact, this assumption was false: Most requests were simple and straightforward. The old process had been overdesigned to handle the most difficult applications, that management could imagine. When IBM Credit's senior managers closely examined the work the specialists did, they found that most of it was little more than clerical: finding a credit rating in a database, plugging numbers into a standard model, pulling boilerplate clauses from a file. These tasks fell well within the capability of a single individual when he or she is supported by an easy-to-use computer system that provides access to all the data and tools the specialists would use.

IBM Credit also developed a new, sophisticated computer system to support the deal structurers. In most situations, the system provides the deal structurer with the guidance needed to proceed. In really tough situations, be it the case can get help from a small pool of real specialists—experts in credit checking, pricing, and so forth. Even here handoffs have dissapeared because the deal structurer and the specialists he or she calls in work together as a team.

The performance improvement achieved by the redesign is extraordinary. IBM Credit slashed its seven-day turnaround to four hours. It did so without an increase in head count—in fact, it has achieved a small head-count reduction. At the same time, the number of deals that it handles has increased a hundredfold. Not 100 percent, but one hundred times.

What IBM Credit accomplished—a 90-percent reduction in cycle time and a hundredfold improvement in productivity—easily meets our definition of reengineering. The company achieved a dramatic performance breakthrough by making a radical change to the process as a whole. IBM Credit did not ask, "How do we improve the calculation of a financing quote? How do we enhance credit checking?" It asked instead, "How do we improve the credit issuance process?" Furthermore, in making its radical change, IBM Credit shattered the assumption that it needed specialists to perform specialized steps.

Example: Ford Motor

Our second example of reengineering involves changes to a different category of process. We defined a process as a series of activities that delivers value to a customer and cited order fulfillment and credit issuance as examples. However, the customer of a process is not necessarily a customer of the company. The customer may be inside the company, as it is, for instance, for the materials acquisition or purchasing process, which supplies materials to a company's manufacturing operations. Reengineering can apply to these processes, too, as Ford Motor Company learned.

In the early 1980s, Ford, like many other American corporations, was searching for ways to cut overhead and administrative costs. One of the places Ford believed it could reduce costs was in its accounts payable department, the organization that paid the bills submitted by Ford's suppliers. At that
tive, Ford’s North American accounts payable department employed more than five hundred people. By using computers to automate some functions, Ford executives believed that they could attain a 20 percent head-count reduction in the department, bringing the number of clerks down to four hundred. By our definition, this incremental improvement, achieved by automating the existing manual process, would not qualify as business reengineering. Nonetheless, Ford managers thought 20 percent sounded pretty good—until they visited Mazda.

Ford had recently acquired a 25 percent equity interest in the Japanese company. The Ford executives noted that the admirably small company took care of its accounts payable chores with only five people. The contrast—Ford’s five hundred people to Mazda’s five—was too great to attribute just to the smaller company’s size, esprit de corps, company songs, or morning calisthenics. Automating to achieve a 20 percent personnel reduction clearly would not just Ford on a cost-per-employee basis, so the Ford executives were forced to rethink the entire process in which the accounts payable department took part.

This decision marked a critical shift in perspective for Ford, because companies can reengineer only business processes, not the administrative organizations that have evolved to accomplish them. “Accounts payable” cannot be reengineered, because it is not a process. It is a department, an organizational artifact of a particular process design. The accounts payable department consists of a group of clerks sitting in a room and passing paper amongst themselves. They cannot be reengineered, but what they do can be—and the way they are eventually reengineered to accomplish the new work process will follow from the requirements of the reengineered process itself.

We cannot emphasize this crucial distinction enough. Reengineering must focus on redesigning a fundamental business process, not on departments or other organizational units. Define a reengineering effort in terms of an organizational unit, and the effort is doomed. Once a real work process is recognized, the shape of the organizational structure required to perform the work will become apparent. It probably will not look much like the old organization; some departments or other organizational units may even disappear, as they did at Ford.

The process that Ford eventually reengineered was not “accounts payable,” but “procurement.” That process took as input a purchase order from, say, a plant that needed parts and provided that plant (the process customer) with bought-and-paid-for goods. The procurement process included the accounts payable function, but it also encompassed purchasing and receiving.

Ford’s old parts acquisition process was remarkably conventional. It began with the purchasing department sending a purchase order to a vendor, with a copy going to accounts payable. When the vendor shipped the goods and they arrived at Ford, a clerk at the receiving dock would complete a form describing the goods and send it to accounts payable. The vendor, meanwhile, sent accounts payable an invoice.

Accounts payable now had three documents relating to these goods—the purchase order, the receiving document, and the invoice. If all three matched, a clerk issued payment. Most of the time, that is what happened, but occasionally Vincenzo Piretto intervened.

Piretto, an early twentieth-century Italian economist, formulated what most of us call the 80-20 rule, technically known as the law of middistribution. This rule states that 80 percent of the effort expended in a process is caused by only 20 percent of the input. In the case of Ford’s accounts payable department, clerks there spent the great majority of their time straightening out the infrequent situations in which the documents—purchase order, receiving document, and invoice—did not match. Sometimes, the resolution required weeks of time and enormous amount of work in order to trace and clarify the discrepancies.

Ford’s new accounts payable process looks radically different. Accounts payable clerks no longer match purchase order
with invoice with receiving department, primarily because the
new process eliminates the invoice entirely. The result has
proved dramatic. Instead of five hundred people, Ford now
has just 125 people involved in vendor payment.

The new process looks like this. When a buyer in the pur-
chasing department issues a purchase order to a vendor, that
buyer simultaneously enters the order into an on-line database. Vendors, as before, send goods to the receiving
dock. When they arrive, someone in receiving checks a com-
puter terminal to see whether the received shipment corre-
sponds to an outstanding purchase order in the database.
Only two possibilities exist: It does or it doesn’t. If it does, the
receipt at the dock displays the goods and pushes a button on the
terminal keyboard that tells the database that the goods have
arrived. Receipt of the goods is now recorded in the database,
and the computer will automatically issue and send a check to
the vendor at the appropriate time. If, on the other hand, the
goods do not correspond to an outstanding purchase order in
the database, the clerk on the dock will refuse the shipment
and send a note to the vendor.

The basic concept of the change at Ford is simple. Payment
authorization, which used to be performed by accounts payable,
now takes place at the receiving dock. The old process fostered Byzantine complexities: searches, suspense files, ticklers—enough to keep five hundred clerks most of the time.
The new process does not. In fact, the new process comes close to eliminating the need for an accounts payable
department altogether. In some parts of Ford, such as the
Europe Division, the head count in accounts payable is now
less than 5 percent of its former size. Only a handful of people
remain to handle exceptional situations.

The reengineered process at Ford breaks hard and fast rules
that formerly applied there. Every business has rules; these rules
are deeply imbedded in the operation of the organization, whether
they are explicitly spelled out or not.

For instance, Rule One at Ford’s accounts payable depart-
ment was: “We pay when we receive the invoice. While this rule
was rarely articulated, it was the frame around which the old
process was formed. When Ford’s managers reengineered this
process, they were effectively asking whether they still wanted
to live by this rule. The answer was no. The way to break this
rule was to eliminate invoices. Instead of “We pay when we
receive the invoice,” the new rule at Ford is: “We pay when we
receive the goods.” Altering just that one word established the
basis for a major business change. Other one-word changes in
old rules at Ford are having similar effects today.

In one of its truck plants, for instance, instead of “We pay
when we receive the goods,” Ford has implemented an even
ever rule: “We pay when we use the goods.” The company
has said in effect to one of its brake suppliers, “We like your
brakes, and we will continue to install them on our trucks, but
until we use them, they are your brakes, not ours. The brakes only
become ours when we use them, and that’s when we’ll pay for
them. Every time a truck comes off the line with a set of your
brakes on it, we’ll mail you a check.”

This change has simplified even further Ford’s purchasing and receiving procedures. It also has paid off in other ways, from reducing
inventory levels to improving cash flow.

The new process for brake acquisitions shatters another rule
at Ford, the one that requires the company always to maintain
multiple sources of supply. At least with regard to truck
brakes, the new rule is: “We shall have a single source of
supply and work very closely with that vendor.”

