

RAY

COLIN

**MANAGEMENT
ACCOUNTING
FOR BUSINESS**

8

**EIGHTH
EDITION**

MIKE TAYLES



4 8001 00008 0111

BRUNNEN

COLIN

MANAGEMENT ACCOUNTING FOR BUSINESS

WITHDRAWN
8

WITHDRAWN
EIGHTH
EDITION

MIKE TAYLES

COVENTRY UNIVERSITY LONDON
CENGAGE
University House

109-117 Middlesex Street, London, E1 7JF
Australia • Brazil • Canada • Mexico • Singapore • United Kingdom • United States

Tel: 024 7765 1016

www.coventry.ac.uk/london

**Management Accounting for Business,
Eighth Edition
Colin Drury, Mike Tayles**

Publisher: Annabel Ainscow

List Manager: Birgit Gruber

Marketing Manager: Helen Seymour

Senior Content Project Manager: Sue Povey

Manufacturing Manager: Eyvett Davis

Typesetter: Lumina Datamatics, Inc.

Cover Design: Jonathan Bargas Ltd

© 2022, Cengage Learning EMEA

ALL RIGHTS RESERVED. No part of this work may be reproduced, transmitted, stored, distributed or used in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior written permission of Cengage Learning or under licence in the U.K. from the Copyright Licensing Agency Ltd.

The Authors have asserted the right under the Copyright Designs and Patents Act 1988 to be identified as Authors of this Work.

For product information and technology assistance, contact us at
emea.info@cengage.com

For permission to use material from this text or product and for permission queries, email **emea.permissions@cengage.com**

British Library Cataloguing-in-Publication Data

A catalogue record for this book is available from the British Library.

ISBN: 978-1-4737-7880-1

Cengage Learning, EMEA

Cheriton House, North Way
Andover, Hampshire, SP10 5BE
United Kingdom

Cengage Learning is a leading provider of customized learning solutions with employees residing in nearly 40 different countries and sales in more than 125 countries around the world. Find your local representative at: **www.cengage.co.uk**.

To learn more about Cengage platforms and services, register or access your online learning solution, or purchase materials for your course, visit **www.cengage.co.uk**.

BRIEF CONTENTS

PART ONE Introduction to management and cost accounting 2

- 1 Introduction to management accounting 4
- 2 An introduction to cost terms and concepts 29

PART TWO Information for decision-making 52

- 3 Cost-volume-profit analysis 54
- 4 Measuring relevant costs and revenues for decision-making 84
- 5 Pricing decisions and profitability analysis 114
- 6 Capital investment decisions: Appraisal methods 141

PART THREE Cost assignment 176

- 7 Cost assignment 178
- 8 Activity-based costing 206

PART FOUR Information for planning, control and performance measurement 234

- 9 The budgeting process 237
- 10 Management control systems 275
- 11 Standard costing and variance analysis 305
- 12 Divisional financial performance measures 340
- 13 Transfer pricing in divisionalized companies 366

PART FIVE Strategic performance and cost management, value creation and challenges for the future 390

- 14 Strategic performance management 392
- 15 Strategic cost management and value creation 423
- 16 Challenges for the future 462

CONTENTS

In memoriam xi

Preface xii

About the authors xix

PART ONE Introduction to management and cost accounting 2

1 Introduction to management accounting 4

The users of accounting information 5

Differences between management accounting and financial accounting 6

The decision-making, planning and control process 7

The impact of the changing business environment on management accounting 11

Focus on customer satisfaction and new management approaches 18

Functions of management accounting 21

Summary of the contents of this book 22

Summary 25

Key terms and concepts 26

Assessment material 28

2 An introduction to cost terms and concepts 29

Cost objects 30

Manufacturing, merchandising and service organizations 30

Direct and indirect costs 31

Period and product costs 34

Cost behaviour 36

Relevant and irrelevant costs and revenues 40

Avoidable and unavoidable costs 41

Sunk costs 42

Opportunity costs 43

Incremental and marginal costs 44

The cost and management accounting information system 46

Summary 47

Key terms and concepts 48

Assessment material 49

PART TWO Information for decision-making 52

3 Cost-volume-profit analysis 54

- Curvilinear CVP relationships 55
- Linear CVP relationships 56
- A numerical approach to cost-volume-profit analysis 58
- The contribution margin ratio 62
- Relevant range 63
- Margin of safety 63
- Constructing the break-even or CVP chart 64
- Alternative presentation of cost-volume-profit analysis 65
- Multi-product cost-volume-profit analysis 68
- Operating leverage 70
- Cost-volume-profit analysis assumptions and limitations 72
- The impact of information technology 74
- Separation of costs into their fixed and variable elements 75
- Summary 77
- Key terms and concepts 78
- Assessment material 79

4 Measuring relevant costs and revenues for decision-making 84

- Identifying relevant costs and revenues 85
- Importance of qualitative/non-financial factors 86
- Special pricing decisions 86
- Product mix decisions when capacity constraints exist 91
- Replacement of equipment – the irrelevance of past costs 94
- Outsourcing and make-or-buy decisions 97
- Discontinuation decisions 101
- Determining the relevant costs of direct materials 103
- Determining the relevant costs of direct labour 103
- Incorporating risk and uncertainty into the decision-making process 104
- Summary 107
- Key terms and concepts 108
- Assessment material 109

