MANAGEMENT



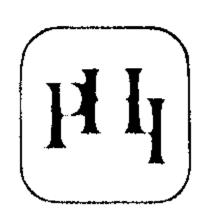
Prentice/Hall International editions

JAMES A. F. STONER

JAMES A. F. STONER

Fordham University

Vanagement



Prentice/Hall International, Inc., London

To my parents

This edition may be sold only in those countries to which it is consigned by Prentice-Hall International. It is not to be reexported and it is not for sale in the U.S.A., Mexico or Canada.

Library of Congress Cataloging in Publication Data Stoner, James A. F.

Management.

Includes bibliographical references and indexes.

Management. I. Title.

HD31.S6963

658.4

77-21259

ISBN 0-13-549386-2

© 1978 by Prentice-Hall, Inc., Englewood Cliffs, N.J. 07632

All rights reserved. No part of this book may be reproduced in any form or by any means without permission in writing from the publisher.

Printed in the United States of America

10 9 8 7 6 5 4 3 2 1

Prentice-Hall International, Inc., London
Prentice-Hall of Australia Pty. Limited, Sydney
Prentice-Hall of Canada, Ltd., Toronto
Prentice-Hall of India Private Limited, New Delhi
Prentice-Hall of Japan, Inc., Tokyo
Prentice-Hall of Southeast Asia Pte. Ltd., Singapore
Whitehall Books Limited, Wellington, New Zealand
Prentice-Hall, Inc., Englewood Cliffs, New Jersey

Cover Photo: Mitchel Funk/The Image Bank



This book is about the job of the manager. It describes how men and women go about managing the people and activities of their organization so that the goals of the organization, as well as their personal goals, will be achieved.

I have attempted in this book to convey the very positive view I have of the manager's job. I believe the job of a manager is among the most exciting, challenging, and rewarding careers a person can have. Individuals can, of course, make great contributions to society on their own. But it is much more likely that major achievements will occur in *managed* organizations—not only businesses, but also universities, hospitals, research centers, governmental agencies, and other organizations. Such organizations bring together the talent and resources that great achievements require. The individual manager, therefore, has a much greater chance to be involved in a significant and far-reaching activity than the individual working alone.

I also believe that in addition to being fun and rewarding, a managerial career is critically important. The problems our society faces today—and, most likely, the problems it will face in the foreseeable future—require the type of large-scale solutions only governments and other organizations can provide. How well we learn to manage such problems as pollution, the energy crisis, overpopulation, and poverty may help determine whether we survive as nations, cultures, or even as a species. The skill of organizational managers will be a vital factor in our ability to meet our society's tasks and challenges. The information in this text is designed to help you, the reader, develop these vital managerial skills.

In this text I have chosen to address the reader as a potential manager. At times, in fact, I even adopt a tone that suggests the reader already is a manager. This decision was a deliberate one: I want to encourage the reader to start thinking like a manager as soon as possible. Obviously, the earlier one learns to think like a manager, the quicker one can develop managerial effectiveness. But there is another, more basic reason I approach the reader as if he or she already were a manager. All managers, but especially young managers just beginning their careers, are evaluated in large part on how effective they are as *subordinates*. The more successful an individual is as a subordinate, the

more successful his or her career is likely to be. And one of the best ways of learning how to be an excellent subordinate is to learn how to think like a manager. Thus, addressing the reader as a manager (or at least as a prospective manager) is meant to be a helpful way of improving the reader's chances for future managerial and career success.

