

RAY H. GARRISON | ERIC W. NOREEN

# MANAGEMENT ACCOUNTING

# WILL SEAL | CARSTEN ROHDE RAY H. GARRISON | ERIC W. NOREEN

# MANAGEMENT ACCOUNTING



# WILL SEAL | CARSTEN ROHDE RAY H. GARRISON | ERIC W. NOREEN

# MANAGEMENT ACCOUNTING



London Boston Burr Ridge, IL Dubuque, IA Madison, WI New York San Francisco St. Louis Bangkok Bogotá Caracas Kuala Lumpur Lisbon Madrid Mexico City Milan Montreal New Delhi Santiago Seoul Singapore Sydney Taipei Toronto

Management Accounting 5e Will Seal, Carsten Rohde, Ray H. Garrison and Eric W. Noreen ISBN-13 9780077157500 ISBN-10 0077157508



Published by McGraw-Hill Education Shoppenhangers Road Maidenhead Berkshire SL6 2OL

Telephone: 44 (0) 1628 502 500 Fax: 44 (0) 1628 770 224

Website: www.mheducation.co.uk

#### **British Library Cataloguing in Publication Data**

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

#### **Library of Congress Cataloguing in Publication Data**

The Library of Congress data for this book has been applied for from the Library of Congress

Content Acquisitions Manager: Leiah Norcott

Product Developer: Stephanie Frosch Content Product Manager: Alison Davis Marketing Manager: Alexis Gibbs

Text Design by HL Studios Cover design by Scott Poulsen

Published by McGraw-Hill Education. Copyright © 2015 by McGraw-Hill Education. All rights reserved. No part of this publication may be reproduced or distributed in any form or by any means, or stored in a database or retrieval system, without the prior written consent of McGraw-Hill Education, including, but not limited to, in any network or other electronic storage or transmission, or broadcast for distance learning.

Fictitious names of companies, products, people, characters and/or data that may be used herein (in case studies or in examples) are not intended to represent any real individual, company, product or event.

ISBN-13 9780077157500 ISBN-10 0077157508

© 2015. Exclusive rights by McGraw-Hill Education for manufacture and export. This book cannot

be re-exported from the country to which it is sold by McGraw-Hill Education.

# **Brief table of contents**

# Part 1: An introduction to management and cost accounting: cost terms, systems design and cost behaviour

- 1 Management accounting and the business environment
- 2 An introduction to cost terms, concepts and classifications
- 3 Cost behaviour: analysis and use
- 4 Job-order and service department costing
- 5 Process costing

# Part 2: Information for decision making

- 6 Profit reporting under variable costing and absorption costing
- 7 Cost-volume-profit relationships
- 8 Activity-based costing
- 9 Relevant costs for decision making
- 10 Capital investment decisions

## Part 3: Planning and control

- 11 Profit planning and the role of budgeting
- 12 Standard costs and variance analysis
- 13 Flexible budgets and performance reporting
- 14 Performance measurement and reporting on segments
- 15 Pricing and intra-company transfers

# Part 4: Value metrics and performance management in a strategic context

- 16 Strategic management accounting and the balanced scorecard
- 17 Management control and corporate governance
- 18 Business process management: towards the lean operation
- 19 Strategic perspectives on cost management

# **Detailed table of contents**

About the authors

Preface

Acknowledgements

Guided tour

Technology to enhance learning and teaching

Part 1: An introduction to management and cost accounting: cost terms, systems design and cost behaviour

#### 1 Management accounting and the business environment

The work of management and the need for management accounting information

Planning

Directing and motivating

Controlling

The end results of managers' activities

The planning and control cycle

Decision making

Comparison of financial and management accounting

Emphasis on the future

Relevance and flexibility of data

Less emphasis on precision

Segments of an organization

International Financial Reporting Standards (IFRS)

Management accounting – not mandatory

Basic organizational structure

Decentralization

Line and staff relationships

Expanding and changing role of management accounting

The sources of management accounting knowledge

International diversity in management accounting traditions

Globalization and international competition

Changes in the business environment and management accounting

New business processes and technologies

Enterprise resource planning systems

Deregulation, privatization and re-regulation

The increased importance of service sector management

Managing for value

Managing for environmental sustainability

Corporate governance, professional and business ethics Some implications for the roles of management accountants