5 Pricing decisions and profitability analysis 114

- The role of cost information in pricing decisions 115
- A price-setting firm facing short-run pricing decisions 115
- A price-setting firm facing long-run pricing decisions 116
- A price-taking firm facing short-run product mix decisions 122
- A price-taking firm facing long-run product mix decisions 122
- Surveys of practice relating to pricing decisions 125
- Limitations of cost-plus pricing 126
- Reasons for using cost-plus pricing 127
- Pricing policies 128
- Customer profitability analysis 130

Summary	134
Key terms and concepts	136
Assessment material	136

6 Capital investment decisions: Appraisal methods 141

The opportunity cost of an investment	142
Compounding and discounting	144
The concept of net present value	147
Calculating net present values	148
Internal rate of return	151
Relevant cash flows	154
Timing of cash flows	154
Comparison of net present value and internal rate of return	155
Techniques that ignore the time value of money	156
Payback method	157
Accounting rate of return	161
The effect of performance measurement on capital investment decisions	162
Qualitative factors	163
Weighted average cost of capital	165
Taxation and investment decisions	165
Summary	167
Key terms and concepts	168
Assessment material	170

PART THREE Cost assignment 176

7 Cost assignment 178

Assignment of direct and indirect costs	179
Different costs for different purposes	181
Cost-benefit issues and cost system design	181
Plant-wide (blanket) overhead rates	182
The two-stage allocation process	185
An illustration of the two-stage process for a traditional costing system	186
Extracting relevant costs for decision-making	191
Budgeted overhead rates	192
Under- and over-recovery of overheads	193
Non-manufacturing overheads	195
Cost assignment in non-manufacturing organizations	196
Summary	198
Key terms and concepts	200
Assessment material	201

8 Activity-based costing 206

Comparison of traditional and ABC systems	207
Volume-based and non-volume-based cost drivers	210

An illustration of the two-stage allocation process for ABC	212
Designing ABC systems	218
Activity hierarchies	220
Cost versus benefit considerations	223
ABC cost management applications	223
Summary	226
Key terms and concepts	227
Assessment material	228

PART FOUR Information for planning, control and performance measurement 234

9 The budgeting process 237

The strategic planning, budgeting and control process	237
The multiple functions of budgets	241
Conflicting roles of budgets	242
The budget period	243
Administration of the budgeting process	244
Stages in the budgeting process	245
A detailed illustration	248
Computerized budgeting	256
Activity-based budgeting	258
Zero-based budgeting	260
Criticisms of budgeting	262
Summary	266
Key terms and concepts	268
Assessment material	269

10 Management control systems 275

Control at different organizational levels	276
Different types of controls	277
Feedback and feed-forward controls	279
Harmful side-effects of controls	280
Management accounting control systems	283
Responsibility centres	283
The nature of management accounting control systems	285
The controllability principle	287
Setting performance targets and determining how challenging they should be	291
Determining how much influence managers should have in setting targets	293
Alternative uses of management accounting information	294
Summary	296
Key terms and concepts	297
Assessment material	299

11	Standard costing and variance analysis	305
	Operation of a standard costing system	306
	Establishing cost standards	309
	Purposes of standard costing	314
	A summary of variance analysis for a variable costing system	315
	Material variances	316
	Labour variances	320
	Variable overhead variances	321
	A generic routine (or columnar) approach to variance analysis	323
	Fixed overhead expenditure or spending variance	323
	Sales variances	325
	Reconciling budgeted profit and actual profit	327
	Dealing with change – planning and operational variances	328
	Summary	330
	Appendix 11.1: A generic routine (or columnar) approach to variance analysis	333
	Key terms and concepts	335
	Assessment material	336
12	Divisional financial performance measures	340
	Divisional organizational structures	341
	Advantages and disadvantages of divisionalization	343
	Prerequisites for successful divisionalization	343
	Distinguishing between the managerial and economic performance of the division	344
	Alternative divisional profit measures	345
	Surveys of practice	346
	Return on investment	348
	Residual income	349
	Economic value added (EVA TM)	350
	Addressing the dysfunctional consequences of short-term financial performance measures	354
	Summary	358
	Key terms and concepts	360
	Assessment material	360
13	Transfer pricing in divisionalized companies	366
	Purpose of transfer pricing	367
	Alternative transfer pricing methods	368
	Market-based transfer prices	369
	Cost plus a mark-up transfer prices	370
	Marginal/variable cost transfer prices	373
	Full cost transfer prices without a mark-up	374
	Negotiated transfer prices	374
	Marginal/variable cost plus opportunity cost transfer prices	375

Comparison of cost-based transfer pricing methods	376
Proposals for resolving transfer pricing conflicts	377
International transfer pricing	380
Summary	383
Key terms and concepts	384
Assessment material	384

PART FIVE Strategic performance and cost management, value creation and challenges for the future 390