The material in this text has been selected with two objectives in mind: to provide the reader with information that is useful and relevant and to give the reader an understanding of the management field. Thus, most chapters have a practical orientation—how organizational realities affect the ethical behavior of managers (Chapter 3); how managers carry out the strategic planning process in their organizations (Chapter 5); when managers and subordinates should make decisions together (Chapter 7); how many subordinates should report directly to each type of manager (Chapter 10); how managers can be effective participants and leaders of groups and committees (Chapter 12); how organizational conflict can be managed (Chapter 14); what leadership styles are most effective in different types of situations (Chapter 17); what organizational realities and career strategies young managers should be aware of in order to manage their careers effectively (Chapter 20); and how managers can devise control systems that will be accepted by their subordinates (Chapters 21 and 24). Every attempt has been made to eliminate the use of management jargon, which so often hampers the readability of books on management. Instead, clear and familiar language is used so that the material will be easily accessible to the reader. Where a new term is introduced, it is set off in italics and clearly defined. The text has also been made more useful to students by covering different types of organizations—nonprofit, governmental, and business—in the belief that students will be assuming a wide variety of management positions.

The field of management has grown so rich that it is impossible to describe the work of all management writers and theorists in an introductory text. Instead, this text describes the major schools of management thought in one introductory chapter (Chapter 2); the remainder of the text includes material from a wide variety of sources that seemed most useful to the reader. The text does not, however, neglect the classical works in the field of management and in addition often includes the first pieces of research in a new area of inquiry.

This book attempts to integrate the major approaches to the basic introductory management course—the classical, behavioral, and quantitative approaches—and the emerging systems and contingency perspectives. The structure of the book is based, in large part, on the classical approach because (1) managers themselves still seem to find it quite useful; (2) students find it to be a good "handle" and lead-in to the management field; and (3) it provides an excellent organizing framework for all the management approaches. I believe that the various schools and perspectives in management have been growing closer for a number of years and that the reader's best interests are served by a text that takes an integrative point of view. Of course, wherever appropriate, I have specifically noted some of the important differences in the underlying values, assumptions, and action implications of the various approaches.

Pedagogical Aids

I have tried to present the material in such a way as to be most helpful to students and teachers alike. The chapters in the text are designed to stand on their own, so instructors can deal with the various topics in whatever order they choose. However, in order to show how integrated the management field is, I have included a large number of chapter cross-references. The book as a whole is organized in a way that has proven successful in many introductory management courses.

Objectives. Each chapter begins with a list of learning objectives. These tell the reader specifically what he or she should know after reading the chapter. The reader can use these objectives as a study aid.

Illustrations and Tables. A large number of colorful and informative charts, tables, cartoons, and other illustrations have been included in this text. They have been designed to convey information in an attractive and readily comprehensible form. The boxed inserts in the text provide the reader with interesting supplementary information or summarize important material in the text.

Summary. A summary at the end of each chapter helps the student review the material presented in that chapter. The summary contains key information, concepts, and terms.

Review Questions. An additional study aid is the list of review questions that follows each chapter. These questions help students pull together and integrate the basic contents of the chapter. In addition, the questions give students an opportunity to see how their own values will affect the way they apply management principles.

Case Studies. The case study method has long been recognized as an effective means for helping students acquire and learn to apply management concepts. This text contains a total of twenty-nine cases, most of which have been class-room-tested for effectiveness. The cases describe situations in business as well as nonbusiness organizations. Each of the five units in the text opens with a major case that is designed to cover the key concepts of the entire unit. Each chapter closes with a shorter case study or incident that is designed to high-light key concepts of the chapter. Both types of cases are followed by case questions that are designed to help students focus on the important aspects of the case.

Supplements. A Study Guide and Workbook is available to help the student review, understand, and integrate the material in the text. Each chapter in the workbook includes a review outline, a list of key terms and concepts, and a series of self-test questions. A separate Instructor's Manual, Test Item File, and set of Transparency Masters are also available.

Acknowledgments

One of the more pleasant parts of writing a book is the opportunity to thank those who have contributed to it. Unfortunately, the list of expressions of thanks—no matter how extensive—is always incomplete and inadequate. These acknowledgments are no exception.