One might wonder why the brake supplier agreed to this
change, since it is now, for practical purposes, financing
Ford’s brake inventory. What benefit does the supplier derive
from the new arrangement?

First, it now gets all of Ford’s truck brake business instead
of just some of it. Second, because the supplier is now tied to
Ford’s computerized manufacturing schedule, it does not have
to depend on the unreliable forecasts of Ford’s brake demands
that it previously got from its own sales force. The brake
supplier can better schedule its own production and reduce the size
of its own inventory.
The reengineering of procurement at Ford illustrates another characteristic of a true reengineering effort: Ford's changes would have been impossible without modern information technology—which is likewise true for the reengineering effort at IBM Credit. The new processes at both companies are not just the old processes with new wrinkles. They are entirely new processes that could not exist without today's information technology.

In the reengineered procurement process, for example, Ford's receiving clerk could not authorize vendor payment when goods arrived without the on-line database of purchase orders. In fact, almost the database, the receiving clerk would be just as much in the dark as ever about what goods Ford had actually ordered. The clerk's only option when goods arrived would have been, as previously, to assume that they had been ordered, accept them, and leave it to accounts payable to reconcile the receiving document, the purchase order, and the invoice. In theory, purchasing could have sent a photocopy of every purchase order to every receiving desk in the company, and receiving clerks could have checked arriving goods against these, but for obvious reasons such a paper-based system would prove impractical. Technology has enabled Ford to create a radically new mode of operation. Similarly, at IBM Credit, technology permits generalists to have easy access to information previously available only to specialists.

We say that in reengineering, information technology acts as an essential enabler. Without information technology, the process could not be reengineered. We will return to this theme in Chapter 5.

Another example of reengineering is the product development process that Kodak created in response to a competitive challenge. In 1987, Kodak's arch-rival, Fuji, announced a new camera, single-use camera, the sun that the consumer buys loaded with film, uses once, and then returns to the manufacturer, who processes the film and breaks down the camera into parts for reuse. Kodak had an competitive offering, not even one in the works, and its traditional product design process would have taken seventy weeks to produce a rival in Fuji's camera. Such a time delay would have handed Fuji an enormous head start and advantage in a new market. To slash its time-to-market, Kodak reengineered its product development process.

Most product development processes are either sequential, which makes them slow, or parallel, which also makes them slow, but for a different reason. In a sequential development process, individuals or groups working on one part of a product wait until the previous step is completed before beginning their own. Camera body designers, for example, may do their work first, followed by shutter designers, then the film advance mechanism designers, and so on. It is no mystery why this process is slow.

In a parallel design process, all the parts are designed simultaneously and integrated at the end. But this method engenders its own problem: Usually, the subsystems will not fit together because, even though all the groups were working from the same basic camera design, changes—often improvements—occurred along the way but were not communicated to the other groups. Then, when the camera is supposed to be ready to go to production, it's back to square one in design.

Kodak's old product development process was partly sequential and partly parallel but entirely slow. Designing the camera was conducted in parallel, with that method's attendant problems, and the design of the manufacturing tooling was locked in, sequentially, at the end. At Kodak, the manufacturing engineers did not even begin their work until twenty-eight weeks after the product designers had started.

Kodak reengineered its product development process through the innovative use of a technology called CAM/CAM—Computer Aided Design/Computer Aided Manufacturing. This technology allows engineers to design at computer workstations instead of at drafting tables. Just working as a
screen instead of on paper would have made the designers individually more productive, but such use of the technology would have had only marginal effect on the process as a whole.

The technology that has enabled Kodak to reengineer its process is an integrated product design database. Each day this database collects each engineer's work and combines all the individual efforts into a coherent whole. Each morning, design groups, and individuals inspect the database to see whether someone else's work yesterday has created a problem for them or for the overall design. If so, they resolve the problem immediately, instead of after weeks or months of wasted work. Moreover, this technology permits manufacturing engineers to begin their tooling design just ten weeks into the development process, as soon as the product designers have given the first prototype some shape.

Kodak's new process, called concurrent engineering, has been used widely in the aerospace and automotive industries and is now starting to attract adherents in consumer goods companies. Kodak exploited concurrent engineering to cut nearly in half—to thirty-eight weeks—the time required to move the $35mm single-use camera from concept to production. Furthermore, because the reengineered process allows tooling designers to get involved before product design is finished, their expertise can be tapped to create a design that is more easily and inexpensively manufactured. Kodak has reduced tooling and manufacturing costs for the single-use cameras by 25 percent.

In these three examples, we have seen illustrations of true business reengineering, even though some of them occurred before we had coined the term. These examples illustrate the four requisite characteristics of reengineering: clout and fulfillment of the definition that reengineering is the fundamental rethinking and radical redesign of business processes to achieve dramatic improvements in critical, contemporary measures of performance, such as cost, quality, service, and speed.

Several themes, listed below, emerge in these three cases, which we will explore at greater length later in this book.

- Process orientation
  The improvements that IBM Credit, Ford, and Kodak effected did not come about by attempting to narrowly defined tasks and working within predefined organizational boundaries. Each was achieved by looking at an entire process—credit issuance, procurement, and product development—that cut across organizational boundaries.

- Ambition
  Minor improvements would not have been sufficient in any of these situations. All three companies aimed for breakthroughs. In reengineering its accounts payable process, Ford, for example, skipped the 20 percent fix and went for the 80 percent solution.

- Rule-breaking
  Each of these companies broke with old traditions as they reengineered their processes. Assumptions of specialization, linearity, and timing were deliberately abandoned.

- Creative use of information technology
  The agent that enabled these companies to break their old rules and create new process models was modern information technology. Information technology acts as an enabler that allows organizations to do work in radically different ways.

WHAT REENGINEERING ISN'T

People with hearsay knowledge of reengineering and those just being introduced to the concept often jump to the conclusion that it is much the same as other business improvement programs with which they are already familiar. "Oh, I get it. Reengineering," they may say, "is another name for downsizing." Or they equate it with restructuring of some other business fix of the month. Not at all. Reengineering has little or nothing in common with any of these
other programs and differs in significant ways even from those
with which it shares some common premises.

Last, despite the prominent role played by information technology
in business reengineering, it should by now be clear that
reengineering is not the same as automation. Automating existing
processes with information technology is analogous to paving cow
paths. Automation simply provides more efficient ways of doing
the wrong kind of things.

Nor should people confuse business reengineering with so-called
software reengineering, which means rebuilding obsolete informa-
tion systems with more modern technology. Software reengi-
neering often produces nothing more than sophisticated computerized
systems that automate obsolete processes.

Reengineering is not restructuring or downsizing. These are just
different terms for reducing capacity to meet current, lower demand.
When the market wants fewer GM cars, GM reduces its size to
better match demand. But downsizing and restructuring only mean
doing less with less. Reengineering, by contrast, means doing more
with less.

Reengineering also is not the same as reorganizing, as flattening an organization, although reengineering may, in fact,
produce a flatter organization. As we have argued above, the
problems facing companies do not result from their organizational
structures but their process structures. Overlaying a new organiza-
tion on top of an old process is pouring new wine into new
bottles.

Companies that correctly set out to "bust" bureaucracies are
hitting the wrong end of the stick. Bureaucracy is not the problem.
On the contrary, bureaucracy has been the solution for the last two
hundred years. If you dislike bureaucracy in your company, try
generation without it. Chaos will result. Bureaucracy is the glue that
holds traditional corporations together. The underlying problem,
the reason bureaucracy has been and remains a solution, is that of
fragmented processes. The way to eliminate bureaucracy and
flatten the organization is by reengineering the processes so that
they are no longer fragmented. Then the company can manage
nicely without its bureaucracy.

Reengineering - The Path to Change

Now is reengineering the same as quality improvement, total
quality management (TQM), or any other manifestation of the
contemporary quality movement. To be sure, quality programs
and reengineering share a number of common themes. They both
recognize the importance of processes, and they both start with
the needs of the process customer and work backwards from
there. However, the two programs also differ fundamentally.