14 Strategic performance management	392
The performance management framework	393
Strategy and strategic positioning	394
Performance measurement and performance management systems	395
Alternative performance management frameworks	396
The balanced scorecard	397
Linking performance evaluation with the balanced scorecard	407
Benefits and limitations of the balanced scorecard approach	409
Summary	414
Key terms and concepts	416
Assessment material	417
15 Strategic cost management and value creation	423
Cost management and the value chain	424
Life cycle cost management	427
Target costing	428
Activity-based management	435
Benchmarking	439
Business process reengineering	440
Just-in-time systems	441
Quality cost management	446
Summary	452
Key terms and concepts	455
Assessment material	456
16 Challenges for the future	462
A brief historical review of management accounting	462
Globalization and management accounting practices	464
Environmental and sustainability issues	465
Focus on ethical behaviour	472
Information technology and digitalization	475
Intellectual capital and the knowledge-based economy	482
Integrated reporting	484
Implications for management accounting	485

Summary	489
Key terms and concepts	490
Assessment material	491
<i>Bibliography</i>	494
<i>Appendices</i>	499
<i>Answers to review problems</i>	503
<i>Glossary</i>	548
<i>Index</i>	559

IN MEMORIAM

Sadly, Professor Colin Drury passed away in 2019 after a short illness. At the time of his passing, Colin had already made plans for the content of the 11th edition of his bestselling textbook, *Management and Cost Accounting*. Therefore, in discussion with Colin's family, Cengage brought on board a new and highly experienced contributing author for the 11th edition, Professor Mike Tayles, to bring Colin's initial plans and drafts to conclusion, and Professor Mike Tayles has continued his dedicated work by updating the eighth edition of *Management Accounting for Business* which introduces the theory and practice of management accounting and emphasizes its role in how business decisions are made. The new edition of *Management Accounting for Business* addresses many of the latest key topics including digitalization and big data, environmental and sustainability issues, ethical considerations and the impact of the emergence of the knowledge-based economy.

For several decades, Colin Drury has been known for his textbooks on management accounting by almost anyone who wanted a thorough understanding of the subject. Colin was often complimented on the comprehensive nature and clarity of his writing. This was probably attributable to his previous practical experience, but also to the thorough and uncomplicated manner in which he tackled all his work. He managed to navigate successfully between the academic and practitioners' study of management accounting and as a result of his rigour and authority, his textbooks became recommended reading in management accounting by the professional accounting bodies as well as in many universities across the UK, Europe and beyond. From early on, his textbook *Management and Cost Accounting* was regarded as 'Europe's Bestselling Management Accounting Textbook'. The ACCA Students' Newsletter noted: 'Drury's book can be recommended, without reservation, to all accounting students.'

Colin also served on the Research Committee of CIMA and worked on the CIMA Official Management Accounting Terminology. Colin was quick to include the most up-to-date research findings into the latest editions of his textbooks and therefore helped turn research into practice. The areas of his own research interests emphasized current practice, hence, he helped to bring management accounting practice into research. Shortly after Colin's retirement, to acknowledge his achievements, the British Accounting and Finance Association bestowed upon him a Lifetime Achievement Award, which he richly deserved. Colin's legacy will live on through this award and through his extensive contributions to books and journals – Cengage thanks him for all his dedication over the past decades, and for his family's support in enabling the new editions of his textbooks to reach fruition.

All at Cengage

PREFACE

This new eighth edition of *Management Accounting for Business* builds upon the foundation of earlier editions which Colin so successfully developed. The book shows a level of comprehensive coverage and clarity of explanation for which Colin was justifiably renowned. Colin and I first started to teach together 40 years ago and commenced our collaboration in 1990 with research into management accounting practices producing professional research reports, academic journal papers and business articles. Colin was a pleasure to work with – he had a clear passion for this work, but for someone so renowned in the academic accounting community he was very modest about his achievements, there was always a humility in the way he went about all of his academic endeavours. Although our careers ultimately followed different paths, we always maintained contact and I am privileged to make a small contribution to this highly successful textbook.

The aim of this book is to provide an introduction to the theory and practice of management accounting and to emphasize its role in making business decisions. It is intended primarily for students who are not specializing in accounting and are pursuing a one- or two-semester basic management accounting course. The more advanced technical aspects that are required by specialist accounting students are not covered. These topics are examined in the author's successful book *Management and Cost Accounting*, the 11th edition of which is also published by Cengage EMEA.

Feedback from lecturers in a large number of universities indicated that they had found the content, structure and presentation of *Management and Cost Accounting* extremely satisfactory and most appropriate for accounting students pursuing a two-year management accounting course. They also indicated that there was a need for a book (based on *Management and Cost Accounting*) for students on shorter courses. This book meets that need and, while still comprehensive, is particularly suitable for students not specializing in accounting, studying management accounting on the following courses:

- a first-level management accounting course for undergraduate students
- higher national diploma in business and finance
- postgraduate introductory management accounting courses.

An introductory course in financial accounting is not a prerequisite, although many students will have undertaken such a course.