First thanks must go to my editor, Sheldon Czapnik, whose unflagging patience, constant good humor, and astounding capacity for creative work and long hours made the book possible. Without Sheldon, there would have been no book. I am deeply indebted to Charles Wankel, Peter Pfister, Dr. Samuel Dekay, and Della Dekay for performing much useful research, completing many detailed tasks, and frequently suggesting alternative approaches. On this text I had professional writing assistance, and I would like especially to thank Arthur Mitchell and Jim McDonald for their contributions. Earl Kivett and Paul Atkinson, at that time Prentice-Hall acquisitions editor and area sales representative, respectively, first interested me in this project. Paul was particularly helpful in encouraging me to go ahead. I would also like to give special thanks to the production editor. Eleanor Perz, for her good spirits, professionalism, and dedication to the project.

Many of my colleagues in academia contributed directly and indirectly to this text. My advisor on two theses and early academic mentor, the late Donald G. Marquis, placed his own imprint indelibly and permanently upon me. I have frequently drawn heavily on the research and the recalled classes and conversations of Professors George Farris, Thomas Ference, Edgar Schein, and Kirby Warren, and my own interpretation of how they might have thought through problems. Tom was helpful on numerous occasions, and I am very grateful to him and to our colleague Jerome Schnee for allowing me to use their teaching notes and other materials at critical times. Deans Senkier, Jordan, and McDermott at Fordham provided consistent encouragement for my involvement in this project. They were always understanding during my various stages of work overload. From the time I was considering embarking on the project until its completion, they each had only one question: "What can I do to help?" I couldn't have asked for better management. James Gatza, Curtis R. Clarke, David E. Risch, Mahmoud A. Moursi, David A. Tansik, and F. Glenn Boseman provided needed reviews and guidance at critical stages.

Because this book is about management and about managers, I am indebted to the many outstanding managers and consultants with whom I have worked. These are far too many to list, but a few simply must be credited: Joseph Voci, David Gleicher, Malcolm MacGruer, and the late Victor Milton have all influenced me profoundly. As consultants, Joe and David can conceptualize and guide the practice of management as well as anyone I have ever met. As practicing managers, Joe, Malcolm, and Victor have always been a joy to watch in action.

Finally, in a strictly personal vein, my thanks for multiple types of encouragement go to Bill, Diane, Lynn, and Sandy.

Ontents

PART I

Introduction to Management 1

Part Opening Case: Leis Electronics Company 2

Chapter 1 Managing and Managers 6

Defining Management 7

Why Organizations Are Needed 8 The Effectiveness of Organizations 9 Continuity of Knowledge Provided by Organizations 9 Organizations as a Source of Careers 10 The Purpose of This Book 10

What Managers Do 11 Some Gaps in Our Working Definition 12 Is Management an Art, a Science, or a Profession? 14

Types of Managers 16 Management Levels 16 Functional and General Managers 17

The Process of Management 17 Planning 18 Organizing 18 Leading 19 Controlling 19

How Managers Spend Their Time 20 Management Levels and Managerial Skills 20 How Managers Allocate Their Time 22 How Managers Spend Their Time: An Alternate View 24

The Training of Managers 26 A Critique of Management Education 27 Books and the Classroom 28

Summary 28 Review Questions 29 Case Study 29

Chapter 2 The Evolution of Management Theory 31

The Classical Management Theorists 33 The Forerunners of Scientific Management 33 Frederick W. Taylor (1856–1915) and Scientific Management 34 Other Contributors to Scientific Management 36 Contributions and Limitations of Scientific Management 37 Henri Fayol (1841–1925) and Classical Organization Theory 39 Contributions and Limitations of Classical Organization

The Behavioral School: The Organization Is People 45 Hugo Münsterberg (1863–1916) and the Birth of Industrial Psychology 46 Elton Mayo and the Human Relations Movement 47 Contributions and Limitations of the Human Relations School 48 From Human Relations to the Behavioral Science Approach 49