Quality programs work within the framework of a company's
existing processes and seek to enhance them by means of what the
Japanese call kaizen, or continuous incremental improvement.
The aim is to do what we already do, only to do it better. Quality
improvement seeks steady incremental improvement to process
performance. Reengineering, as we have seen, seeks break-
throughs, not by enhancing existing processes, but by discarding
them and replacing them with entirely new ones. Reengineering
involves, as well, a different approach to change management
from that needed by quality programs.

Finally, we can do no better than to return to our original two-
word definition for reengineering: starting over. Reengineering is
about beginning again with a clean sheet of paper. It is about
rejecting the conventional wisdom and recovering assumptions
of the past. Reengineering is about inventing new approaches to
process structure that bear little if any resemblance to those of
previous eras.

Fundamentally, reengineering is about reversing the industrial
revolution. Reengineering rejects the assumptions inherent in
Adam Smith's industrial paradigm—the division of labor, economies
of scale, hierarchical control, and all the other appearances
of an early-stage developing economy. Reengineering is the
search for new models of organizing work. Tradition counts for
nothing. Reengineering is a new beginning.
CHAPTER 3

RETHINKING BUSINESS PROCESSES

It should be clear by now that a reengineered business process looks vastly different from a traditional process. But what, exactly, does a reengineered process look like?

We can’t give a single answer to this question, because reengineered processes take many different forms. Nonetheless, we can say a great deal about the characteristics that typify reengineered processes.

As we’ve observed and participated in reengineering projects in dozens of corporations, we’ve noticed striking similarities among their various reengineered processes, similarities that transcend industry type and even the identity of the particular process. Much of what holds true for an auto company that has reengineered its processes is also true for an insurance company or a retailer.

Thus recurring themes appear in companies that have undergone reengineering, should not come as a surprise, since the shape of a company that has reengineered, like the shape of the traditional industrial organization, flows from a small set of fundamental premises. The industrial model rests on the basic premise that workers have few skills and little time or capacity for training. This premise inevitably requires that the jobs and tasks assigned to these workers be very simple. Moreover, Adam Smith argued that people work most efficiently when they have only one easily understood task to perform. Simple tasks, though, demand complex processes to knit them all together, and for two hundred years companies have accepted the inconvenience, inefficiencies, and costs associated with complex processes in order to reap the benefits of simple tasks.

In reengineering, we stand the industrial model on its head. We try to lighten processes to bring the contemporary demands of quality, speed, flexibility, and low costs where they are needed. This need for simplicity has enormous consequences for how processes are designed and organizations are shaped.

Here, then, are some commonalities, some recurring themes or characteristics, that we frequently encounter in reengineered business processes.

- Several jobs are combined into one.

The most basic and common feature of reengineered processes is the absence of an assembly line; that is, many formerly distinct jobs or tasks are integrated and compressed into one. We observed this characteristic at IBM Credit, where several specialist jobs such as credit checker or price were combined into a single position, “deal structurer.” We encountered a similar transformation at an electronics company that had reengineered its order fulfillment process. Previously, specialists located in separate organizations performed each of the five steps between selling and installing the company’s equipment. Because this process involved so many handoffs, errors and misunderstandings were inevitable—all the more so because no one individual or group had responsibility for, or knowledge of, the entire process. When customers telephoned with problems, no one could help them.

In reengineering this process, the company compressed responsibility for the various steps and assigned it to one person, the “customer service representative.” That person now performs the
whole process and also serves as the single point of contact for the customer. One error for such an individual responsible for an end-to-end process is one worker.

It is not always possible to compress all of the steps in a lengthy process into one integrated job performed by a single person. In some situations (product delivery, for example), the various steps must be performed at different locations. In those instances, a company needs several people, each managing parts of the process. In other cases, it may not prove practical to assign one person all the skills he or she would need to perform the entire process.

Bell Atlantic, for example, found that it was too much to ask one person to handle all the tasks involved in establishing high-speed digital circuits for business customers. But the company also wanted to do away with the problems that inevitably occurred when the order was passed between people across departmental lines. To eliminate the handoffs, Bell Atlantic organized what we call a core team, a group of people who have among them all the skills that are needed to handle an installation order.

Core team members—who previously were located in different departments at several geographic locations—were brought together into a single unit and given total responsibility for installing the equipment. While handoffs between teams were eliminated, some delays and errors, they are insignificant compared to the problems that the cross-organizational handoffs caused. Perhaps most important, everyone now knows who has responsibility for getting an order processed quickly and accurately.

The payoffs of integrated processes, core workers, and core teams can be enormous. Eliminating handoffs means doing away with the errors, delays, and rework that they engender. Typically, a core worker-based process operates 200 times faster than the assembly line version that it replaces. Bell Atlantic, for example, reduced the time it takes to install a high-speed digital service link from thirty days to three; in some instances, it now takes only several hours. Moreover, because the new process generates fewer errors and misunderstandings, the company doesn’t need additional people to find and fix them.

Integrated processes also have reduced process administration overheads. Because employees involved in the process assume responsibility for making sure that customers’ requirements are met on time and with no defects, they need less supervision. Instead, the company encourages these empowered employees to find innovative and creative ways to reduce cycle time and cost continually while producing a defect-free product or service. Improved control is another benefit of integrated processes; because they involve fewer people, assigning responsibility for them and monitoring performance is easier.

Workers make decisions.

Companies that undertake reengineering, not only compress processes horizontally by having core workers or core teams perform multiple, sequential tasks but vertically as well. Vertical compression means that at the points in a process where workers used to have to go up the managerial hierarchy for an answer, they now make their own decisions. Instead of separating decision-making from real work, decision-making becomes part of the work. Workers themselves now do that portion of a job that, formerly, managers performed.

Under the mass-production paradigm, the basic assumption is that the people actually performing work have little time for the inclination to monitor and control it and that they lack the depth and breadth of knowledge required to make decisions about it. The industrial practice of building hierarchical management structures follows from this assumption. Accountants, auditors, and supervisors check, record, and monitor work. Managers supervise the worker here and handle the exceptions. This assumption, and its consequences, need to be discarded.

The benefits of compressing work vertically as well as horizontally include fewer delays, lower overhead costs, better customer response, and greater empowerment for workers.

The steps in the process are performed in a natural order.

Reengineering processes are freed from the tyranny of straight-line sequence, natural precedence in the work, rather than the artificial one introduced by linearity, can be exploited. Typically, as a
conventional process, person 1 must complete task 1 before passing the results to person 2 to do task 2. But what if task 2 could be performed simultaneously with task 1? Linear sequencing of tasks imposes an artificial precedence that slows work down.

In reengineered processes, work is sequenced in terms of what needs to follow what. In one manufacturing company, for example, it took five steps to go from the receipt of a customer order to the installation of the equipment. The first step was to determine the customer's requirements; the second, to translate them into internal product codes; the third, to convey the coded information to various plants and warehouses; the fourth, to receive and assemble the components; and the fifth, to deliver and install the equipment. A different organization performed each step.

Traditionally, group 1 completed step 1 before group 2 began step 2, but this was not actually necessary. The employee responsible for step 1 spent most of his time gathering information that would not be required until step 3. Because of the arbitrary linear sequencing imposed on the process, however, everyone could begin working on step 2 until step 3 was completed. In the reengineered version of this process, step 2 begins as soon as step 1 has collected enough information to get it started. Then while steps 2, 3, and 4 operate, step 1 continues to collect the information needed for step 3. As a result, the company reduced the time it takes to fill a customer order by more than 60 percent.

We have already encountered another example of a process freed from strict linearity with Kodak's new product development process. There, design of the manufacturing tooling does not have to wait until product design is finished. As soon as the basic product design is in place, tooling engineers do not only begin their work; they can influence the rest of the product design process.

"Dechunking" processes speeds them up in two ways. First, many steps get done simultaneously. Second, reducing the amount of time that elapses between the early and late steps of a process narrows the window for major change that might make the earlier work obsolete or make the later work inconsistent with the earlier. Organizations thereby encounter less rework, which is another major source of delay.