STRUCTURE AND PLAN OF THE BOOK

In writing this book we have adopted the same structure and included much of the introductory content of *Management and Cost Accounting*. The major theme is that different information is required for different purposes. The framework is based on the principle that there are three purposes of constructing management accounting information. One is conventional cost

accounting, with its emphasis on producing product costs for allocating costs between cost of goods sold and inventories to meet external and internal financial accounting inventory valuation and profit measurement requirements. The second is the notion of decision-relevant costs, with the emphasis on providing information to help managers make good decisions. The third is responsibility accounting, cost control and performance management, which focus on both financial and non-financial information, in particular the assignment of cost and revenues to responsibility centres. This book focuses mainly on the second and third of the above purposes. Less emphasis is given to conventional cost accounting, because an in-depth understanding of this topic is not essential for those students who are not specializing in accounting. The purposes are captured in Figure 0.1, and throughout the book we remind the reader of this distinction and point out where different management accounting information is, or is not, suited to particular circumstances.

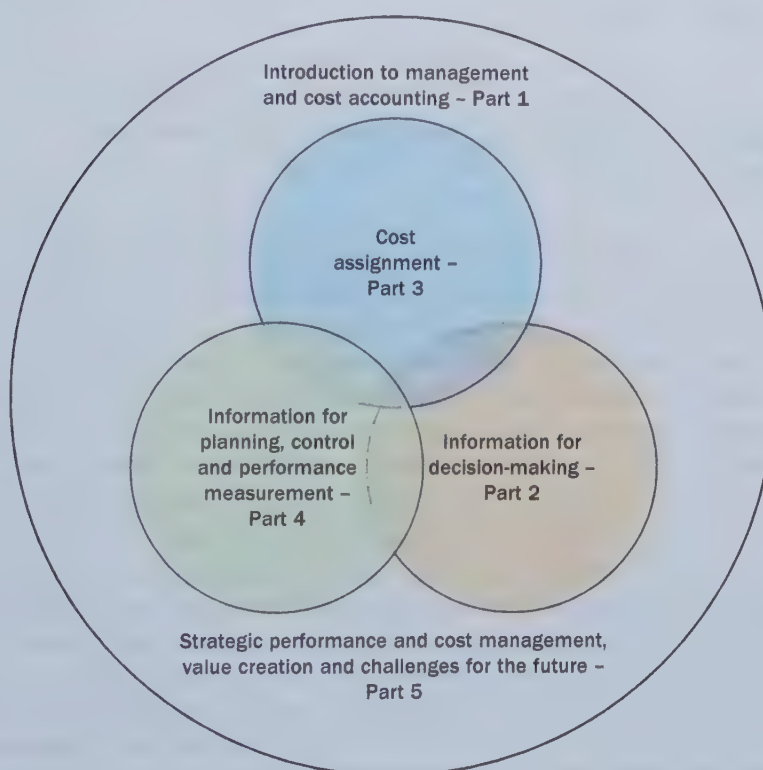


FIGURE 0.1

The management accounting system structure of this book

This book consists of 16 chapters divided into five parts. Part One contains two chapters and provides an introduction to management and cost accounting, the terminology and a framework for studying the remaining chapters. Part Two consists of four chapters and is entitled 'Information for decision-making'. Here the focus is on measuring and identifying those costs that are relevant for different types of decisions that managers and businesses are faced with. These include tactical decisions, pricing, profitability analysis, the impact of business volume, spare capacity and long-term decisions. The title of Part Three is 'Cost assignment'. It is made up of two chapters that provide an explanation of how costs are accumulated and assigned to cost objects, such as products or services. In particular, alternative approaches that can be used for measuring resources consumed by cost objects and the factors that should be considered in determining the sophistication of the cost accumulation system are described.

Part Four consists of five chapters and is entitled 'Information for planning, control and performance measurement'. This part concentrates on the process of translating organizational goals and objectives into specific activities and the resources that are required, via the short-term (budgeting) and long-term planning processes. The management control systems that organizations use are described and the role that management accounting control systems play within the overall control process, including performance measurement and evaluation within different segments of the organization, are examined. The title of Part Five is 'Strategic performance and cost management, value creation and challenges for the future'. It consists of three chapters. The first chapter focuses on strategic performance management, the second on strategic cost management and value creation. The third chapter concentrates on the emerging issues that are likely to have an impact on management accounting, and considers some potential future developments in management accounting. The five parts are displayed in Figure 0.1.

CHANGES IN THE CONTENT OF THE EIGHTH EDITION

The feedback relating to the structure and content of the previous editions has been extremely favourable and therefore no major changes have been made to the existing structure. The objective in writing the eighth edition has been to produce more accessible text and to incorporate recent developments in management accounting. All of the chapters have been reviewed, and where appropriate new material has been added. There is greater discussion related to digitalization and big data, environmental and sustainability issues, ethical considerations and the impact of the emergence of the knowledge-based economy. This occurs throughout the book, culminating in the final chapter which focuses on the emerging issues that are likely to have an impact on management accounting and considers some potential future developments in management accounting. Updates have been made to the end-of-chapter assessment material, and solutions to these are in a separate section at the end of the book. Most of the *Real World Views* that provide examples of the practical application of management accounting have been replaced by more recent examples or updated. Suggested answers to *Real World Views* questions are in the Instructor's Manual. Additionally, we have included a new and highly engaging *Apply your Knowledge* section at the end of each chapter which aims to reinforce the content and provide scope to consider its wider implications. This new feature is explained further in Chapter 1.