The Quantitative School: Operations Research and Management Science 50 Contributions and Limitations of the Management Science Approach 51 Attempts to Integrate the Schools 52 The Systems Approach 52 The Contingency Approach 54 Summary 55 Review Questions 56 Case Study 56

Chapter 3 Managers and the External Environment of Organizations 58

The "Direct-Action" Environments" 60 Suppliers 60 Customers 61 Competitors 62 Government Agencies 62 The "Indirect" and General Environments 64 Technological Variables 64 Political-Legal Economic Variables 64 Sociocultural Variables 66 The International Dimension 67 Variables 66 Relating the Organization to the Environment 68 Changing Concepts of Managerial and Organizational Responsibility 69 Changing Views of the Manager's Role 69 The Personal Values of The Ethics of Managers 73 Managers 71 Concepts of Organizational or Corporate Responsibility 76 Two Views of the Proper Role of Business 76 The Levels of Business Activism in Social The Role of Profits 78 Measuring Social Performance 80 Areas 78 Barriers to Improved Social Performance 81 Review Questions 83 Summary 83 Case Study 83

PART II Planning and Decision Making 85

Part Opening Case: System-Wide Solutions Needed 86

Chapter 4 Planning and Plans 90

The Need for Planning 91 The Need for Flexibility in Planning 92 Planning and the Management Process 92 Planning, Plans, and Decision Making 94

Ways of Classifying Plans and Planning 95 The Perspectives of Organizational Planning 95 Strategic and Tactical Plans 97

Types of Plans 97 Goals 98 Single-Use Plans 100 Standing Plans 102

The Four Basic Steps in Planning 103 Step 1: Establishing a Goal 103

Step 2: Determining the Present Situation 104 Step 3: Determining Aids and Barriers to Goals 105 Step 4: Developing a Plan for Reaching the Goal 106

The Linkage of Planning and Controlling 108
Summary 109 Review Questions 110 Case Study 110

Chapter 5 Strategic Planning 112

Why Strategic Planning? 113 The Changing Environment of Organizations 114 The Concept of Strategy 115 Finding the Common Thread 116 Approaches to Strategic Planning 117 The Three Modes of Strategy Making Selecting the Approach 119 Two Types of Strategic Planning 120 118 The Need for the Formal Approach to Planning 121 The Formal Planning Approach 122 Step 1: Select the Goals 123 Analyze the Environment 125 Step 3: Establish Measurable Goals 126 Step 4: Subunits Develop Their Own Plans 126 Step 5: Compare Lower-Level Plans with the Strategic Plan 126 Step 6: Close the Gap 127 Step 7: Select the Best Alternatives 127 Step 8: Implement the Strategic Plan 128 Step 9: Measure and Control the Progress of the Plan 129 The Place of Strategic Planning in Organizations 130 The Role of the Planning Staff 131 Strategic Planning in Large. Diversified Companies 133 The Disadvantages and Advantages of Strategic Planning 135 Disadvantages 136 The Advantages 136 Summary 137 Review Questions 137 Case Study 138

Chapter 6 Making Planning Effective 140

Barriers to Effective Planning 142 Reluctance to Establish Goals 142 Resistance to Change 144 Barriers to Formal Strategic Planning 145 Factors That Discourage Strategic Planning 146 Obstacles to the Effectiveness of Strategic Planning 149 Management by Objectives 151 What Is Management by Objectives? 152 The Philosophy behind MBO 153 The MBO System 154 The Evaluation of MBO 156 The Strengths of MBO 158 The Weaknesses of MBO Making MBO Effective 160 Summary 161 Review Questions 161 Case Study 162

Chapter 7 Decision Making 164

Types of Decisions 165 Programmed and Nonprogrammed Decisions 166 Decisions under Certainty, Risk, and Uncertainty 167 The Limits of Rational Decision Making 170

Decision Trees and Decision Making 171 The Problem 172 Analyzing the Decision Tree 172