- Processes have multiple versions

We might term the fourth and most characteristic of reengineered processes the end of standardization. Traditional processes were intended to provide mass production for a mass market. All inputs were handled identically, so companies could produce uniform and consistent outputs. In a world of diverse and changing markets that logic is obsolete. To meet the demands of today's environment, we need multiple versions of the same process, each one tuned to the requirements of different markets, situations, and inputs. What's more, these new processes must have the same economies of scale that result from mass production.

Processes with multiple versions or paths usually begin with a "triage" step to determine which version works best in a given situation. Triage is at work at IBM Credit, which has put in place three versions of the credit issuance process: one for straightforward cases (which are performed entirely by computer), one for medium hard cases (performed by deal structurers), and one for difficult cases (performed by the deal structurer with help from specialists and advisors).

We know a man who, in order to make some minor improvement to his house, had to wait six months for a public hearing before a city board that, when it finally considered his application, took only twenty seconds to approve it. His application, illustrated by a hand-drawn sketch, had to travel through the same process as those of mega-million-dollar office tower developers with volumes of blueprints, plans, and materials specification sheets. If the city had reengineered its building permit system, it might have replaced the single process with two or maybe three processes: one for small projects, one for big projects, and one for those in the middle. Simple triage, based on some preestablished thresholds, would have sent our friend's application quickly and efficiently through the right one.

Traditional one-size-fits-all processes are usually very complex, since they must incorporate special procedures and exceptions to handle a wide range of situations. A multi-version process, by contrast, is clean and simple, because each version needs to handle...
only the cases for which it is appropriate. There are no special cases and exceptions.

- Work is performed where it makes the most sense

A fifth recurring theme in reengineered processes is the shifting of work across organizational boundaries. In traditional organizations, work is organized around specialists—and not just on the factory floor. Accountants know how to count, and purchasing clerks know how to order things. So, when the accounting department needs new pencils, the purchasing department buys them. Purchasing finds vendors, negotiates price, places the order, inspects the goods, and pays the invoice—and eventually the accountants get their pencils, unless the approved supplier is short on pencils and purchasing decides to substitute pens.

This kind of process is expensive, since it involves a variety of departments plus the overhead that's associated with tracking all the paper and logging all the pieces of the process together. One company we know ran a controlled experiment and learned that it expected $100 in internal costs to buy $3 worth of batteries. It also discovered that 38 percent of its purchase orders were for amounts less than $500.

The notion of spending $100 internally to expend $500 or less did not sit well, so the company decided to off-load the responsibility for purchasing goods onto the process customers; in other words, the accountants—as well as everyone else—now buy their own pencils. They know from whom to buy and what to pay, because purchasing has negotiated these prices and given the accountants a list of approved vendors. Each operating unit has a credit card with a $500 credit limit. At the end of the month, the bank that issued the credit card sends the manufacturer a tape of all the card transactions, which the company then runs against its internal general ledger system, so that the accountants' budget gets charged for the pencils.

As a result, the purchasers receive their products more quickly and with less hassle, and the company spends far less than $100 on the processing costs. This example illustrates what we mean when we say that the customer of a process can perform some or all of the process in order to eliminate handoffs and overhead and cut costs.

In an analogous way, an electronics equipment manufacturer reengineered its field service process by shifting some of the repair work to its customers, who now make simple fixes themselves without having to wait for a technician to arrive with, maybe, the right spare parts. Some spare parts are now stored at each customer's site and managed through a computerized parts management system. When a problem crops up, the customer calls the manufacturer's field service hotline and describes the symptoms to a diagnostician, who can ask a computer for help. If the problem is something the customer can fix, the diagnostician tells the customer what part to replace and how to install it. Later, the manufacturer picks up the old part and leaves a new part in its place. Service technicians make site calls only when the problem is too complex for the customer.

Sometimes, though, it's more effective when the supplier to a customer process performs some or all of the process on behalf of the customer. Navistar International, for example, has shifted some of its work back to its suppliers. Instead of managing its own warehouse inventory of tires to be installed on the trucks it manufactures, Navistar has turned warehouse management over to Goodyear, which has more expertise than Navistar at managing tire warehouses. Goodyear sees that Navistar gets the Goodyear Bridgestone, and Michelin tires it needs as it needs them.

For Navistar, this shift is the ultimate in process simplification. The manufacturer no longer has to manage its tire inventory at all. Since Goodyear, the supplier, is much better than Navistar, the customer, at warehouse management, the amount of inventory in the warehouse has dropped from twenty-two days' supply to five.

In other words, in the aftermath of reengineering, the correspondence between processes and organizations may look very different from how it looked beforehand. Work is shifted across organizational boundaries to improve overall process performance. Much of the work done in organizations consists of integrating related pieces of work that independent organizational units perform. Relocating work across organizational boundaries,
as exemplified in the cases above, eliminates the need for this integration.

- Checks and controls are reduced.

Another kind of nonvalue-adding work that gets minimized in reengineered processes is checking and control, or, to put it more precisely, reengineered processes use controls only to the extent that they make economic sense.

Conventional processes are replete with checking and control steps, which add no value but are included to ensure that people aren't abusing the process. In a typical purchasing process, for example, the purchasing department checks the signature of the person requesting an item to make sure that person is authorized to acquire the requested goods at the dollar amount specified and verify that the department's budget is good for the bill. All this checking is to make sure that people in the organization are not buying items that they should not.

While that objective may be laudable, many organizations fail to recognize the costs associated with strict control. It takes time and labor to do all this checking; in fact, it may take more time and effort to do the checking than to do the actual purchasing. Worse, the cost of the checking may exceed the cost of the goods being purchased.

Reengineered processes exhibit a more balanced approach. Instead of tightly checking as it is performed, reengineered processes often have aggregate or deferred controls. These control systems will, by design, tolerate minor and limited abuse, by delaying the point at which abuse is detected or by examining aggregate patterns rather than individual instances. The reengineered control systems, however, more than compensate for any possible increase in abuse by dramatically lowering the costs and other inconveniences associated with the control itself.

Consider the credit card–based purchasing process we just described. Compared to more traditional processes, this one seems almost devoid of controls. Departments might use their credit cards to go on wild spending sprees. People could run away to Hawaii with the spoils of their cards on office supply vendors. Or so it feared the company's internal auditors. But they were wrong because the reengineered purchasing process does have a point of control; unauthorized purchases will be detected when the credit card tape is run against the department's budget and when the departmental manager reviews the expenditures. Given the credit limit on the cards, the process designers felt it was better to swallow the limited exposure to abuse that the new process endures in order to eliminate the overhead cost associated with the traditional controls. (We should keep in mind, as well, that the old process was far from immune to abuse.)

Some automobile insurance companies are taking approaches similar to the one we just described in their claims processing activities. Traditionally, insurers dispatch claims adjusters and appraisers to assess the extent of auto damage and determine how much the insurer is willing to pay for repairs. This control step is designed to make sure that the body shop performing the repair doesn't inflate the bill or do unnecessary work. But adjusters aren't inexpensive, and they slow the process down, thereby antagonizing claimants—and angry claimants often sue.

Consequently, some insurers take adjusters out of the process for small accidents. They send the claimant to an approved body shop and say they will pay for whatever needs to be done. How do they avoid overbilling? By periodically reviewing the body shop's charges, the insurer can get a sense of the patterns of its repairs and compare them against normative standards and patterns of other body shops. A shop that is doing too many front-end alignments, say, will get a warning: If you continue this abuse, you'll get dropped from the approved list, and you'll receive no more referrals from us. The insurance companies are happy to accept the potential of some short-term abuse, because the cost will be more than offset by the benefits of a streamlined claims process that is less expensive to operate and leaves claimants happy.

- Reconciliation is minimized.

Yet another form of nonvalue-adding work that reengineered processes minimize is reconciliation. They do it by cutting back the number of external contact points that a process has, thereby
reducing the chances that inconsistent data requiring reconciliation will be received. The accounts payable process at Ford, described in Chapter 2, illustrates this principle.