#### 2 An introduction to cost terms, concepts and classifications

General cost classifications

Manufacturing costs

Non-manufacturing costs

Product costs versus period costs

Cost classifications on financial statements

The balance sheet

The statement of profit or loss

Schedule of cost of goods manufactured

Product costs – a closer look

Inventoriable costs

An example of cost flows

Costing in service organizations: a first look

Cost classifications for predicting cost behaviour

Variable cost

Fixed cost

Cost classifications for assigning costs to cost objects

Direct cost

Indirect cost

Cost classifications for decision making

Differential cost and revenue

Opportunity cost

Sunk cost

#### 3 Cost behaviour: analysis and use

Types of cost behaviour patterns

Variable costs

The activity base

True variable versus step-variable costs

The linearity assumption and the relevant range

Fixed costs

Types of fixed costs

The trend toward fixed costs

Is labour a variable or a fixed cost?

Fixed costs and the relevant range

Mixed costs

The analysis of mixed costs

The high-low method

The scattergraph method

The least-squares regression method

Multiple regression analysis

The contribution format

Why a new statement of profit or loss format?

The contribution approach

Appendix 3A: Least-squares regression calculations

Appendix 3B: Non-linear cost functions and the learning curve

Appendix 3C: Cost measurement in service industries

#### 4 Job-order and service department costing

Process and job-order costing

Process costing

Job-order costing

Job-order costing – an overview

Measuring direct materials cost

Job cost sheet

Measuring direct labour cost

Application of manufacturing overhead

Choice of an allocation base for overhead cost

Computation of unit costs

Summary of document flows

Job-order costing – the flow of costs

The purchase and issue of materials

Labour cost

Manufacturing overhead costs

The application of manufacturing overhead

Non-manufacturing costs

Cost of goods manufactured

Cost of goods sold

Summary of cost flows

Problems of overhead application

Underapplied and overapplied overhead

Disposition of underapplied or overapplied overhead balances

A general model of product cost flows

Multiple predetermined overhead rates

Job-order costing in service companies

The predetermined overhead rate and capacity

Appendix 4A: Service department costing

Allocations using the direct and step methods

Selecting allocation bases

Interdepartmental services

Effect of allocations on operating departments

Some cautions in allocating service department costs

Should all costs be allocated?

#### 5 Process costing

Comparison of job-order and process costing

Similarities between job-order and process costing

Differences between job-order and process costing

A perspective of process cost flows

Processing departments

The flow of materials, labour and overhead costs

Materials, labour and overhead cost entries

Equivalent units of production

Weighted-average method

Production report – weighted-average method

A comment about rounding errors

FIFO method

Equivalent units – FIFO method

Comparison of equivalent units of production under the weighted-average and

FIFO methods

Production report – FIFO method

A comparison of costing methods

Standard costing method

Operation costing

#### Part 2: Information for decision making

#### 6 Profit reporting under variable costing and absorption costing

Overview of absorption and variable costing

Absorption costing

Variable costing

Unit cost computations

Profit comparison of absorption and variable costing

Extended comparison of profit data

Effect of changes in production on profit

Variable costing

Absorption costing

The impact on the manager

Choosing a costing method

External reporting

Decision making

Advantages of variable costing and the contribution approach

Impact of JIT methods

#### 7 Cost-volume-profit relationships

The basics of cost–volume–profit (CVP) analysis

Contribution margin

Contribution margin ratio (CM ratio)

