# Table of Contents

- About the Authors  xiv
- Preface  xv
- Acknowledgements  xx

## 1 The Manager and Management Accounting  1

- Financial Accounting and Management Accounting  2
- Strategic Decisions and the Management Accountant  3
- Value-Chain and Supply-Chain Analysis and Key Success Factors  4
  - Value-Chain Analysis  4
  - Supply-Chain Analysis  6
  - Key Success Factors  6
  - Sustainability  8
- Decision Making, Planning, and Control  8
- Key Management Accounting Guidelines  12
  - Cost–Benefit Approach  12
  - Behavioral and Technical Considerations  12
  - Different Costs for Different Purposes  12
- Organization Structure and the Management Accountant  13
  - Line and Staff Relationships  13
  - The Chief Financial Officer and the Controller  13
  - Management Accounting Beyond the Numbers  14
- Professional Ethics  15
  - Institutional Support  15
  - Typical Ethical Challenges  16

## 2 An Introduction to Cost Terms and Purposes  28

- Costs and Cost Terminology  29
- Direct Costs and Indirect Costs  30
  - Challenges in Cost Allocation  30
  - Factors Affecting Direct/Indirect Cost Classifications  31
- Cost-Behavior Patterns: Variable Costs and Fixed Costs  31
  - Cost Drivers  33
  - Relevant Range  34
  - Relationships of Types of Costs  35
- Total Costs and Unit Costs  35
  - Unit Costs  35
  - Use Unit Costs Cautiously  36
Business Sectors, Types of Inventory, Inventoriable Costs, and Period Costs  37
  Manufacturing-, Merchandising-, and Service-Sector Companies  37
  Types of Inventory  38
  Commonly Used Classifications of Manufacturing Costs  38
  Inventoriable Costs  38
  Period Costs  39

Illustrating the Flow of Inventoriable Costs and Period Costs  39
  Manufacturing-Sector Example  40
  Recap of Inventoriable Costs and Period Costs  43
  Prime Costs and Conversion Costs  43

Measuring Costs Requires Judgment  45
  Measuring Labor Costs  45
  Overtime Premium and Idle Time  45
  Benefits of Defining Accounting Terms  46
  Different Meanings of Product Costs  47

A Framework for Cost Accounting and Cost Management  48
  Calculating the Cost of Products, Services, and Other Cost Objects  49
  Analyzing the Relevant Information for Making Decisions  49
  Obtaining Information for Planning and Control and Performance Evaluation  49

3 Cost–Volume–Profit Analysis  76

Essentials of CVP Analysis  77
  Contribution Margin  78
  Expressing CVP Relationships  80
  Cost–Volume–Profit Assumptions  81

Breakeven Point and Target Operating Income  82
  Breakeven Point  82
  Target Operating Income  83

Target, Net Income and Income Taxes  85

Using CVP Analysis for Decision Making  86
  Decision to Advertise  86
  Decision to Reduce Selling Price  86
  Determining Target Prices  87

Sensitivity Analysis and Margin of Safety  87

Cost Planning and CVP  90
  Alternative Fixed-Cost/Variable-Cost Structures  90
  Operating Leverage  91

Effects of Sales Mix on Income  92

CVP Analysis in Service and Not-for-Profit Organizations  95

Contribution Margin Versus Gross Margin  96

4 Job Costing  115

Building-Block Concepts of Costing Systems  116

Job-Costing and Process-Costing Systems  117
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 Process Costing and Cost Allocation</td>
<td>171</td>
</tr>
<tr>
<td>Illustrating Process Costing</td>
<td>172</td>
</tr>
<tr>
<td>Case 1: Process Costing with No Beginning or Ending Work-in-Process</td>
<td>173</td>
</tr>
<tr>
<td>Inventory</td>
<td>174</td>
</tr>
<tr>
<td>Case 2: Process Costing with Zero Beginning and Some Ending Work-in-Process Inventory</td>
<td>175</td>
</tr>
<tr>
<td>Case 3: Process Costing with Some Beginning and Some Ending Work-in-Process Inventory</td>
<td>176</td>
</tr>
<tr>
<td>Hybrid-Costing Systems</td>
<td>187</td>
</tr>
<tr>
<td>Cost Allocation for Joint Costs and Common Costs</td>
<td>190</td>
</tr>
<tr>
<td>6 Activity-Based Costing and Activity-Based Management</td>
<td>206</td>
</tr>
<tr>
<td>Broad Averaging and Its Consequences</td>
<td>207</td>
</tr>
<tr>
<td>Undercosting and Overcosting</td>
<td>207</td>
</tr>
<tr>
<td>Product-Cost Cross-Subsidization</td>
<td>207</td>
</tr>
</tbody>
</table>
7 Pricing Decisions, Customer Profitability, and Cost Management 254