Ford's old accounts payable process contained three points of contact: with vendors, at the purchasing department through the purchase order, at the receiving dock through the receiving paperwork, and at accounts payable through the invoice. Three points of contact meant enormous opportunities for inconsistency; the purchase order could disagree with either the receiving document or the invoice, and either of them could disagree with the other. Ford reduced the points of external contact from three to two and the opportunity for inconsistency by two-thirds. As a result, the checking and reconciliation work that accounts payable had heretofore performed became unnecessary, which meant that the accounts payable organization could shrink dramatically.

This theme, and several others, are illustrated in the way Wal-Mart, working with Procter & Gamble, reengineered the management of its Pampers inventory. Pampers, a disposable diaper, is a bulky item that requires a lot of storage space relative to its dollar value. Wal-Mart maintained Pampers inventory at its distribution centers, from which it shipped orders coming from the stores. When the distribution center inventory begins to run low, Wal-Mart would reorder more diapers from P&G.

Managing inventory is a delicate balancing act. Too little inventory makes for unhappy customers and lost sales. Too much means high financing and storage costs. Not only that, inventory management is itself a costly activity. With the idea of improving this aspect of its business, Wal-Mart approached P&G with the observation that P&G probably knew more about diaper movement through warehouses than Wal-Mart, as it had information about usage patterns and reorder points from retailers all over the country. Wal-Mart suggested, therefore, that P&G should assume the responsibility of telling Wal-Mart when to reorder Pampers for its distribution center and in what quantity. Every day Wal-Mart would tell P&G how much stock it was moving out of the distribution center to the stores. When P&G felt it was appropriate, it would tell Wal-Mart that it was time to reorder and how much. If the recommendation seemed to make sense, Wal-Mart would approve it, and P&G would ship the goods.

The new arrangement worked so well that over time Wal-Mart suggested that P&G henceforth skip the purchase recommendations and just ship the diapers it thought Wal-Mart would need. In other words, Wal-Mart off-loaded its inventory replenishment function onto its supplier, illustrating the principle of redefining work across organizational boundaries that we discussed earlier. In this case, though, the boundaries were intercompany, not interorganizational. Both companies reap advantages.

Wal-Mart has eliminated the costs associated with maintaining its Pampers inventory. The stock is managed more effectively, since P&G indeed can do a better job than Wal-Mart. Therefore, the retailer has less inventory on hand and suffers fewer out-of-stock situations. Lower inventory levels frees up space in Wal-Mart's distribution center, and reduces the retailer's need for working capital to finance that inventory. In fact, inventory management is now so streamlined that goods move through Wal-Mart's distribution center and stores and into the hands of the customer even before Wal-Mart has to pay P&G for the goods. When it does pay, Wal-Mart is using cash it has already received from consumers. Whether we call this arrangement negative inventory carrying costs or an infinite return on capital, it is a wonderful state of affairs for Wal-Mart.

Anyone could provide diapers to Wal-Mart, but P&G adds value to the diapers it supplies by performing the inventory management process. It thereby endures itself as a preferred supplier to the large retail chain. As a preferred supplier, P&G gets additional shelf space in Wal-Mart stores and the much sought after end-visible displays. The reengineered process also has major internal performance benefits for P&G. First, the company can put its manufacturing and logistics operations more efficiently now that it has the information it needs to better predict product demand. Inventory no longer moves to Wal-Mart irregularly in large lots,
but continually in small doses. Other manufacturer-retailer combinations such as Levi Strauss and many of its customers, also use this approach, known as "continuous replenishment."

The second benefit P&G reaps from its new arrangement with Wal-Mart relates back to the notion of minimizing the number of external contact points—in this case, in P&G's accounts receivable process. Conventionally, accounts receivable's job is to reconcile payments from customers with order and invoice data from the vendor. In principle, they should match, but reality does not always follow principle. When they do not—as, for example, when prices have recently changed—these endless variances enter the black hole of reconciliation, where they consume enormous energy and damage the vendor-customer relationship. P&G, however, now has only two accounts receivable contacts with Wal-Mart: the invoice and the payment. Wal-Mart no longer generates the original order, P&G does. In this way, errors and the need for reconciliation are enormously reduced.

- A case manager provides a single point of contact

The use of someone we might call a "case manager" is another recurring characteristic we find in reengineered processes. This mechanism proves useful when the steps of a process are too complex to be dispersed in such a way that integrating them for a single person is difficult. Acting as a buffer between the still complex process and the customer, the case manager behaves with the customer as if he or she were responsible for performing the entire process, even though that is really not the case.

To perform this role—that is, to be able to answer the customer's questions and solve customer problems—the case manager needs access to all the information systems that the people actually performing the process use and the ability to contact those people with questions and requests for further assistance when necessary.

We sometimes call the case managers "empowered" customer service representatives to distinguish them from traditional CSRs, who are often people with skimpy information and less clout.

Empowered CSRs can actually get things done. At Duke Power Company, a large public utility based in Charlotte, North Carolina, case managers present customers with the useful fiction of an integrated customer service process by handling all their problems while shielding them from the real complexities of the actual process.

- Hybrid centralized/decentralized operations are prevalent

Companies that have reengineered their processes have the ability to combine the advantages of centralization and decentralization in the same process. We will encounter this theme at Hewlett-Packard in Chapter 5, where a standard purchasing system and a shared database allow the company to combine the best of both worlds.

Information technology increasingly enables companies to operate as though their individual units were fully autonomous, while the organization still enjoys the economies of scale that centralization creates. Equipping field sales representatives with notebook computers connected by wireless modems to the central office or to corporate headquarters, for instance, gives salespeople instant access to information that is maintained there. At the same time, controls incorporated into the software they use to write up sales contracts prevent the salespeople from giving unreasonable prices or specifying delivery or other conditions that the organization cannot meet. With this technology, companies can reengineer the sales process so as to eliminate the bureaucratic machinery of regional field offices, enhance the sales representatives' autonomy and empowerment, and, simultaneously, improve the control the company has over selling prices and conditions.

Many banks have established separate divisions to sell different products to the same clients—large corporations, for instance. One division sells traditional lines of credit; another, asset-based finance; a third, letters of credit; and a fourth, escrow and management services. The decentralized structure ensures that each division focuses on the products and services with which it has the most expertise, and, simultaneously, promotes real entrepreneurial autonomy. It also guarantees chaos.
In this fractionalized structure, everyone is looking at narrow pieces of the market, but no one is looking at the customer as a whole. In important aggregate issues may fall between the cracks. One bank, for example, established a $20 million credit limit for a certain customer and instructed each autonomous unit to enforce it. Each one did—by extending the client the full $20 million credit. The bank-wide exposure to the client was therefore many times that figure. Management only understood its true exposure after the client went bankrupt. To avoid these kinds of problems, several banks have implemented bank-wide customer databases that all operating units share. Every unit pays what they know about the customer and their relationship with the customer into the database, and every unit uses the database as a source of customer information. In this way, units with freedom to act independently can coordinate their activities without the bureaucratic interference of a central control point.

The objective of presenting the above examples is to point out the characteristics that we see recurring in reengineered business processes is not to suggest that all reengineered processes look the same or that process redesign is a straightforward matter. Nothing could be further from the truth. Not every reengineered business process will display all of these characteristics we have cited. Indeed, they could not, because some are conflicting. Actually creating a new design requires insight, creativity, and judgment. These ingredients are also needed for designing the jobs and organizations that support reengineered processes. It is in that topic we next turn our attention.

We have repeatedly made the point that reengineering entails the radical redesign of a company’s business processes. But while reengineering does start with process redesign, it doesn’t end there. Fundamental changes in business processes have implications for many other parts and aspects of an organization—every part of it, in fact.

When a process is reengineered, jobs evolve from narrow and task-oriented to multidimensional. People who once did as they were instructed now make choices and decisions on their own instead. Assembly-line work disappears. Functional departments lose their reasons for being. Managers stop acting like supervisors and behave more like coaches. Workers focus more on the customers’ needs and less on their bosses’. Attitudes and values change in response to new incentives. Practically every aspect of the organization is transformed, often beyond recognition.

Let’s look closer at the kinds of changes that occur when a company reengineers its business processes.