The Nature of Managerial Decision Making 174 Defining the Decision-Making Situation 174 Finding the Problem to Work On 176

The Decision-Making Process 177 Rational Decision Making 178

Improving the Effectiveness of Decisions 182 Matching the Decision-Making Approach to the Problem 184

Summary 187 Review Questions 188 Case Study 188

Chapter 8 Aids in Planning and Decision Making 190

Management Science Approaches to Decision Making 191 Steps in the Management Science Approach 192 Types of Models and Management Science Techniques 195 Application of OR Techniques 197 Advantages and Limitations of OR 200 Problems of Implementation 201

Forecasting Techniques 204 Forecasts as Premises 204 Forecasting Techniques for Economic and Sales Information 205 Technological Forecasting 207 Choosing the Appropriate Forecasting Technique 209

Summary 210 Review Questions 211 Case Study 211

PART III Organizing for Stability and Change 213

Part Opening Case: Wilco, Inc. 214

Chapter 9 Organizational Structure 220

The Meaning and Importance of Organizing 221
Strategy and Organizational Structure 223
Departmentalization 224
The Organization Chart 225 The Formal Organizational Structure 226
The Informal Organization 232
Division of Work 233 The Advantages of Job Specialization 233

viii

Specialization and Job Satisfaction 234 Job Enlargement and Job Enrichment 237

Summary 238 Review Questions 239 Case Study 239

Chapter 10 Coordination and Span of Management 241

Coordination 242 The Need for Coordination 242 The Difficulty of Coordination 243 Effective and Ineffective Coordination 244 Coordinating Mechanisms 246 The Span of Management 248 Wide versus Narrow Spans of Management 249 Efficient Utilization of Managers and Subordinates 251 Span of Management and Organizational Levels 251 Tall versus Flat Organizational Structures 253 Selecting the Appropriate Span 254 Summary Review Questions 262 261 Case Study 262

Chapter 11 Authority, Delegation, and Decentralization 264

Influence, Power, and Authority 266 The Basis of Formal Authority: Two The Bases of Power 268 Power in Organizations 270 Views **266** Line and Staff Authority 272 Line Positions 272 Staff Positions 273 Types of Staff 273 Functional Staff Authority 275 Delegation 276 Guidelines for Effective Delegation 277 The Advantages of Effective Delegation 279 Barriers to Effective Delegation 280 Overcoming the Barriers 281 Decentralization 282 Factors Influencing Decentralization 283 Trends in Decentralization 285 Summary 285 Review Questions 286 Case Study 287

Chapter 12 Groups and Committees 289

Types of Groups 291 Formal Groups 292 Informal Groups 292 Characteristics of Groups in Organizations 295 Informal Leadership 295 Group Norms and Conformity 296 Group Cohesiveness 296 Group Performance 297 Group Cohesiveness and Group Performance 297 Individual versus Group Problem Solving 298 Improving Group Problem Solving 299 Group Assets 299 Group Liabilities 299 Factors That Can Be Assets or Liabilities 300 Effective Group Leadership: One Perspective 301

Task Forces and Committees 302 Functions of Committees 303 Types of Committees and Task Groups 304 Advantages of Committees 306 Disadvantages of Committees 307 Making Committees and Task Groups Effective 308

Summary 311 Review Questions 311 Case Study 312

Chapter 13 Organizational Design for Changing Environments 314

Early Approaches to Organizational Design 316 The Classical Approach to Organizational Design 316 The Neoclassical Approach 318 Contingency Approaches to Organizational Design 322 Strategy and Structure 322 Task-Technology and Structure 324 External Environment and Structure 326 People and Structure 329 Organizational Climate 331 Definition and Importance of Organizational Climate 331 Determinants of Organizational Climate 333 A Model of Organizational Growth and Change 334 The Five Phases of Growth 336 Summary 339 Review Questions 340 Case Study 340