Some applications of CVP concepts

Importance of the contribution margin

Break-even analysis

Break-even computations

CVP relationships in graphic form

Preparing the CVP graph

Target profit analysis

The CVP equation

The contribution margin approach

The margin of safety

CVP considerations in choosing a cost structure

Cost structure and profit stability

Operating leverage

Automation: risks and rewards from a CVP perspective

Structuring sales commissions

The concept of sales mix

The definition of sales mix

Sales mix and break-even analysis

Assumptions of CVP analysis

#### 8 Activity-based costing

How costs are treated under activity-based costing

Non-manufacturing costs and activity-based costing

Manufacturing costs and activity-based costing

The costs of idle capacity in activity-based costing

Designing an activity-based costing (ABC) system

Identifying activities to include in the ABC system

The mechanics of activity-based costing

Tracing overhead costs to activities and cost objects

Assigning costs to activity cost pools

Computation of activity rates

Targeting process improvements: activity-based management

Assigning costs to cost objects

Overhead costs computed using the ABC system

Product margins and customer profitability computed using the ABC system

Comparison of traditional and ABC product costs

Product margins computed using the traditional cost system

The differences between ABC and traditional product costs

ABC product costs – an action analysis

Ease of adjustment codes

The action analysis view of the ABC data

Service costing and management: the benefits of an ABC approach

Time-driven ABC

Activity-based costing and external reports

A simplified approach to activity-based costing

#### 9 Relevant costs for decision making

Cost concepts for decision making

Identifying relevant costs and benefits

Different costs for different purposes

Sunk costs are not relevant costs

Book value of old equipment

Future costs that do not differ are not relevant costs

An example of irrelevant future costs

Why isolate relevant costs?

Adding and dropping product lines and other segments

An illustration of cost analysis

A comparative format

Beware of allocated fixed costs

The make or buy decision

An example of make or buy

The matter of opportunity cost

Special orders

Utilization of constrained resources

Contribution in relation to a constrained resource

Managing constraints

The problem of multiple constraints in the short run: linear programming

Sensitivity analysis

Shadow prices

The limitations of the linear programming model as a management accounting technique

Joint product costs and the contribution approach

The pitfalls of allocation

Sell or process further decisions

Activity-based costing and relevant costs

#### 10 Capital investment decisions

Capital budgeting – planning investments

Typical capital budgeting decisions

The time value of money

Discounted cash flows – the net present value method

The net present value method illustrated

Emphasis on cash flows

Recovery of the original investment

Simplifying assumptions

Choosing a discount rate

An extended example of the net present value method

Discounted cash flows – the internal rate of return method

The internal rate of return method illustrated

Salvage value and other cash flows

The process of interpolation

Using the internal rate of return

The cost of capital as a screening tool

Comparison of the net present value and the internal rate of return methods

Expanding the net present value method

The total-cost approach

The incremental-cost approach

Least-cost decisions

Capital budgeting and non-profit organizations

Preference decisions – the ranking of investment projects

Internal rate of return method

Net present value method

Other approaches to capital budgeting decisions

The payback method

The simple rate of return method

Postaudit of investment projects

Appendix 10A: The concept of present value

The mathematics of interest

Computation of present value

Present value of a series of cash flows

Appendix 10B: Inflation and capital budgeting

Appendix 10C: Future value and present value tables

Appendix 10D: The impact of corporate taxation

Appendix 10E: Investment decision making and risk

Risk and uncertainty

Investment decision making and risk

Interrelated risks: the decision tree

The value of extra information

Pay-off strategies

#### Part 3: Planning and control

#### 11 Profit planning and the role of budgeting

The basic framework of budgeting

Definition of budgeting

Personal budgets

Differences between planning and control

Advantages of budgeting

Responsibility accounting

Choosing a budget period

The participative or self-imposed budget

The matter of human relations

The budget committee

The master budget inter-relationships

Sales forecasting – a critical step

Preparing the master budget

The sales budget

The production budget

The direct materials budget

The direct labour budget

The manufacturing overhead budget

The ending finished goods inventory budget

The selling and administrative expense budget

The cash budget

The budgeted statement of profit or loss

The budgeted balance sheet

Expanding the budgeted statement of profit or loss

Activity-based budgeting

Some criticisms of budgeting as a performance management system

Reform or abandon budgeting?
The Beyond Budgeting Round Table

#### 12 Standard costs and variance analysis

Standard costs – management by exception

Who uses standard costs?

Setting standard costs

Ideal versus practical standards

Setting direct materials standards

Setting direct labour standards

Setting variable manufacturing overhead standards

Are standards the same as budgets?

