

# CONTENTS

---

<b>1</b>	<b>Introduction to Total Quality Management</b> .....	<b>1</b>
	The Concept of TQM	2
	Antecedents of Modern Quality Management	3
	The Quality Gurus	4
	Accelerating Use of TQM	8
	Quality and Business Performance	9
	Service Quality vs. Product Quality	11
	The Baldrige Award	13
	Questions for Discussion	19
	<b>Reading</b> The Catch-22 of Total Quality Management	24
	<b>Case</b> TQM in a Service Organization	29
<b>2</b>	<b>Leadership for TQM</b> .....	<b>33</b>
	Attitude and Involvement of Top Management	36
	Communication	37
	Culture	40
	Management Systems	43
	Questions for Discussion	44
	<b>Reading</b> Management: Quality Programs Show Shoddy Results	47
	<b>Case</b> How to Implement a Quality Management Initiative	50
	<b>Exercise</b> Leadership at Verifilm	59
<b>3</b>	<b>Information Analysis and Information Technology</b> .....	<b>61</b>
	Organizational Implications	62
	Strategic Information Systems	64
	Shortcomings of Accounting Systems	65
	Organizational Linkages	67
	Advanced Processes/Systems	68

Information and the Customer	70
Systems Design	71
Questions for Discussion	72
<b>Reading</b> What Does It All Mean?	75
<b>Case</b> Information Systems at Three Companies	80
<b>Exercise</b> Information Systems and Analysis at Varifilm	87

#### **4 Strategic Quality Planning** ..... 89

Strategy and the Strategic Planning Process	90
Strategic Quality Management	91
Definition of Quality	96
Control	102
Service Quality	103
Questions for Discussion	104
<b>Reading</b> Is Strategy Strategic? Impact of Total Quality Management on Strategy	107
<b>Case</b> Drucker on Management: Japan: New Strategies for a New Reality	112
<b>Exercise</b> Strategic Planning at Varifilm	117

#### **5 Human Resource Development and Management** ..... 119

Involvement: A Central Idea of Human Resource Utilization	120
Training and Development	122
Selection	123
Performance Appraisal	124
Compensation Systems	125
Total Quality Oriented Human Resource Management	127
Questions for Discussion	128
<b>Reading</b> The Training Challenge	130
<b>Case</b> Employee Involvement at Bay City Machine Tool Company	136
<b>Exercise</b> Human Resources at Varifilm	139

#### **6 Management of Process Quality** ..... 143

A Brief History of Quality Control	144
Product Inspection vs. Process Control	146
Moving from Inspection to Process Control	147
Statistical Quality Control	148
Basic Approach to Statistical Quality Control	149
Tools for Statistical Quality Control	149
Problem Analysis	152
Pareto Analysis	153

Manufacturing to Specification vs. Manufacturing to Reduce Variations 156

Process Control in Service Industries 157

Process Control for Internal Services 159

Quality Function Deployment 159

Just-in-Time 163

Just-in-Time or Just-in-Case 165

The Human Side of Process Control 166

Questions for Discussion 167

**Reading** Reducing Variability—Key to Continuous Quality Improvement 171

Beyond Statistical Process Control 180

**Case** Putting Deming’s Principles to Work 186

Continuous Process Improvement at Brooktree 189

Case Study: Quality Improvement in a Diversified Health Center 197

**Exercise** Process Quality at Varifilm 202

**7 Customer Focus and Satisfaction** ..... 205

Process vs. Customer 207

Internal Customer Conflict 208

Defining Quality 209

A Quality Focus 209

The Driver of Customer Satisfaction 211

Getting Employee Input 212

Measurement of Customer Satisfaction 212

The Role of Marketing and Sales 213

The Sales Process 214

Service Quality and Customer Retention 215

Customer Retention and Profitability 216

Buyer–Supplier Relationships 217

Questions for Discussion 219

**Reading** When Quality Control Gets in the Way of Quality 222

**Case** Hewlett-Packard Company 225

**Exercise** Customer Focus at Varifilm 231

**8 Benchmarking** ..... 235

The Evolution of Benchmarking 236

The Essence of Benchmarking 238

Benchmarking and the Bottom Line 238

The Benefits of Benchmarking 239

Strategic Benchmarking 240

Operational Benchmarking 242  
 The Benchmarking Process 242  
 Identify the Best-in-Class 245  
 Measure Your Own Performance 247  
 Actions to Close the Gap 247  
 Pitfalls of Benchmarking 249  
 Questions for Discussion 250  
**Reading** Customer Satisfaction through Quality 252  
**Case** Benchmarking: Tales from the Front 257  
**Exercise** Benchmarking at Varifilm 261

**9 Organizing for Total Quality Management: Structure and Teams** ..... 263

Organizing for TQM: The Systems Approach 264  
 Organizing for Quality Implementation 269  
 The People Dimension: Making the Transition from a Traditional to a TQM Organization 272  
 Roles in Organizational Transition to TQM 275  
 Small Groups and Employee Involvement 276  
 Teams for TQM 278  
 Questions for Discussion 281  
**Reading** Lessons from the Veterans of TQM 285  
**Case** Allen-Bradley Company 291  
 Employee Involvement Makes TQM Work 296

**10 Productivity, Quality, and Reengineering** ..... 299

The Leverage of Productivity and Quality 301  
 Management Systems vs. Technology 301  
 Productivity in the United States 303  
 Measuring Productivity 305  
 Basic Measures of Productivity: Ratio of Output to Input 305  
 White-Collar Productivity 308  
 Improving Productivity (and Quality) 309  
 Capital Equipment vs. Management Systems 313  
 Activity Analysis 314  
 Reengineering 316  
 Questions for Discussion 319  
**Case** World Class Productivity at Standard Aero 322  
 Reengineering at AT&T Universal Card Services 327  
**Exercise** Productivity at Varifilm 329

<b>11</b>	<b>The Cost of Quality</b> .....	331
	Cost of Quality Defined	331
	The Cost of Quality	332
	Three Views of Quality Costs	333
	Quality Costs	334
	Measuring Quality Costs	337
	The Use of Quality Cost Information	339
	Accounting Systems and Quality Management	340
	Activity-Based Costing	340
	Questions for Discussion	344
	<b>Case</b> Cost-of-Quality Reporting: How We See It	347
<b>12</b>	<b>ISO 9000: Universal Standards of Quality</b> .....	359
	ISO around the World	360
	ISO 9000 in the United States	361
	The ISO 9000 ANSI/ASQC Q-90 Series Standards	363
	Benefits of ISO 9000 Certification	367
	Getting Certified: The Third-Party Audit	368
	Documentation	368
	Post-Certification	369
	Choosing an Accredited Registration Service	369
	ISO 9000 and Services	370
	The Cost of Certification	371
	ISO 9000 vs. The Baldrige Award	371
	Implementing the System	372
	Questions for Discussion	372
	<b>Reading</b> Assessing Quality Growth in the U.S.	376
	<b>Case</b> PPG's Journey to ISO 9000	380
<b>13</b>	<b>1993 Varifilm Case Study</b> .....	387
	Overview	387
	Category 1.0: Leadership	390
	Category 2.0: Information and Analysis	397
	Category 3.0: Strategic Quality Planning	406
	Category 4.0: Human Resource Development and Management	412
	Category 5.0: Management of Process Quality	425
	Category 6.0: Quality and Operational Results	435
	Category 7.0: Customer Focus and Satisfaction	439
	<b>Index</b> .....	455