



CONTENTS

PREFACE

xiii

PART ONE: THE DOMAIN OF CONTROL SYSTEMS

1 INTRODUCTION TO MANAGEMENT CONTROL SYSTEMS 1

The Purpose of Management Control Systems 1 The Relationship between Management
Control Systems and the Management Process 2 Constraints upon Control Systems
Design 3 The Cybernetic Paradigm of Control 6 The Control Process Paradigm 8
The Cybernetic Paradigm and the Control Process 9 Information Systems in Support of the
Control Process 15 Strategic Planning and Management Control 16 An Overview of
the Text 17 References 19 **Cases and Problems:** 1. Mercury Stores, Inc. 19
2. Visagraph: Putting the MCS Together 25

2 ORGANIZATIONAL CONSTRAINTS UPON THE MCS 34

A Caveat 34 Goals as Organizational Constraints 35 Goal Formulation, Loose Coupling,
and Organizational Slack 37 Strategy and Policies 38 Business Unit and Corporate

vii

Strategy	39	Policies as an Elaboration of Strategy	41	Goal Programming and Goal Formulation	41	Goals, Strategy, and Policies as Constraints	46	References	46
Cases and Problems:		1. West End Brewery	47	Duval, Inc.	51				

PART TWO: STRUCTURAL INFLUENCES ON CONTROL

3 KEY VARIABLES AND PERFORMANCE MEASURES 54

Identification of Key Variables	55	Key Success Factors and Performance Measures	62
Inadequacy of "Accounting Profit" as a Measure of Performance	67	References	68
Cases and Problems:		1. Herberston Company	68
		2. Pierce-Irwin Corporation	69
3. Productivity Measurement	76		

4 ORGANIZING FOR CONTROL 78

Strategy, Organization Structure, and Control	78	Evaluation of the Control Factors in Organizational Design	92	The Controller's Organization	97	References	102
Cases and Problems:		1. Framar National Bank	102	2. The Hooper Company	104		
		3. Dorf International	105	4. The Electronics Division (A)	107	5. Translator Technology Corporation	110

5 STRUCTURAL CONTROL OF ORGANIZATIONAL SUBUNITS 116

Determinants of Divisional Autonomy	116	Responsibility Structure	121	Overall Effectiveness Measures: ROI	122	A Pricing Policy That Builds in ROI	127
Goal-Congruent Behavior in the MCS	132	References	136				
Cases and Problems:		1. Denny Daniels	137	2. Integrated Securities Group and the Drysdale Fiasco	138	3. The Merit Pay System at the Southeast Missile Test Center	140

6 MEASURING DIVISIONAL PERFORMANCE 145

The Purpose of Divisional Performance Measurement	145	Setting Transfer Prices	146
The Economics of Transfer Pricing	147	Imperfect Competition in the Intermediate Market	151
Practical Difficulties in the Implementation of Marginal Cost Transfer Pricing in Imperfectly Competitive Intermediate Markets	152	The Birch Paper Company	154
Dual Variables and Long-Range Planning	159	Workable Transfer Pricing Procedures	159
Transfer Pricing in Practice	160	References	163
Cases and Problems:		1. Lorax Electric Company	163
		2. Warren Ford	165
		3. Tate Brothers Ice Cream	170
		4. The J. Walter Thompson Advertising Agency	172
		5. Mid-Atlantic University (A)	178



7

MEASUREMENT METHODS FOR DECENTRALIZED OPERATIONS: INVESTMENT CENTERS

Return on Investment as a Performance Measure 184 Conceptual Differences in the Measures Themselves 185 The Annuity Method of Depreciation 189 Residual Income as a Performance Measurement Concept 190 Accounting for Inflation in Performance Measurement Systems 194 Conclusion: Performance Measurement of Decentralized Operations 197 References 198 **Cases and Problems:** 1. Internal Rate of Return 199 2. ROI and Asset Selection 199 3. Managerial Motivation 199 4. Adjusting ROI for Inflation 200 5. Botel Division of Staple, Inc. 200 6. Diversified Products Corporation 201

PART THREE: THE CONTROL PROCESS AND RELATED INFORMATION FLOWS

8

ENVIRONMENTAL SCANNING AND BUSINESS PLANNING 212

Introduction to Part III: Overview of the Management Control Process 212 The Elements of the Control Process 215 Criteria for Evaluating Management Systems 218 Introduction to Environmental Analysis 220 Environmental Scanning and Business Planning 223 Business Planning at General Electric 225 The PIMS Model 229 References 235 **Cases and Problems:** PIMS Model 1. Business Planning with PIMS 236 2. Productivity Audit with PIMS Data 237 3. Evaluating Business Plans with PIMS 238 4. Environmental Analysis 239