A general model for variance analysis

Price and quantity variances

Using standard costs – direct materials variances

Materials price variance – a closer look

Materials quantity variance – a closer look

Using standard costs – direct labour variances

Labour rate variance – a closer look

Labour efficiency variance – a closer look

Using standard costs – variable manufacturing overhead variances

Manufacturing overhead variances – a closer look

Structure of performance reports

Variance analysis and management by exception

Evaluation of controls based on standard costs

Advantages of standard costs

Potential problems with the use of standard costs

#### 13 Flexible budgets and performance reporting

Flexible budgets

Characteristics of a flexible budget

Deficiencies of the static budget

How a flexible budget works

Using the flexible budgeting concept in performance evaluation

The measure of activity – a critical choice

Variable overhead variances – a closer look

The problem of actual versus standard hours

Spending variance alone

Both spending and efficiency variances

Overhead rates and fixed overhead analysis

Flexible budgets and overhead rates

Overhead application in a standard cost system

The fixed overhead variances

The budget variance – a closer look

The volume variance – a closer look

Graphic analysis of fixed overhead variances

Cautions in fixed overhead analysis

Overhead variances and under- or overapplied overhead cost

Appendix 13A: Sales mix, quantity variances, production mix and yield variances

Sales mix variances with multiple products

Production mix and yield variances

Appendix 13B: Variance analysis in service settings

Efficiency measures

#### 14 Performance measurement and reporting on segments

Decentralization in organizations

Advantages and disadvantages of decentralization

Decentralization and segment reporting

Cost, profit and investment centres

Responsibility centres

Segment reporting and profitability analysis

Levels of segmented statements

Sales and contribution margin

Traceable and common fixed costs

Traceable costs can become common costs

Segment margin

There is more than one way to segment a company

Hindrances to proper cost assignment

Omission of costs

Inappropriate methods for allocating costs among segments

Arbitrarily dividing common costs among segments

Rate of return for measuring managerial performance

The return on investment (ROI) formula

Operating profit and operating assets

Plant and equipment: net book value or gross cost?

Controlling the rate of return

Increase sales

Reduce expenses

Reduce operating assets

Criticisms of ROI

Residual income – another measure of performance

Motivation and residual income

Divisional comparison and residual income

The problem of single period metrics: the bonus bank approach

#### 15 Pricing and intra-company transfers

The economists' approach to pricing

Elasticity of demand

The profit-maximizing price

The absorption costing approach to cost-plus pricing

Setting a target selling price using the absorption costing approach

Determining the mark-up percentage

Problems with the absorption costing approach

Target costing

An example of target costing

Service companies – time and material pricing

Time component

Material component

An example of time and material pricing

Revenue and yield management

Transfer pricing

Negotiated transfer prices

Transfers at the cost to the selling division

Transfers at market price

Divisional autonomy and sub-optimization

International aspects of transfer pricing

Part 4: Value metrics and performance management in a strategic

#### context

#### 16 Strategic management accounting and the balanced scorecard

Profit planning with a given industry and product: cost structure and business orientation

Value-based management

Some basic techniques of strategic management accounting

SMA and the concept of strategic positioning

Strategic investment appraisal: investment appraisal with strategic 'bolt-ons'?

The Mavis Machines case

Strategic investment appraisal: an iterative model

Strategy as collision: lean enterprises and business process re-engineering

Modelling and monitoring strategy: the balanced scorecard and other non-financial measures

Divisional performance measures and the balanced scorecard

Common characteristics of balanced scorecards

Some criticisms of the balanced scorecard

Some obstacles to SMA

#### 17 Management control and corporate governance

General models of management control and performance measurement

The levers of control approach to strategy implementation

Corporate governance: a financial perspective

Management accounting and the integrity of financial information

Management accounting and regulatory approaches to corporate governance

Corporate governance and risk management

Wealth creation and good corporate governance: the role of boundary systems Enterprise governance

A broader view on corporate governance: stakeholders, social and environmental responsiveness

The Performance Prism

Environmental management accounting

An example of environmental management accounting

Organizational control and service delivery in the public sector: beyond incrementalism?