Learning notes

In order to meet the different requirements of readers and different course curricula, various topics are included as learning notes that can be accessed by students and lecturers on the digital support resources accompanying this book. The learning notes relate to either specific topics that may be only applicable to a minority of the readers or a discussion of topics where more complex issues are involved that not all readers may wish to pursue. All learning notes are appropriately cross-referenced within the text to the digital support resources. For example, at appropriate points within specific chapters, the reader's attention is drawn to the fact that, for a particular topic, more complex issues

exist and that a discussion of these issues can be found by referring to a specific learning note on the digital support resources accompanying this book.

Case studies

Case studies are available on the dedicated digital support resources for this book. Both lecturers and students can download these case studies from the digital support resources. Teaching notes for the case studies are only available for lecturers to download. The cases generally cover the content of several chapters and contain questions to which there is no ideal answer. They are intended to encourage independent thought and initiative and to relate and apply your understanding of the content of this book in more uncertain situations. They are also intended to develop your critical thinking and analytical skills.

International focus

The book has now become an established text in many different countries throughout the world. Because of this a more international focus has been adopted. A major feature is the presentation of boxed exhibits of surveys and practical applications of management accounting in companies in many different countries. To simplify the presentation, however, the UK pound monetary unit has been mostly used throughout the book, although examples of the euro, dollar and rand can be found in the assessment material at the end of each chapter. Most of the assessment material incorporates questions set within a UK context. These questions, however, are appropriate for worldwide use and contain the beneficial features described above for case study assignments.

Assessment material

Throughout this book we have kept the illustrations simple. You can check your understanding of each chapter by answering the review questions. Each review question is followed by page numbers within parentheses that indicate where in the text the answers to specific review questions can be found. More complex review problems are also set at the end of each chapter and within the digital online resources to enable students to pursue certain topics in more depth. Fully worked solutions to the review problems within the text are provided in a separate section at the end of the book.

SUPPLEMENTARY MATERIAL

The eighth edition of Colin Drury's *Management Accounting for Business* is accompanied by the following dedicated digital support resources:

- Dedicated instructor resources only available to lecturers, who can register for access either at account.cengage.com or by speaking to their local Cengage representative.
- Cengage MindTap helps students embed the material. Dedicated digital content creates a learning path designed by the instructor to guide students through the course and focus on what's important. Instructors can find out more about accessing MindTap by speaking to their local Cengage representative.

DEDICATED INSTRUCTOR RESOURCES

This includes the following resources for lecturers:

- **Instructor's Manual** with instructor's additional review problems
- **Online test bank** provides approximately 500 extra questions and answers
- **PowerPoint** slides to use in your teaching
- **Case studies** (internationally focused)
- **Teaching notes** to accompany the case studies
- **Downloadable figures and tables** from the book to use in your teaching.

MINDTAP

MindTap is an online learning solution that allows lecturers to customize and combine easily learning tools such as readings, interactive content and assessment activities to create a personalized learning path for students, including **Aplia**. Lecturers can add or remove existing content within the learning path or add their own content in order to deliver a seamless student experience that aligns exactly with the way they teach their course.

ACKNOWLEDGEMENTS

We are indebted to many individuals for their ideas and assistance in preparing this and previous editions of the book. In particular, we would like to thank the following who have provided material for inclusion in the text and the book's accompanying digital support resources or who have commented on this and earlier editions of the book:

Magdy Abdel-Kader, University of Essex
 Tony Abdoush, Bournemouth University
 John Ahwere-Bafo, Royal Holloway, University of London
 Anthony Atkinson, University of Waterloo
 Karen Boyd, Fellow of ACCA, UK
 Stan Brignall, Aston Business School
 Alison Broughton, Middlesex University
 Jose Manuel de Matos Carvalho, ISCA de Coimbra
 Gin Chong, Southampton Institute
 Peter Clarke, University College Dublin
 Adriana van Cruysen, Zuyd Hogeschool
 Denny Emslie, University of Fort Hare
 Wayne Fiddler, University of Huddersfield
 Ian G. Fisher, John Moores University
 Lin Fitzgerald, Loughborough University Business School
 John Ford, Gordon Institute of Business Science, University of Pretoria
 Keith Gainsley, Sheffield Hallam University
 Olive Gardiner, Fife College
 Alicia Gazely, Nottingham Trent University

Richard Grey, University of Strathclyde
 David Grinton, University of Brighton
 Antony Head, Sheffield Hallam University
 Yu-Lin Hsu, University of Strathclyde
 Lise Hunter, University of Plymouth
 Mike Johnson, University of Dundee
 Mohammed Sulaiman Hassan Kasbar, Queen Mary University of London
 Michel Lebas, Groupe HEC
 Pik Liew, London School of Economics
 Kevan Lyons, University of New York in Prague
 Paola Madini, University of Kent at Canterbury
 Phillip McCosker, University College, Worcester
 Bhagwan Moorjani, University of Westminster
 Ellertone Ndalama, University of Warwick
 Lorenzo Neri, Queen Mary University of London
 Peter Nordgaard Hansen, Copenhagen Business School
 Deryl Northcott, Auckland University of Technology
 Rona O'Brien, Sheffield Hallam University
 Dan Otzen, Copenhagen Business School
 Graham Parker, Kingston University
 Breggie van der Poll, UNISA
 Jayne Rastrick, Sheffield Hallam University
 Tony Rayman, University of Bradford
 Carsten Rohde, Copenhagen Business School
 Robin Roslender, University of Stirling
 George Sarpong, Nelson Mandela University
 John Shank, The Amos Tuck School of Business, Dartmouth College
 Reimala Sivalingam, The University of Manchester
 Helen Smith, Abertay University
 Torkel Strömsten, Stockholm School of Economics
 Chandres Tejura, University of North London
 Ed Tew, University of Winchester
 René Thamm, Hochschule für Technik und Wirtschaft Dresden
 Richard Kojo Tawiah, University of Strathclyde
 Karel Thomas, Zuyd Hogeschool
 Eric Tonner, Glasgow Caledonian University
 Ben Ukaegbu, London Metropolitan University
 Franco Visani, University of Bologna
 Ted Welten, Erasmus School of Economics
 John Williams, Rhodes University
 Richard Wilson, M.S. Loughborough University Business School
 Laura Zoni, Bocconi University
 Nasiru Zubairu, University of Plymouth