Major Factors that Affect Pricing Decisions 255
- Customers 255
- Competitors 255
- Costs 255
- Weighing Customers, Competitors, and Costs 255

Costing and Pricing for the Long Run 256
- Calculating Product Costs for Long-Run Pricing Decisions 256
- Alternative Long-Run Pricing Approaches 257

Target Costing for Target Pricing 259
- Understanding Customers’ Perceived Value 259
- Doing Competitor Analysis 259
- Implementing Target Pricing and Target Costing 259

Value Engineering, Cost Incurrence, and Locked-In Costs 260
- Value-Chain Analysis and Cross-Functional Teams 262
- Achieving the Target Cost per Unit for Provalue 263

Cost-Plus Pricing 265
- Cost-Plus Target Rate of Return on Investment 265
- Alternative Cost-Plus Methods 265
- Cost-Plus Pricing and Target Pricing 266
Financial Benefits of JIT and Relevant Costs 415
Enterprise Resource Planning (ERP) Systems 416
Performance Measures and Control in JIT Production 417
Effect of JIT Systems on Product Costing 417
Lean Accounting 417
JIT Systems and Supply-Chain Analysis in Retailing 419
JIT in Service Industries 420

Time as a Competitive Tool 420
Customer-Response Time and On-Time Performance 420
Bottlenecks and Time Drivers 421
Relevant Revenues and Relevant Costs of Time 424
Time-Related Measures 425

11 Capital Investments 444

Stages of Capital Budgeting 445
Discounted Cash Flow 447
  Net Present Value Method 447
  Internal Rate-of-Return Method 449
  Comparison of Net Present Value and Internal Rate-of-Return Methods 450
  Sensitivity Analysis 451
Payback Method 452
  Uniform Cash Flows 452
  Nonuniform Cash Flows 453
Accrual Accounting Rate-of-Return Method 455
Relevant Cash Flows in Discounted Cash Flow Analysis 456
  Relevant After-Tax Flows 457
  Categories of Cash Flows 458
Project Management and Performance Evaluation 461
  Postinvestment Audits 462
  Performance Evaluation 462
Strategic Considerations in Capital Budgeting 463
  Investment in Research and Development 464
  Customer Value and Capital Budgeting 464

12 Master Budget and Responsibility Accounting 483

Budgets and the Budgeting Cycle 484
  Strategic Plans and Operating Plans 484
  Budgeting Cycle and Master Budget 485
Advantages of Budgets 486
  Coordination and Communication 486
  Framework for Judging Performance and Facilitating Learning 486
  Motivate Managers and Other Employees 487
  Challenges in Administering Budgets 487
Developing an Operating Budget 488
  Time Coverage of Budgets 488
  Steps in Preparing an Operating Budget 488
13 Flexible Budgets, Cost Variances, and Management Control  535

Static Budgets and Variances  536
  The Use of Variances  536
  Static Budgets and Static-Budget Variances  537

Flexible Budgets  539
  Sales-Volume Variances  540
  Flexible-Budget Variances  541

Price Variances and Efficiency Variances for Direct-Cost Inputs  542
  Obtaining Budgeted Input Prices and Budgeted Input Quantities  542
  Data for Calculating Webb’s Price Variances and Efficiency Variances  544
  Price Variances  545
  Efficiency Variance  546

Planning Overhead Costs and Calculating Overhead Rates  547
  Planning Variable Overhead Costs  547
  Planning Fixed Overhead Costs  548
  Standard Costing  548
  Developing Budgeted Variable Overhead Rates  548
  Developing Budgeted Fixed Overhead Rates  549

Variable Overhead Cost Variances  550
  Flexible-Budget Analysis  551
  Variable Overhead Efficiency Variance  551
  Variable Overhead Spending Variance  552