New political and management structures

The introduction of policy-led budgeting

#### Informal versus formal control systems

#### 18 Business process management: towards the lean operation

Optimizing inventory: the economic order quantity (EOQ) and the reorder point

Costs associated with inventory

Computing the economic order quantity (EOQ)

Just-in-time (JIT) and the economic order quantity (EOQ)

Production lot size

Reorder point and safety inventory

Reducing inventory: just-in-time (JIT)

The JIT concept

Key elements in a JIT system

Benefits of a JIT system

Inventory control and enterprise resource planning (ERP)

E-commerce: new challenges for management accounting

Quality and business processes: measurement and management

The cost of quality model

Prevention costs

Appraisal costs

Internal failure costs

External failure costs

Distribution of quality costs

Quality cost reports

From modelling the costs of quality to quality management

Total quality management (TQM)

The plan-do-check-act cycle

Some criticisms of TQM

Benchmarking

Some problems with benchmarking

Business process re-engineering (BPR)

What does a re-engineered process look like?

Some criticisms of re-engineering

Six Sigma

Lean production

An emphasis on eliminating 'waste'

Lean accounting

Obstacles to organizational change and the advantages of a fresh start

#### 19 Strategic perspectives on cost management

The theory of constraints

TOC and continuous improvement

An example of TOC

The impact of TOC on management accounting

Throughput accounting

Strategic approaches to cost management: target costing and life-cycle costing

Target costing and life-cycle costing

Some problems with target and life-cycle costing

The make or buy decision from a strategic perspective: supply chain management

Integration versus sub-contracting

Traditional supply relationships

Strategic partnering

The implications for management accounting of strategic approaches to make or buy

Corporate unbundling: shared service centres and service outsourcing

The shared service centre model

Variable costs

Fixed costs

Should actual or budgeted costs be allocated?

Service outsourcing

Glossary

Bibliography

Index

# About the authors

**Will Seal** is Professor of Management Accounting at Loughborough University having previously held Chairs at the Universities of Essex, Birmingham and Loughborough. He has also previously lectured at the Universities of Nottingham, Bath, Nottingham Trent and Sheffield Hallam.

Professor Seal is a current and active research academic as well as an active lecturer. His research interests include accounting for hotels and hospitality, supply chains and relational contracting; management accounting in local government; management control in shared service centres; management control and corporate governance. He has published in many leading journals including Accounting, Organizations and Society; Management Accounting Research; British Accounting Review; European Accounting Review: Critical Perspectives on Accounting; Accountability and Auditing Journal, Financial Accountability & Management and Cambridge Journal of Economics. His most recent research papers include: 'Controlling strategy Through Dialectical Management' (with R. Mattimoe) in press (2014) and Management Accounting Research. Currently Professor Seal also serves as a member on editorial boards for Management Accounting Research, Financial Accountability & Management and Qualitative Research in Accounting & Management.

Carsten Rohde is Professor of Cost and Management Accounting at Copenhagen Business School in Denmark. His interest concerns both conventional and strategic cost and management accounting. His research includes accounting information systems, budgeting and beyond, cost accounting, management control systems, profitability measurement and transfer pricing. He has among others, published in Handbook in Management Accounting Research, International Journal of Accounting Information Systems, Journal of Academy Marketing Science, Journal of Accounting and Organizational Change and Management Accounting Research. In addition he has co-authored a couple of textbooks on bookkeeping, management accounting and managerial economics. Currently he serves as a member on editorial boards for Global Perspectives on Accounting Education, International Journal of Accounting and Finance and Journal of Accounting and Organizational Change. Professor Rohde has long and varied teaching experience at the undergraduate and master level from different universities including Copenhagen Business School,

Reykjavik University, University of Copenhagen, University of Southern Denmark and Aalborg University. In addition he carries out executive training and gives lectures at conferences for practice. He also works closely with companies organizing seminars and collaborating on industrial PhD projects and other research projects.

**Ray H. Garrison** is emeritus Professor of Accounting at Brigham Young University, Provo, Utah.

**Eric W. Noreen** is emeritus Professor of Accounting at the University of Washington and was visiting Price Waterhouse Professor of Management Information & Control at INSEAD, France.