- Work units change—from functional departments to process teams

Companies that reengineer are, in effect, putting back together again the work that Adam Smith and Henry Ford broke into tiny
piece and many years ago. Once it is restructured, process teams—groups of people working together to perform an entire process—turn out to be the logical way to organize the people who perform the work. Process teams don’t contain representatives from all the functional departments involved. Rather, process teams replace the old departmental structure. While there are several different kinds of process teams, we mean something very particular when we use the word “team.”

Think of the progress of an order through an organization (or of a new product idea or an insurance claim). Each of these items gets handled by many different people, but those people are not organizationally integrated. They are scattered all over the company in functional silos—different departments, groups, divisions, and so on. This fragmentation creates numerous problems, but in particular it promotes inconsistent goals among the different people involved. One person might care about inventory turns while another focuses on delivery time.

An alternative approach is to look at the same collection of people who are now handling the order or new product or claim, but instead of separating them into departments, to put them together in a team. We aren’t necessarily changing what they do, but we’re arranging for them to do it together instead of separately, scattered all over the organization. In some sense we’re only putting back together a group of workers who have been artificially separated by organization. When they’re reunited, we call them a process team. A process team, in other words, is a unit that naturally falls together to complete a whole piece of work—a process.

Process teams are of many sizes, the right one depending on the nature of the work being done. One we call a case team. Here, as we saw with Bell Atlantic in the last chapter, a number of people with different skills work together to complete routine, recurring work—such as processing an insurance claim or connecting a telephone customer to a long-distance carrier. In the past, when a Bell Atlantic business customer requested a connection between its telephone system and a long-distance carrier for data services, for instance, the request traveled from department to department at Bell Atlantic, taking from two weeks to one month to complete its journey. In reengineering that process, Bell Atlantic took people from many functional departments and put them together in a case team, which now handle most customer requests in a matter of days or even hours instead of weeks. Because case teams perform recurring work—that is, they process similar customer requests day after day—the people on the team are usually permanently grouped together. (We will look more closely at the Bell Atlantic example in Chapter 13.)

Another kind of a process team has a shorter life span, because it stays together only for as long as it takes to complete a particular, episodic task. We call these virtual teams. Kodak’s new product design process, for instance, requires many people with diverse talents—shutter designers, lens specialists, manufacturing experts, and others—to work jointly on a new camera design project. When the camera is designed and goes into production, however, the project is finished and the virtual team dissolves, its members moving on to other projects and other teams. People may simultaneously be members of more than one virtual team, splitting their time among different projects.

IBM Credit (which we first looked at in Chapter 2) uses a third kind of process team. It’s like a case team, but it consists of only one person. Prior to reengineering, when IBM Credit put together a financing package for a prospective customer, credit checking was done in the credit department, pricing was done in the pricing department, offer terms and conditions were set in the business practices department, and the final offer got pulled together by someone in the bid preparation department. People in these departments passed the work back and forth among themselves, with all the usual errors and delays. But when the company reengineered its deal structuring process, it integrated those four separate functions, replacing four departments with one. Many of the people—called deal structurers—who staff this new department are the same people who used to be specialists.

IBM Credit went further than simply grouping four specialists into a process team. Now, each individual can shepherd an entire deal through the process from beginning to end. IBM Credit realized that one trained person with access to on-line data could
handle 90 percent or more of the work that used to get handed off among specialists. A few specialists, however, assigned to assist deal structurers, could help them handle the rest. At IBM Credit, the process team is a team of one—what we have called a case worker.

Jobs change—from simple tasks to multi-dimensional work

People working on process teams will find their work far different from the jobs to which they have been accustomed. Assembly line work, whether it’s of the white- or blue-collar variety, is highly specialized—the repetitious performance of one task. The job may require some training—how to insert a particular component into a particular printed circuit board, for instance. It may even require extensive education—a college degree in mechanical engineering in order to design camera shutters. But when they’re doing task work, neither the assembly-line worker nor the mechanical engineer needs to know—or even care much about—the whole process of, say, building a computer or developing a camera design.

Process team workers, who are collectively responsible for process results rather than individually responsible for tasks, have a different kind of job. They share joint responsibility with their team members for performing the whole process, not just a small piece of it. They need only use a broader range of skills. From day to day, they have to be thinking of a far bigger picture. While not every member of the team will be doing exactly the same work—after all, they have different skills and abilities—each team member will have at least a basic familiarity with all the steps in the process and is likely to perform several of them. Moreover, everything an individual does is imbued with an appreciation for the process as a whole.

A clear example of how jobs change after reengineering is provided by IBM Credit. The old job consisted of specialists who did one task. The new deal structurers perform a variety of tasks. They are generalists. Their work is multidimensional.

What happened at Kodak when the company reengineered its product design process? A less designer who used to concentrate strictly and narrowly on lens design now designs lenses in the context of the camera as a whole, which means that he or the

inherently contributes to other aspects of the design and that his or her own design will be influenced by what others have to say. The lens no longer operates strictly within the limits of one designer. The job has become multi-dimensional.

Sometimes process reengineering shifts the boundaries between different kinds of work. At one company, for instance, engineers who previously had prepared data for other people to use in producing marketing brochures now produce the marketing brochures themselves; they know more about the product than the marketing people, and they are able to use the desktop publishing tools themselves. The marketing people now act as advisers to the engineers. Work for both groups—the engineers and the marketing people—has broadened.

As work becomes more multi-dimensional, it also becomes more substantive. Reengineering eliminates not just waste but non-value-adding work as well. Most of the checking, reconciling, waiting, monitoring, tracking—the unproductive work that exists because of boundaries within an organization and to compensate for process fragmentation—is eliminated by reengineering, which means that people will spend more time doing real work.

After reengineering, work becomes more satisfying, since workers achieve a greater sense of completion, closure, and accomplishment from their jobs. They actually perform a whole job—a process or a subprocess—that by definition produces a result that someone cares about. Process performers share many of the challenges and rewards of entrepreneurs. They are focused on customers whose satisfaction is their aim. They’re not just trying to keep the boss happy or to work through the bureaucracy.

Moreover, work becomes more rewarding since people’s jobs have a greater component of growth and learning. In a process team environment, personal development does not mean climbing up through the hierarchy but expanding one’s breadth—learning more so one can encompass a larger part of the process. After reengineering there is no such thing as “mastering” a job, as a worker’s expertise and experience grows, but at her job grows with it.

Moreover, since workers in reengineered processes spend more
Reengineering the Corporation

tone on value-adding work and less time on work that adds no value, their contributions to the company increase, and, consequently, jobs in a reengineered environment will on the whole be more highly compensated.

There is, however, a challenging side to all this good news about work in a reengineered environment. If jobs are more satisfying, they are also more challenging and difficult. Much of the old, routine work is eliminated or automated. If the old model was simple tasks for simple people, the new one is complex jobs for smart people, which raises the bar for entry into the workforce. Few simple, routine, unskilled jobs are to be found in a reengineered environment.

- People's roles change—from controlled to empowered

A task-oriented, traditional company hires people and expects them to follow the rules. Companies that have reengineered don't want employees who can follow rules; they want people who will make their own rules. As management invests teams with the responsibility of completing an entire process, it must also give them the authority to make the decisions needed to get it done.

The following example illustrates the nature and payoff of empowerment. A guest approached the doorman at a major hotel and complained that his car radar detector had been stolen from his car in the hotel's garage. The doorman, empowered to perform customer services, asked how much it cost, took the guest to the front desk, and commanded “Give this man $150” to the clerk. Everybody gaped, but the customer was satisfied. Two weeks later, the general manager received a letter from this customer that stated he had found his radar detector in his trunk. In the envelope was also a check for $150. The postscript to the letter added: “By the way, I will never stay at any other hotel chain for the rest of my life.”

People working in a reengineered process are, of necessity, empowered. As process teams work, they are both permitted and required to think, act, use judgment, and make decisions. At IBM Credit and Kodak, intricate supervisors and managers have no place in the reengineered work processes. Imagine an IBM Credit bank supervisor who is trying to handle several cases in different stages of completion and to get as many of them done as quickly as possible. Suddenly, a supervisor appears in check on his or her progress. Real work stops as to a halt while the detail supervisor shifts to satisfying the supervisor instead of the customer. At Kodak, when could the head of the lens department “approve” the lens design? The lens design isn’t final until the camera design is done. Supervisory approval would only slow the process.