9

PROGRAMMING AND LONG-TERM PLANNING 242

Bower's Model of the Investment Decision-Making Process 244 Formal Programming Procedures 245 Project Definition 246 Project Evaluation 247 Project Implementation and Control 251 The Capital Projects Manual 251 References 252 **Cases and Problems:** 1. New York Telephone (A) 252 2. New York Telephone (B): Long-Range Planning in the State Region 259

10

PROGRAMMING MODEL 268

Nondiscounted Cash Flow Methods 268 Discounted Cash Flow Methods 269 Provision for Uncertainty 289 References 297 **Cases and Problems:** 1. Sampson Corporation 301 2. The ABC Company 301 3. Vernon Enterprises 301 4. The Super Project 302 5. The Strotz Brewery 319

11 BUDGET PLANNING 321

Water Filtration Systems (WFS) 322 Goals and Objectives 322 Organization and
 Responsibility Centers 323 Performance Evaluation and Rewards 323
 Transfer Pricing 324 The Control Process 324 The Nature and Purpose of Budgeting 329
 Budgeting in Service Centers 332 Tools for Budgeting in Discretionary Expense
 Centers (DECs) 333 Computer Budgeting 337 Sensitivity Analysis in the
 Computer Model 340 References 343 **Cases and Problems:** 1. The Triple-F
 Health Club 343 2. Cycle World, Inc. 345 3. McDonough Corporation 348

12 ACCOUNTING FOR CONTROL: COST ACCOUNTING 358

Activity Costing 361 Job Costing 361 Development of the Flexible Overhead Budget 363
 Methods of Estimating Semivariable Costs 363 Allocation of Overhead Costs 364
 Process Costing 366 Standard Cost Accounting 368 Service Sector Cost Accounting:
 A Case Illustration 374 **Cases and Problems:** 1. C. F. Church Manufacturing Company 380
 2. The Parker Manufacturing Company 393 3. Dashing Dashound Dippers 394
 4. Janice Watson: Executive Director 395

13 ACCOUNTING FOR CONTROL: VARIABLE COSTING 397

Profit Under a Full Cost System 397 Profit Under a Variable Cost System 400
 Information for Management for Short-run Decisions 401 Marginal Analysis 402
 Variable Costing Systems 403 Applications of the Variable Cost System 404
 Limitations of Variable Costing 407 Mathematical Programming and Variable Costing 409
 Variable Costing Versus Linear Programming 413 References 414
Cases and Problems: 1. What Price Progress 414 2. Manley Tractor Division 416
 3. Mid-Atlantic University (B) 418

14 THE COMPARATOR 427

Overview of Variance Analysis 428 Standard Cost Accounting 429
 Performance Evaluation and Comparator Design 442 Fundamental Concepts of
 Comparator Design 443 References 444 **Cases and Problems:** 1. The Manhattan
 Company 445 2. Markley Division 445 3. Sales Proposition System 448

15 DECISIONS AND CONTROL 459

Underlying Control Drives Assumed in the Paradigm 459 The Basic Control Paradigm (in static form) 461 Control Strategy 463 Control Dynamics 464
 Stability and Control Conditions 471 References 472
Cases and Problems: 1. Leon Horn Efficiency Expert 472 2. Chase Manhattan Mortgage and Real Estate Trust 474 3. Tablon Inc. 480

PART FOUR: ADVANCED TOPICS IN CONTROL

16 THE CONTROL PROCESS FOR COMPLEX PROGRAMS: PROGRAM PLANNING 483

The Program Control Process 484 References 511 **Cases and Problems:** 1. The Dryfus Company 511 2. Edward Jones 512 3. Woodruff Grocery Company 512

17 THE CONTROL PROCESS FOR COMPLEX PROGRAMS: FINANCIAL PLANNING, RESOURCE SCHEDULING, AND CONTROL 517

Program Financial Planning 517 Resource Allocation Versus Program Planning 522
 Resource Loading 524 Resource Leveling 526 Resource Scheduling Subject to Personnel Constraints 529 The Budget Process 531 Systems of Reporting for Program Control 536 Reporting Delays and Bias 540 References 540
Cases and Problems: 1. Woodruff Grocery Company 541
 2. Jaeger Manufacturing Company 541 3. Electronics Division (B) 543
 4. Tipton Company 548 5. Sterling International's Aerospace Operations 550

18 CONTROL ISSUES IN THE MULTINATIONAL CORPORATION 559

Analysis of Foreign Investment Projects by Multinational Corporations 559 Taxes on Income Associated with Foreign Projects 560 Political Risks 562 Economic Risks 564
 Inflation 566 Empirical Findings Concerning Methods Used to Evaluate Foreign Affiliates 567
 Transfer Pricing for Affiliates of an MNC 570 Budgeting for Foreign Affiliates of an MNC 572 The Impact of Financial Accounting Rules on Performance Evaluation: FASB 8 and FASB 52 575 FASB 8 575 FASB 52 576 References 577
Cases and Problems: 1. Pittsburgh Plate and Glass (PPG) Industries, Inc. 577
 2. Granadia's Power Gadgets 583