# **Preface**

Building on previous editions of *Management Accounting*, this fifth edition offers a comprehensive and balanced introduction to management accounting theory and practice and has been written specifically for courses across the UK and Europe. The text combines a solid grounding in technical material with a fresh look at emerging issues relevant to accounting practice. It is a clear and accessible book promoting practice as a method of learning through real-world and numerical examples, vignettes, and graded end of chapter exercises and problems. The text includes new research and developments in the discipline and has been specifically shaped to meet the needs of the market.

#### Content

Each chapter has been updated to reflect the latest development in management accounting and the main changes and developments to this edition include:

- The introduction of a new end of chapter 'Applying Excel' feature that links the power of Excel with management accounting concepts by illustrating how Excel functionality can be used to better understand accounting data. The Excel feature provides the students with an opportunity to build their own Excel worksheets and formulas as a basis for analysing different 'what if' questions.
- Chapter 1 has been extended to include more focus on the roles of management accounting and the accountant for control, planning and decision making.
- Chapter 5 on cost behaviour has been moved up as a new Chapter 3 and aligned to the content of Chapter 2. This is done to tie the chapters together better and eliminate unnecessary overlap.
- The new Chapter 5 on process costing (previous Chapter 4) has been extended to also include the use of the FIFO method. In addition a short section on the use of standard costing as an additional method is added. This is done to tie Chapter 4 better to the discussion on standard costing in Chapter 12.
- Chapter 8 on activity based costing has been extended to include more

- examples on activity based management and time-driven activity based costing.
- In Chapter 9 on relevant costs for decision making the section on optimal utilization of one constrained resource has been extended. In addition the section of multiple constrained resources has been moved from Chapter 19 and integrated in the chapter. Finally, the section on joint production has been extended and a new example added.
- Chapter 10 on capital investment decisions has been extended by adding a new Appendix 10A on present value concepts to increase the understanding of the time value of money.
- Chapter 15 on pricing and intra-company transfers has a new Focus on Practice example on how a single set of transfer prices used for both tax compliance and management control purposes can lead to conflicts.
- Chapter 17 on management control and corporate governance has been reorganized to focus more on those subjects. In addition two new Focus on Practice boxes have been added to make a better linkage to practice.
- In Chapter 18 the focus on the subject of business process management towards lean operation has been strengthened by reorganizing the contents of the chapter.
- Chapter 19 has been reorganized to focus more clearly on strategic cost management topics. In addition the section on target costing has been extended.
- Brand new end of chapter questions, exercises, problems and cases have been added to a number of chapters.
- A new and improved look and feel with a brand new four-colour design aiming to present the concepts clearly, to engage students and provide improved presentation of materials.
- More generally, references, key terms and learning objectives have been updated where appropriate.

### Superior pedagogy

The book includes a full suite of pedagogical learning tools designed to make teaching and learning stimulating and efficient, all presented in a visually impressive format. More detail is provided in the Guided Tour on pages xix to xxi.

#### Resources

A wealth of online resources also provides support to both the instructor and student. Students can access content including quizzes and practice exercises. For instructors, solutions and other teaching resources ensure the book is as easy to use as possible. An exciting addition to the support package for this edition is *Connect*<sup>TM</sup> *Plus Accounting*. This excellent online assignment and assessment platform provides opportunities for additional interaction between students and instructors, allowing instructors to continually assess each student's individual progress through practice and assessment. More information on this can be found in the technology section on pages xxii–xxiv.