We are also indebted to Martin Quinn (Queens University Belfast, UK) and Peter Cleary (University College Cork, Ireland) for providing the new Real World Views that have been added to the eighth edition as well as Birgit Gruber, Marie Lebreton, Sue Povey and Helen Seymour at Cengage for their valuable publishing advice, support and assistance. My appreciation goes also to the Chartered Institute of Management Accountants,

the Chartered Association of Certified Accountants and the Association of Accounting Technicians for permission to reproduce examination questions. The answers in the text and accompanying website are our own and are in no way the approved solutions of the above professional bodies.

Mike Tayles, Emeritus Professor
Accounting and Finance,
University of Hull

ABOUT THE AUTHORS



Colin Drury was at Huddersfield University from 1970 until his retirement in 2004, when he was awarded the title of Emeritus Professor. For the last 35 years, Colin had been at the forefront of helping students learn the key concepts and processes in management and cost accounting through his bestselling textbooks, which have been widely recommended by the main professional accounting bodies for their examinations. He was an active researcher throughout his career and his research had been published in around 100 professional and academic journals.

In recognition for his contribution to accounting education and research, Drury was given a Lifetime Achievement Award by the British Accounting and Finance Association in 2009.

Colin's Flagship title *Management and Cost Accounting* was first published in 1985 and is now in its 11th edition. It established itself as one of the leading management accounting textbooks in EMEA. It is known, not just for its rigour and authority, but particularly for Colin's down-to-earth style that reflected his background as a practising accountant before his involvement in academia.



Mike Tayles holds the Emeritus Chair in Accounting and Finance at the University of Hull. During his career, he has been the Head of Management Accounting and Programme Director of various Degree Programs, as well as a Visiting Professor at various universities internationally. He has been an Examiner/Lead Marker for both the ACCA and CIMA.

Mike is a chartered management accountant with a first degree in mathematics and economics and a doctorate in contemporary management accounting practices. He has worked in various manufacturing industries, holding such positions as group management accountant and financial controller.

Mike's research interests include management accounting practices, cost system design, activity-based cost management and developments in strategic management accounting, including quality and intellectual capital. He has presented papers at national and international conferences, and published articles in professional and international academic journals and research reports. He has consulting and research experience in both manufacturing and service businesses.

Teaching & Learning Support Resources

Cengage's peer-reviewed content for higher and further education courses is accompanied by a range of digital teaching and learning support resources. The resources are carefully tailored to the specific needs of the instructor, student and the course. Examples of the kind of resources provided include:



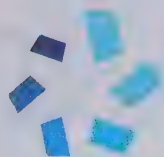
A password-protected area for instructors with, for example, a test bank, PowerPoint slides and an instructor's manual.



An open-access area for students including, for example, useful weblinks and glossary terms.

Lecturers: to discover the dedicated teaching digital support resources accompanying this textbook please register here for access: cengage.com/dashboard/#login

Students: to discover the dedicated learning digital support resources accompanying this textbook, please search for *Management Accounting for Business*, 8th Edition on: cengage.co.uk



CENGAGE

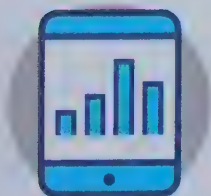
MINDTAP

Fit your coursework into your hectic life.

Make the most of your time by learning your way. Access the resources you need to succeed whenever and wherever you like.



Study with interactive tools and resources designed to help you master key concepts and prepare you for class.



Review your current course grade and compare your progress with your peers.



Get the free Cengage Mobile App and learn wherever you are.

MINDTAP. POWERED BY YOU

cengage.co.uk/mindtap

PART ONE

INTRODUCTION TO MANAGEMENT AND COST ACCOUNTING

- 1 Introduction to management accounting**
- 2 An introduction to cost terms and concepts**

The objective of this section is to provide an introduction to management and cost accounting. In Chapter 1 we define accounting and distinguish between financial, management and cost accounting. This is followed by an examination of the role of management accounting in providing information to managers for decision-making, planning, control and performance measurement. We also consider the important changes that have taken place in the business environment. As you progress through the book you will learn how these changes have influenced management accounting systems. In Chapter 2 the basic cost terms and concepts that are used in the cost and management accounting literature are described. This terminology is essential to the study of management accounting. It is used in the further chapters of this book and in business practice.