Teams, of one person or several, performing process-oriented work are inevitably self-directing. Within the boundaries of their obligations to the organization—agreed upon deadlines, productivity goals, quality standards, etc.—they decide how and when work is going to be done. If they have to wait for supervisory direction of their tasks, they aren’t process teams.

Empowerment is an unavoidable consequence of reengineered processes; processes can’t be reengineered without empowering process workers. Consequently, companies that reengineer must consider additional criteria in their hiring. It is no longer enough merely to look at prospective employees’ education, training, and skills; their character becomes an issue as well. Are they self-starting? Do they have self-discipline? Are they motivated to do what it takes to please a customer?

Reengineering and its consequent empowerment have powerful implications for the kinds of people companies will hire.

- Job preparation changes—from training to education

If jobs in reengineered processes require that people not follow rules, but rather that they exercise judgment in order to do the right thing, then employees need sufficient education so that they can discern for themselves what that right thing is. Traditional companies typically stress employee training—teaching workers how to perform a particular job or how to handle one specific situation or another. In companies that have reengineered, the emphasis shifts from training to education—as to hiring the educated. Training increases skills and competence and teaches employees the "how" of a job. Education increases their insight and understanding and teaches them the "why."
Hall’s Pet Products, a subsidiary of Colgate-Palmolive, recently built a new plant in Richmond, Indiana, at which the company has implemented many of the principles of reengineered processes. The company’s management knew the kind of people they needed to work on the plant floor and set out to hire 150 of them. The company received thousands of applications and the personnel department looked closely at 3,000. When the finalists were selected, practically all of them shared one characteristic: They lacked factory work experience. The applicants who the company wanted mostly turned out to be former schoolteachers, police officers, and others who had the right character and the right education although they lacked factory skills. But that ostensible defect wasn’t a major problem. The company was able to train the new hires, because these were people who already knew how to learn.

For multi-dimensional and changing jobs, companies don’t need people to fill a slot, because the slot will be only roughly defined. Companies need people who can figure out what the job takes and do it, people who can create the slot that fits them. Moreover, the slots will keep changing. In an environment of flexibility and change, it is clearly impossible to hire people who already know everything they’re ever going to need to know, so continuing education over the lifetime of a job becomes the norm in a reengineered company.

Focus of performance measures and compensation shifts — from activity to results

Worker compensation in traditional companies is relatively straightforward. People are paid for their time. In a traditional operation — whether it’s on an assembly line manufacturing machines or in a clerical office processing paperwork — an individual employee’s work has no quantifiable value. What, for instance, is the dollar value of a soldered joint? Or of verified employment data on an insurance application form? Neither is worth anything by itself. Only the finished product or newly-issued insurance policy has value to the company. When work is fragmented into simple tasks, companies have no choice but to measure workers on the efficiency with which they perform narrowly defined work. The trouble is that increased efficiency of narrowly defined tasks does not necessarily translate into improved process performance.

In contrast, the IBM Credit deal structure is not measured by how many pieces of paper he or she handles but by the number and profitability of finalized deals and by their quality, as reflected in customer satisfaction surveys. When employees are performing process work, companies can measure their performance and pay them on the basis of the value they create. That value is measurable because in reengineered business processes, teams create products or services that have intrinsic value. A new camera, for instance, has value; a shutter mechanism does not.

Reengineering also forces companies to reconsider some basic assumptions about compensation. For instance, an employee’s performance in a reengineered job this year does not guarantee anything about his or her performance in the years to come. For that reason, base salaries in companies with reengineered processes tend to remain relatively flat after adjustments for inflation. Substantial rewards for outstanding performance take the form of bonuses, not pay raises.

Other compensation assumptions also fall away after reengineering: paying people based on job rank or seniority; paying people just for showing up; and giving people a raise just because another year has passed. Paying people based on their position in the organization — the higher up they are, the more money they make — is inconsistent with the principles of reengineering. Traditional pay schemes, in which the size of a person’s salary is a function of the number of subordinates that person has working for him or her and the size of his or her budget, also don’t fit in a process-oriented environment. Finely graded hierarchies with a lot of positions — analyst 1, analyst 2, senior analyst, etc. — each with a narrow compensation band, must be discarded.

In companies that have reengineered, contribution and performance are the primary bases for compensation. Precedents for this approach exist. Even in traditional companies, the vice president of sales is rarely the most highly paid person in the sales organization — that honor usually belongs to the most productive...
sales rep. On Wall Street, the chairman of an investment bank is typically not the most highly paid individual; rather, it is usually the top bond dealer or currency trader.

In companies that have reengineered, performance is measured by value created and compensation should be set accordingly.

- Advancement criteria change—from performance to ability

A bonus is the appropriate reward for a job well done. Advancement to a new job is not. In the aftermath of reengineering, the distinction between advancement and performance is firmly drawn. Advancement to another job within the organization is a function of ability, not performance. It is a change, not a reward.

Progressive Insurance considers this distinction important enough to note in the company’s annual report: “One of our core principles,” the document says, “is that we pay for performance and promote for ability.” Once considered, the principle seems obvious. But it is rarely followed. If Elizabeth is a good chemist, conventional thinking goes, she will be a good manager of chemists. Often that isn’t true, and Elizabeth’s “promotion” could get the company a bad manager at the cost of a good chemist.

Capital Holdings’s Direct Response Group, an insurer, makes the distinction between performance and advancement quite clear to its employees. “We’ve separated the results review, at which we reward people with compensation, from the development review,” says DHG senior vice president Pamela Godwin. “This way, we can every day people who may have delivered outstanding results to acknowledge their need for additional growth and development. By separating the two evaluations we help keep the differences clear in employees’ minds.”

- Values change—from productive to productive

Reengineering entails a great shift in the culture of an organization as in its structural configuration. Reengineering demands that employees deeply believe that they work for their customers, not for their bosses. They will believe this only to the extent that the company’s practices of reward reinforce it. For instance, Xerox Corporation doesn’t just tell its people that customers pay

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their salaries; it makes the connection explicit. The company now bases a major portion of every manager’s bonus on a measure of customer satisfaction. When their bonuses depend solely on how well their individual departments performed, managers continually warred with one another over fault, jurisdiction, and resources. Now, the internal arguments have all but disappeared as managers have shifted their focus to maximizing customer satisfaction.

An organization’s management systems—the ways in which people are paid, the measures by which their performance is evaluated, and so forth—are the primary shapers of employees’ values and beliefs.

Unfortunately, too many managers still believe that all they have to do to shape their employees’ belief systems is to articulate some high-sounding values and then make speeches about them. Creating a corporate value statement alone is useless and just another foolish exercise. Without supporting management systems, most corporate value statements are collections of empty platitudes that only increase organizational cynicism. To be worth the paper it’s printed on, a value statement must be reinforced by the company’s management systems. The statement articulates values; the management systems give those values life and reality within the company.

And, of course, senior management must live these values themselves. If an executive says it’s important to care about customers and then spends an hour a week on the phone with customers, the value of that time to customers may be minor, but its value to the organization is immeasurable. The hour is a symbol and a demonstration of management’s personal commitment to the values by which they expect everyone to live.

The cultural values found in some traditional companies are the by-products of fragmented management systems, which focus on past performance, emphasize control, and obfuscate the hierarchy. Whatever such a company’s value statement might say, its management systems may in fact promote values something like this:

— My boss pays my salary: For all the talk about serving customers, the real objective is to keep the boss happy.
I'm just a cog in the wheel: My best strategy is to keep my head down and not make waves.

The more direct reports I have, the more important I am. The one with the biggest engine wins.

Tomorrow will be just like today. It always has been.

The trouble is that these values and beliefs do not promote the performance that customer-oriented organizations require. They are inconsistent with the new processes created in a reengineered environment, and unless the values change, new processes, no matter how well designed, will not work. Changing values is as important a part of reengineering as changing processes.