# Terminology

Accounting terminology differs in UK and US English. With the globalization of capital markets and accounting, the use of international English as applied by the International Accounting Standards IFRS offers a solution that will bridge the barriers across countries and provide uniform understanding. Therefore, for consistency, IFRS English has been predominantly applied in this book. IFRS international English applies UK English for grammar and spelling, but for terminology, the main emphasis is on US terms. Some examples are:

- IFRS statement of profit or loss = income statement (US + IFRS) = profit and loss account (UK)
- IFRS revenue (US) = revenue, sales (US) = turnover (UK).
- IFRS operating profit (UK) = net operating income (US) = EBIT (Earnings Before Interest and Taxes).
- IFRS profit before tax (UK) = income before tax (US) = EBT (Earnings Before Tax)
- IFRS *profit* (UK) = *net income* (US).
- IFRS + UK balance sheet = statement of financial position (IFRS + US).
- IFRS inventory/inventories (US) = stock/stocks (UK)
- IFRS accounts receivable (US) = debtors (UK)
- IFRS accounts payable (US) = creditors (UK)
- IFRS work in progress (UK) = work in process (US)

# Acknowledgements

Our thanks go to the following reviewers for their comments and suggestions at various stages in the text's development:

Ian Andrews, Exeter University

Li-Cheng Chang, University of Kent

Henri Dekker, VU University Amsterdam

John Doran, University College Cork

Peter Ellington, University of East Anglia

Jeremy Fernando, Kingston University

Thomas Fischer, Universität Erlangen-Nürnberg

Ros Haniffa, Heriot-Watt University

Abeer Hassan, University of West of Scotland

Douglas Howcroft, University of Nottingham

Joset Jordaan-Marais, University of Johannesburg

Adele Maree, University of Pretoria

Ferina Marimuthu, Durban University of Technology

Karim Sorour, Northumbria University

Peter Sudar, University of Westminster

Breda Sweeney, NUI Galway

We would also like to thank the following contributors for the material which they have provided for this textbook and its accompanying digital resources:

Joset Jordaan-Marais, University of Johannesburg

Gerhard Kristandl, University of Greenwich

Cao Tong Yu, University College Cork

Nicolai Svendsen, Copenhagen Business School

#### Rennie Tjerkstra, University of Kent

We would also like to thank Lise Mourier, M. Ling. Merc., Associate Professor Emerita, Translation and Language for Special Purposes, Copenhagen Business School, for her input to accounting terminology. Finally, we would like to thank the two MSc students in Accounting, Strategy and Control at Copenhagen Business School, Amalie Holmstrup and Nicolai Gram Svendsen, for their comments on the book and in the case of Nicolai also for his contribution to the development of the Excel solutions.

We are grateful to the Association of Chartered Certified Accountants (ACCA) for permission to reproduce past examination questions. The suggested solutions in the exam answer bank have been prepared by us, unless otherwise stated.

Every effort has been made to trace and acknowledge ownership of copyright and to clear permission for material reproduced in this book. The publishers will be pleased to make suitable arrangements to clear permission with any copyright holders whom it has not been possible to contact.

# **Guided tour**

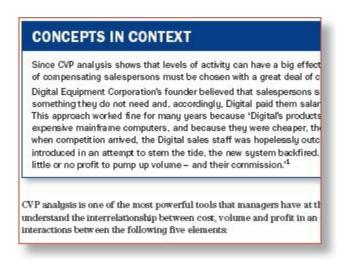
# Learning Objectives

Each chapter opens with a set of learning objectives, summarizing what you should learn from each chapter.



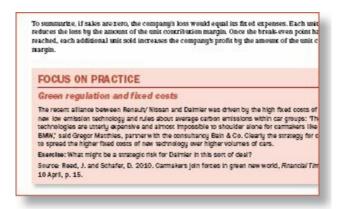
# Concepts in Context

These concepts in context boxes introduce you to the topics to follow and ground the chapter concepts in real life terms.



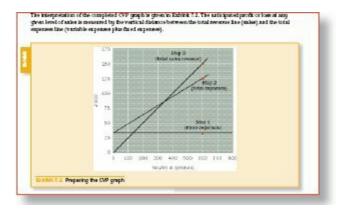
#### Focus on Practice

These mini-examples accompanied by an exercise illustrate precisely how management accounting theory affects companies, using topical examples of management accounting in well-known companies and industry sectors.



#### **Exhibits and Tables**

Each chapter includes 4-colour exhibits and tables, illustrating the concepts you need to know and the techniques you need to learn.



#### Management Accounting in Action

These dialogues follow different management accounting issues through chapters to demonstrate them in practice in the real world.