Chapter 14 Managing Organizational Conflict and Creativity 342

Three Views of Conflict 343 Conflict, Competition, and Cooperation 345 Functional and Dysfunctional Conflict 345 Types of Conflict 347 Sources of Organizational Conflict 347 Shared Resources 348 Differences in Goals 348 Interdependence of Work Activities 348 Differences in Values or Perceptions 348 Other Sources of Conflict 349 Consequences of Organizational Conflict 350 Functional and Dysfunctional Consequences 351 Methods for Managing Conflict 352 Conflict Stimulation Methods 352 Conflict Reduction Methods 354 Conflict Resolution Methods 355 Line and Staff Conflict 357 The View from the Line 358 The View from the Staff 358 Other Line-Staff Differences 358 Reducing Line-Staff Conflict 359 Managing Organizational Creativity 359 Creativity and Innovation 360 Steps in the Creative Process 360 Individual Creativity 361 Stimulating Individual and Group Creativity 362 Organizational Creativity and

Review Questions 369

Establishing a Climate for Organizational Creativity 367

Case Study 369

Innovation 363

Summary 368

Chapter 15 Managing Organizational Change and Development 371

Responses to Change Pressures 372 Forces for Change 373 External Forces 373 Internal Forces 374

The Process of Organizational Change 374 A Model of Organizational Change 374

Resistance to Change 377 Overcoming Resistance to Change 378

Approaches to Organizational Change 379 Interdependence of the Three Approaches 380 Structural Approaches 381 Technological Approaches 381 People Approaches 382

The Organizational Development Approach 385 Characteristics of the OD

Process 386 OD Assumptions and Values 387 Types of OD Activities 389 Conditions for Successful OD Programs 393

Summary 394 Review Questions 394 Case Study 395

PART IV Leading 397

Part Opening Case: Weston University 398

Chapter 16 Motivation, Performance, and Satisfaction 404

The Importance of Motivation 405 Ways of Looking at Motivation 406 Content Theories 406 Process Theories 408 Reinforcement Theories 408 Early Views of Motivation in Organizations 409 The Traditional Model 409 The Human Relations Model 409 The Human Resources Model 410 A Systems View of Motivation in Organizations 412 Characteristics of the Individual 412 Characteristics of the Job Task 418 Characteristics of the Work Situation 420 The Impact of Past Consequences on Behavior 421 Operant Conditioning Types of Reinforcement 423 Learning Theory Techniques 424 422 Integrative Approaches 427 Expectations, Outcomes, and Work Behavior 428 Perceptions of Equitable Treatment and Work Behavior 431

Review Questions 433 Case Study 434

Chapter 17 Leadership 436

Summary 432

Defining Leadership 437 The Nature of Leadership 438
The Search for Leadership Traits 439

The Behavior of Leaders 441 Leadership Functions 442 Leadership Styles 442

Situational Factors in Leadership Effectiveness 448 The Leader's Personality and Past Experiences 450 The Expectations and Behavior of Superiors 450 Subordinates' Characteristics, Expectations, and Behavior 450 Task Requirements 451 Organizational Climate and Policies 451 Peers' Expectations and Behavior 452

Contingency Approaches to Leadership 452 Leadership Style and the Work Situation: The Fiedler Model 452 A Path-Goal Approach to Leadership 455 A Life Cycle Theory of Leadership 458 How Flexible Are Leadership Styles? 459

Summary 461 Review Questions 462 Case Study 462

Chapter 18 Interpersonal and Organizational Communication 464

Summary 489

The Importance of Communication 465
Interpersonal Communication 467 The Communication Process 467
One-Way and Two-Way Communication 471 Barriers to Effective
Interpersonal Communication 472 Overcoming the Barriers to Interpersonal
Communication 476
Communication in Organizations 479 Communication Networks within the
Organization 481 Vertical Communication 483 Lateral and Informal
Communication 485 Overcoming Organizational Barriers to
Communication 487