In a company that has reengineered, employees must hold beliefs such as the following:

- Consumer pay all out salaries: I must do what it takes to please them.
- Every job in this company is essential and important: I do make a difference.
- Showing up is an accomplishment: I get paid for the value I create.
- The buck stops here: I must accept ownership of problems and get them solved.
- I belong to a team: We fail or we succeed together.
- Nobody knows what tomorrow holds: Constant learning is part of my job.
- Managers change—from supervisors to coaches.

When a company reengineers, once complex processes become simpler while once simple jobs grow complex. For instance, the process of getting a deal put together at IBM Credit has gone from one that entailed four to five different people to one that involves just a single person: A deal structural does the whole thing. Consequently, the company's managers now have to spend less time keeping the pieces of paper moving through departments but more time helping employees do their jobs and more demanding work.

Process teams, consisting of one person or many, don't need bosses: They need coaches. Teams ask coaches for advice. Coaches help teams solve problems. Coaches are not in the action, but close enough to it so they can assist the team in its work.

Traditional bosses design and allocate work. Teams do that for themselves. Traditional bosses supervise, monitor, control, and check work as it moves from one task performer to the next. Teams do that themselves. Traditional bosses have little to do in the reengineered environment. Managers must switch from supervisory roles to acting as facilitators, as enablers, and as people whose jobs are the development of people and their skills so that those people will be able to perform value-adding processes themselves.

This kind of managing is a real profession. Traditional practice undervalues both work and management. It undervalues work by stating that the only way a worker can get ahead is by becoming a manager. Managing, this implies, is more important than working. But the traditional practice also says that anybody who does well as a worker can manage.

In fact, managing is a particularly skill, just like engineering or sales, and there is little correlation between excelling in a work skill and being a good manager. Casey Stengel was an adequate baseball player; he was a great manager. Most great players have made lousy managers.

Managers in a reengineered company need strong interpersonal skills and have to take pride in the accomplishment of others. Such a manager is a mentor, who is there to provide resources, to answer questions, and to look out for the long-term career development of the individual. This is a different role from the one most managers have traditionally played.

Organizational structures change—from hierarchical to flat.

When a whole process becomes the work of a team, process management becomes part of the team's job. Decisions and interdepartmental issues that used to require meetings of managers and managers' managers now get made and resolved by teams during
the course of their normal work. Making decisions about work
shows to the people doing it means that managers’ traditional roles
are diminished. Companies no longer require as much managerial
“glue” as they used to in order to hold work together. After
reengineering, it no longer takes all the king’s horses and all the
king’s men to put fragmented pieces back together again. With
fewer managers there are fewer management layers.

In the traditional company, organizational structure is an im-
portant issue on which enormous amounts of energy are expended.
Why? Because organizational structure is the mechanism through
which a great many issues get resolved and questions get answered.

Remember that the basic unit of the traditional organization is
the functional department, a collection of people performing simi-
lar tasks. The organization as a whole consists of these functional
departments arranged in various ways. The arrangements vary
widely among companies. In the so-called functional company, all
related functional departments are aggregated into a single func-
tional division. All sales departments come together in a sales
division. In a structure based on strategic business units, functional
departments are grouped together by markets, so a company might
have an institutional division or a West Coast division, for in-
stance.

A lot of energy goes into designing these organizations because
the shape of the organization determines much about it, from how
the company’s work is organized to the mechanisms for the exer-
cise of control and performance monitoring. The organizational
structure establishes the lines of communication within the organi-
sation and determines the decision-making hierarchy.

In companies that have reengineered, however, organizational
structure isn’t such a weighty issue. Work is organized around
processes and the teams that perform them. Lines of communica-
tion? People communicate with whoever they need. Control is
vested in the people performing the process.

Consequently, whenever organizational structure remains after
reengineering tends to be flat, as work is performed by teams of
essentially equal people operating with great autonomy and
supported by a few managers—few, because while a manager can

typically supervise only about seven people, he or she can coach
close to thirty. At a one to seven manager-to-worker ratio, an
organization is of necessity hierarchical. At one to thirty, it is much
less so.

Stephen Israel, a senior vice president at IBM Credit, when asked
about his post-reengineering organizational chart, replied, “We
have one, but we never look at it.” The structure of his organiza-
tion has become, in a phrase, “A bunch of people doing work.”
Such a company does not rely on its structure per se to answer
many questions. After reengineering, the issue of structure is con-
siderably diminished in importance.

• Executives change—from scorekeepers to leaders

Not the least of the changes set off by reengineering is the
opportunity and necessity for a shift in the role of a company’s
senior executives. Flatter organizations move senior executives
closer to customers and to the people performing the company’s
value-adding work. In a reengineered environment, the successful
accomplishment of work depends far more on the attitudes
and efforts of empowered workers than on the actions of the task-
oriented functional managers. Therefore, executives must be
leaders who can influence and reinforce employees’ values and
beliefs by their words and their deeds.

Executives have overall responsibility for reengineered process’
performance without having direct control over the people per-
forming them. These people are working more or less autonom-
ously with the guidance of their coaches. Executives fulfill their
responsibilities by ensuring that processes are designed in such a
way that workers can do the job required and are motivated by the
company’s management systems—the performance measurement
and compensation systems—to do it.

In traditional companies executives are divorced from opera-
tions. Their perspective on the companies they run is primarily a
financial one: Did the company make its numbers this quarter? As
leaders in a company that has reengineered, they move closer to the
real work. In shaping processes and providing workers with moti-
vation, they’re intimately concerned with how the work gets
done. No football coach tells the team, "I want you to win by 15 points. Get in there and play, and at the end of the game, report to me how it comes out." Although coaches don't play, they're closely involved in creating the game plan and in the players' performance. So is the executive in a reengineered company. They are far more than just scorekeepers.

Let us summarize the changes that occur when a company reengineers its business processes: Jobs certainly change, as do the people needed to fill them, the relationships those people have with their managers, their career paths, the ways people are measured and compensated, the roles of managers and executives, and even what goes on in workers' heads. In short, reengineering a company's business processes ultimately changes practically everything about the company, because all these aspects—people, jobs, managers, and values—are linked together. We call them the four points of the business system diamond. The top point on the diamond is the company's business processes—the way the work gets done; the second is its jobs and structure; the third, its management and measurement systems; and the fourth, its culture—what its employees value and believe.

The four points of the business system diamond, process, determines the second point, jobs and structure. The way in which work is performed determines the nature of people's jobs and how the people who perform these jobs are grouped and organized. The fragmented processes found in traditional companies lead to narrowly specialized jobs and organizations based on functional departments. Integrated processes give rise to multidimensional jobs that are best organized into process teams.

Likewise, people who perform multidimensional jobs and who are organized into teams must be recruited, evaluated, and paid by means of appropriate management systems. In other words, jobs and structures, themselves determined by the process designs, in turn lead to the third point on the diamond, the kind of management systems a company must have.

The management systems—how people are paid, the measures by which their performance is evaluated, and so forth—are the primary shapers of employees' values and beliefs, the fourth point on the diamond. By values and beliefs, we mean the issues and concerns that people in the organization think are important and to which they pay significant attention.

Finally, the reigning values and beliefs in an organization must support the performance of its process designs. For example, an order fulfillment process that is designed to operate quickly and accurately will not do so unless the people performing it believe speed and accuracy are important. This brings us back to the top of the diamond. Once again we say that in reengineering it is not sufficient to redesign processes alone. All four points in the business system diamond have to fit together or the company will be flawed and miss the point.
CHAPTER 5

THE ENABLING ROLE OF INFORMATION TECHNOLOGY

A company that cannot change the way it thinks about information technology cannot reengineer. A company that equates technology with automation cannot reengineer. A company that looks for problems first and then seeks technology solutions for them cannot reengineer.

Information technology plays a crucial role in business reengineering, but one that is easily misused. Modern, state-of-the-art information technology is part of any reengineering effort, an essential enabler as we termed it in Chapter 4, since it allows companies to reengineer business processes. But, to paraphrase what is often said about money and government, merely throwing computers at an existing business problem does not cause it to be reengineered. In fact, the misuse of technology can block reengineering altogether by reinforcing old ways of thinking and old behavior patterns.

Consider what throwing computers at the problem might have accomplished at the three companies, IBM Credit, Ford, and