1

INTRODUCTION TO MANAGEMENT ACCOUNTING

LEARNING OBJECTIVES After studying this chapter you should be able to:

- distinguish between management accounting and financial accounting
- identify and describe the elements involved in the decision-making, planning and control process
- justify the view that a major objective of commercial organizations is to broadly seek to maximize future profits
- explain the important changes in the business environment that have influenced management accounting practice
- outline and describe the key success factors that directly affect customer satisfaction
- identify and describe the functions of a cost and management accounting system.

There are many definitions of accounting, but the one that captures the theme of this book is the definition formulated by the American Accounting Association. It describes accounting as:

the process of identifying, measuring and communicating economic information to permit informed judgements and decisions by users of the information.

In other words, accounting is concerned with providing both financial and non-financial information that will help decision-makers to make good decisions. In order to understand accounting, you need to know something about the decision-making, planning and control process, and also to be aware of the various users of accounting information.

During the past two decades, many organizations in both the manufacturing and service sectors have faced dramatic changes in their business environment. Deregulation and extensive competition from international companies in domestic markets has resulted in a situation where most companies now operate in a highly competitive global market. At the same time there has been a significant reduction in product life cycles arising from technological innovations and the need to meet increasingly discriminatory customer demands. To succeed in today's highly competitive environment, companies have made customer satisfaction an overriding priority. They have also adopted new management

approaches and manufacturing companies have changed their manufacturing systems and invested in new technologies. These changes have had a significant influence on management accounting systems.

The aim of this first chapter is to give you the background knowledge that will enable you to achieve a more meaningful insight into the roles, benefits, issues and problems of cost and management accounting that are discussed in the book. We begin by looking at the users of accounting information and identifying their requirements. This is followed by a description of the decision-making process and the changing business environment. Finally, the different functions of management accounting are described.

THE USERS OF ACCOUNTING INFORMATION

Accounting is a language that communicates economic information to various parties (known as stakeholders) who have an interest in the organization. **Stakeholders** fall into several groups (e.g. managers, shareholders and potential investors, employees, suppliers and customers, creditors and the government) and each of these groups has its own requirements for information:

- Managers require information that will assist them in their decision-making and control activities; for example, information is needed on the estimated selling prices, costs, demand, competitive position and profitability of various products/ services that are provided by the organization.
- Shareholders require information on the value of their investment and the income that is derived from their shareholding. Likewise, potential investors are interested in their potential returns.
- Employees require information on the ability of the firm to meet wage demands and avoid redundancies, and its potential to provide continued employment.
- Creditors and the providers of loan capital require information on a firm's ability to meet its financial obligations.
- Government agencies such as the Central Statistical Office collect accounting information and require such information as the details of sales activity, profits, investments, stocks (i.e. inventories), dividends paid, the proportion of profits absorbed by taxation and so on. In addition, government taxation authorities require information on the amount of profits that are subject to taxation. All this information is important for determining policies to manage the economy.

The need to provide accounting information is not confined to business organizations. Non-profit-making organizations such as churches, charitable organizations, clubs and government units such as local authorities, also require accounting information for decision-making, and for reporting the results of their activities. For example, a tennis club will require information on the cost of undertaking its various activities so that a decision can be made as to the amount of the annual subscription that it will charge to its members. Similarly, municipal authorities, such as local government and public sector organizations, need information on the costs of undertaking specific activities so that decisions can be made as to which activities will be undertaken and the resources that must be raised to finance them.

As you can see, there are many different users of accounting information who require information for decision-making. The objective of accounting is to provide sufficient information to meet the needs of the various users at the lowest possible cost. Obviously, the benefit derived from using an information system for decision-making must be greater than the cost of operating the system.

The users of accounting information can be divided into two categories:

- 1 internal users within the organization, such as managers and other employees who need this information to operate their part of the business to best effect
- 2 external users such as shareholders, creditors and regulatory agencies, outside the organization.

From the above, it is possible to distinguish between two branches of accounting, which reflect the internal and external users of accounting information. **Management accounting** is concerned with the provision of information to people within the organization to help them make better decisions and improve the efficiency and effectiveness of existing operations, whereas **financial accounting** is concerned with the provision of information to external parties outside the organization, including the general public. Thus, management accounting could be called internal reporting and financial accounting could be called external reporting. This book concentrates on management accounting.

DIFFERENCES BETWEEN MANAGEMENT ACCOUNTING AND FINANCIAL ACCOUNTING

The major differences between these two branches of accounting are:

- *Legal requirements.* There is a statutory requirement for limited companies to produce annual financial accounts, regardless of whether or not management regards this information as useful. Management accounting, by contrast, is entirely optional and information should be produced only if it is considered that the benefits it offers management exceed the cost of collecting it.
- *Focus on individual parts or segments of the business.* Financial accounting reports describe the whole of the business, whereas management accounting focuses on parts of the organization; for example, the cost and profitability of products, services, departments, customers and activities.
- *Generally accepted accounting principles.* Financial accounting statements must be prepared to conform with the legal requirements and the generally accepted accounting principles established by the regulatory bodies such as the International Accounting Standards Board. These requirements are essential to ensure uniformity and consistency, which make intercompany and historical comparisons possible. Financial accounting data should be verifiable and objective. In contrast, management accountants are not required to adhere to generally accepted accounting principles when providing managerial information for internal purposes. Instead, the focus is on serving the management's needs and providing information that is useful to managers when they are carrying out their decision-making, planning and control functions. Indeed, it could be said that the best management accounting is that which is most useful to the manager, and this varies with the business size, sector, technology and the circumstances of the question or problem.