Case Study 491

Review Questions 490

Chapter 19 Staffing and the Personnel Function 494

The Staffing Process 495

Human Resource Planning 498 Steps in Human Resource Planning 499

Forecasting and the Human Resource Audit 500

Recruitment 502 Job Analysis 502 Sources for Recruitment 503

Selection 504 Interviewing 507 Manager Selection 508 Assessm

Selection 504 Interviewing 507 Manager Selection 508 Assessment Centers 510

Induction and Orientation 511 The Effects of Early Job Experiences 511

Training and Development 513 Training Programs 513 Management

Development Programs 514

Performance Appraisal 518 Informal and Formal Appraisal 518 Formal Appraisal Approaches 518 Problems of Appraisal 519

Promotions, Transfers, Demotions, and Separations 521 Promotions 521 Transfers 522 Demotions and Separations 522 Summary 523 Review Questions 524 Case Study 525

Chapter 20 Organizational Careers and Individual Development 526

Early Organizational Career Experiences 527 The Formation of Expectations 527 Early Job Experiences 530 Early Career Dilemmas 532 Political Insensitivity and Passivity 532 Loyalty Dilemmas 533 Personal Anxiety 535 Problems of Organizational Stress 535 Careers over Time 538 Careers and the Life Cycle 539 The Levinson Careers within Organizations 541 Model **539** The Career Plateau 543 Individual Career Management Activities 547 Career Tactics 547 Conscious Career Planning 550 Summary 552 Review Questions 553 Case Study 554

PART V Controlling 557

Part Opening Case: Bill French, Accountant 558

Chapter 21 The Control Process 564

The Meaning of Control 565 The Link between Planning and Controlling 566 What Is Control? 566

The Importance of Control 569 Organizational Factors Creating the Need for Control 569 Finding the Right Degree of Control 570

Types of Control Methods 572 Steering Controls 572 Yes-No or

Screening Controls 572 Yes-No or Screening Controls 572 Yes-No or Screening Controls 572 Post-Action Controls 573 The Importance of Steering Controls 574

Design of the Control Process 575 The Control Process 575 Critical Issues in Establishing a Control System 579

Key Performance Areas 582 General Electric's Key Result Areas 583
Strategic Control Points 586

Characteristics of Effective Control Systems 586
Summary 589 Review Questions 590 Case Study 590

Chapter 22 Budgetary Methods of Control 592

Responsibility Centers and Budgetary Control 594 Responsibility Centers 594

The Budgeting Process 596 How Budgets Are Drawn Up and Approved 596 The Role of Budget Personnel 598 How Budgets Are Revised 598 Some Problems in Budget Development 598

Types of Budgets 600 Budgets Based on Responsibility Centers 600 Financial Budgets 602 Variable versus Fixed Budgets 604 Special Approaches to Budgeting 606 PPBS 606 Zero-Base Budgeting 608

Functional and Dysfunctional Aspects of Budget Systems 609 Potentially Functional Aspects of Budgets 609 Potentially Dysfunctional Aspects of Budgets 610

Summary 616 Review Questions 616 Case Study 617

Chapter 23 Nonbudgetary Methods of Control 618

Financial Control Methods 619 Financial Statements 619 Ratio
Analysis 623 Break-Even Analysis 628
Auditing 630 External Auditing 631 Internal Auditing 631
Management Auditing 632
Project and Program Control Techniques 634 The Gantt Chart 635
Milestone Scheduling 636 Network Analysis: PERT and CPM 636
Advantages and Limitations of PERT and CPM 641
Summary 642 Review Questions 642 Case Study 643

Chapter 24 Making Control Effective 645

Information and Control 646 The Computer Revolution 647 The Value and Cost of Control Information 648

Management Information Systems 650 Designing an MIS 651 Computers and MIS 656

Establishing Effective Control Systems 661 Guidelines for Effective Control 662

Summary 664 Review Questions 665 Case Study 665

Name Index 667
Subject Index 671

XIV