Fixed Overhead Cost Variances  554
  Production-Volume Variance  555
  Interpreting the Production-Volume Variance  556

Integrated Analysis of Variances  558
  Summary of Variances  558

How Managers Use Variances  560
  Multiple Causes of Variances  561
  When to Investigate Variances  561
  Performance Measurement Using Variances  561
  Organization Learning  562
  Continuous Improvement  562
  Financial and Nonfinancial Performance Measures  562
  Cost Variances in Nonmanufacturing Settings  563
  Impact of Information Technology on Variances  563
14 Strategy, Balanced Scorecard, and Strategic Profitability Analysis  583

What Is Strategy?  584
Building Internal Capabilities: Quality Improvement and Reengineering at Chipset  586
Strategy Implementation and the Balanced Scorecard  587
   The Balanced Scorecard  587
   Strategy Maps and the Balanced Scorecard  587
   Implementing a Balanced Scorecard  591
   Different Strategies Lead to Different Scorecards  591
   Features of a Good Balanced Scorecard  592
   Pitfalls in Implementing a Balanced Scorecard  593
   Evaluating the Success of Strategy and Implementation  594
Strategic Analysis of Operating Income  594
   Growth Component of Change in Operating Income  596
   Price-Recovery Component of Change in Operating Income  597
   Productivity Component of Change in Operating Income  598
   Further Analysis of Growth, Price-Recovery, and Productivity Components  600
   Applying the Five-Step Decision-Making Framework to Strategy  600
Downsizing and the Management of Processing Capacity  601
   Engineered and Discretionary Costs  601
   Identifying Unused Capacity for Engineered and Discretionary Overhead Costs  602
   Managing Unused Capacity  602

15 Transfer Pricing  624

Management Control Systems  625
   Formal and Informal Systems  625
   Effective Management Control  625
Decentralization  626
   Benefits of Decentralization  627
   Costs of Decentralization  627
   Comparison of Benefits and Costs  628
   Decentralization in Multinational Companies  628
   Choices About Responsibility Centers  629
Transfer Pricing  630
   Criteria for Evaluating Transfer Prices  630
Calculating Transfer Prices  630
   An Illustration of Transfer Pricing  631
Market-Based Transfer Prices  633
   Perfectly Competitive Market  633
   Distress Prices  634
   Imperfect Competition  634
Cost-Based Transfer Prices  635
   Full-Cost Bases  635
   Variable-Cost Bases  637
Hybrid Transfer Prices  637
Prorating the Difference Between Maximum and Minimum Transfer Prices 638
Negotiated Pricing 638
Dual Pricing 639

A General Guideline for Transfer-Pricing Situations 640
Multinational Transfer Pricing and Tax Considerations 642
Transfer Pricing for Tax Minimization 642
Transfer Prices Designed for Multiple Objectives 644
Additional Issues in Transfer Pricing: Tariffs and Customs Duties 645

16 Performance Measurement and Compensation 664

Financial and Nonfinancial Performance Measures 665
Accounting-Based Measures for Business Units 666
  Return on Investment 666
  Residual Income 668
  Economic Value Added 669
  Return on Sales 671
  Comparing Performance Measures 671

Choosing the Details of the Performance Measures 672
  Alternative Time Horizons 672
  Alternative Definitions of Investment 672
  Alternative Asset Measurements 673

Target Levels of Performance and Feedback 675
  Choosing Target Levels of Performance 675
  Choosing the Timing of Feedback 676

Performance Measurement in Multinational Companies 676
  Calculating the Foreign Division's ROI in the Foreign Currency 677
  Calculating the Foreign Division's ROI in U.S. Dollars 677

Distinction Between Managers and Organization Units 678
  The Basic Tradeoff: Creating Incentives versus Imposing Risk 679
  Intensity of Incentives and Financial and Nonfinancial Measurements 680
  Benchmarks and Relative Performance Evaluation 680
  Performance Measures at the Individual Activity Level 680
  Executive Performance Measures and Compensation 682

Strategy and Levers of Control 684
  Boundary Systems 684
  Belief Systems 684
  Interactive Control Systems 685

Appendix 702
Field-Based Assignments and Experiential Learning 709
Glossary 714
Index 723