- *Time dimension.* Financial accounting reports what has happened in the past in an organization, it is historical; whereas management accounting is concerned with *future* information as well as past information. Decisions are concerned with *future* events and management therefore require details of expected *future* costs and revenues, which by definition are predictions and not known with certainty.
- *Report frequency and less emphasis on precision.* A detailed set of financial accounts is published annually and less detailed accounts are sometimes published semi-annually. Management usually requires information more quickly than this if it is to act on it. Managers are often more concerned with timeliness than precision. They prefer a good estimate now rather than a precise answer much later. Consequently, management accounting reports on various activities may be ad hoc investigations or be prepared at daily, weekly or monthly intervals.

THE DECISION-MAKING, PLANNING AND CONTROL PROCESS

Information produced by management accountants must be judged in the light of its ultimate effect on the outcome of decisions. It is therefore important to have an understanding of the *decision-making, planning and control process*. Figure 1.1 presents a diagram of the decision-making, planning and control process. The first four stages represent the decision-making and planning process. The final two stages represent the **control process**, which is the process of measuring and correcting actual performance to ensure the best alternatives are chosen and the plans for implementing them are carried out. We will now examine the stages in more detail.

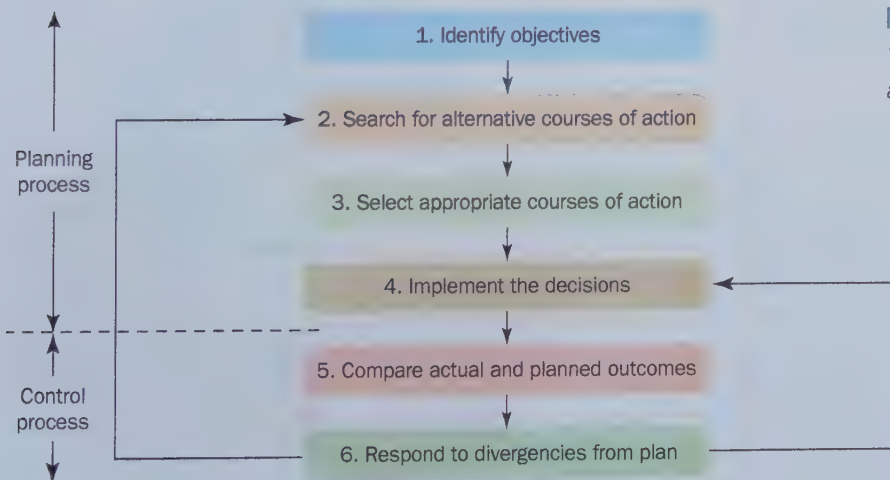


FIGURE 1.1

The decision-making, planning and control process

Identifying objectives

Before good decisions can be made there must be some guiding aim or direction that will enable the decision-makers to assess the desirability of choosing one course of action over another. Hence, the first stage in the decision-making process should be to specify the company's goals or organizational objectives, that is, what they are in business to achieve.

This is an area where there is considerable controversy. Economic theory traditionally assumes that firms seek to maximize profits for the owners of the firm or, more precisely, the maximization of shareholders' wealth. Some writers (e.g. Simon, 1959) believe that many managers are content to find a plan that provides satisfactory profits rather than to maximize profits. Clearly it is too simplistic to say that the only objective of a business firm is to maximize profits. Some managers seek to establish a power base and build an empire. Another common goal is security, and the removal of uncertainty regarding the future may override the pure profit motive. Organizations may also pursue more specific objectives, such as producing high-quality products or being the market leader within a particular market segment. We are also seeing an increasing interest in the responsibility of firms to a wider society at the present time: in other words responsibility to a wider stakeholding, and hence stakeholder capitalism and not just shareholder capitalism. This is demonstrated by calls for firms to publish a Triple Bottom Line of performance, covering social, environmental, and economic performance or profitability. It is only by addressing these three requirements that firms could be said to be 'sustainable' (see Figure 1.2). We shall discuss the implications for management accounting of these developments in Chapter 16. Nevertheless, the view adopted in this book is that, *broadly*, firms seek to maximize future profits. There are two reasons for us to concentrate on this objective:

- 1 It is unlikely that any other objective is as widely applicable in measuring the ability of the organization to survive in the future.
- 2 It is unlikely that maximizing future profits can be realized in practice, but by establishing the principles necessary to achieve this objective you will learn how accounting information can highlight how profits can be increased.

FIGURE 1.2

The interconnection of the elements of the Triple Bottom Line concept



The search for alternative courses of action

The second stage in the decision-making model is a search for a range of possible courses of action (or **strategies**) that might enable the objectives to be achieved. If the management of a company concentrates entirely on its present product range and markets, and market shares and profits are allowed to decline, there is a danger that the company will be unable to survive in the future. If the business is to survive, management must identify potential opportunities and threats in the current environment