

# Instructor's Manual

## Management and Cost Accounting

Sixth edition

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ISBN: 978-1-292-06354-6

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**PEARSON EDUCATION LIMITED**

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First published Prentice Hall Europe 1999  
Second edition published 2002  
Third edition published 2005  
Fourth edition published 2008  
Fifth edition published 2012  
**This edition published 2015**

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ISBN 978-1-292-06354-6

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# Contents

<b>Chapters</b>	<b>Pages</b>
<b>Part I – Management and cost accounting fundamentals</b>	
1. The accountant's role in the organisation	6
2. An introduction to cost terms and purposes	15
3. Job-costing systems	28
4. Process-costing systems	42
5. Cost allocation	66
6. Cost allocation: joint-cost situations	81
7. Income effects of alternative stock-costing methods	98
<b>Part II – Accounting Information for decision making</b>	
8. Cost–volume–profit relationships	114
9. Determining how costs behave	131
10. Relevant information for decision making	145
11. Activity-based costing	156
12. Pricing, target costing and customer profitability analysis	167
13. Capital investment decisions	180
<b>Part III – Planning and budgetary control systems</b>	
14. Motivation, budgets and responsibility accounting	200
15. Flexible budgets, variances and management control: I	213
16. Flexible budgets, variances and management control: II	230
17. Measuring yield, mix and quantity effects	249
<b>Part IV – Management control systems and performance issues</b>	
18. Control systems and transfer pricing	270
19. Control systems and performance measurement	283
<b>Part V – Quality, time and the strategic management of costs</b>	
20. Quality and throughput concerns in managing costs	300
21. Accounting for just-in-time systems	311
22. Strategic management accounting and emerging issues	328
<b>Guide to case study solutions</b>	<b>336</b>

## Preface

This manual is intended to assist lecturers' discussion of assignments and lecture topics. 'Points to stress and teaching tips' are provided for each chapter to give broad guidance on relevant issues or potential areas of difficulty to students. Solutions are offered for end-of-chapter 'assessment material' in the text. Case notes prepared (in most cases) by the case writer to all cases included in the text are also provided.

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## PART I

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# **Management and cost accounting fundamentals**

# The accountant's role in the organisation

## Teaching tips and points to stress

### *Modern management accounting*

While the accounting system provides information (e.g. product costs, downtime) for management decisions, cost management refers to active use of this information to plan and control costs. Cost management requires managers to actively seek ways to reduce costs. Much cost management occurs well before the accounting system recognises costs. (The product design stage often offers more cost management opportunities than controlling manufacturing operations.) Cost management is integrated throughout the text.

To reinforce the value-chain concept, ask a student to illustrate activities/costs in each function in the context of his/her work experience.

Students are often confused about the difference between R&D and Design. The distinctions are not always clear-cut, but R&D is basic research and idea generation, whereas design turns those ideas into reality. Design encompasses development of prototype products and the manufacturing process by which the products are produced.

### *Elements of management control*

Planning and control are distinct activities, but they go hand in hand. To maximise the benefits from planning (e.g. budgeting), the manager should use that plan as a benchmark for controlling (i.e. assessing the effectiveness and efficiency of implementation). Conversely, it is difficult to control activities without a plan or budget.

To help students understand how accounting numbers can affect employees' behaviour and hence firm's performance, ask questions, such as if a materials procurement officer's annual bonus depends on the difference between budgeted price and actual price paid, how will the officer behave? The officer may be tempted to purchase cheap, perhaps low-quality materials that may not be delivered on a reliable, timely basis; he or she may refuse to order materials for rush orders if there will be an extra delivery charge, etc.

Although it is difficult to quantify the costs and benefits of accounting systems, a decision about the system will be made. The question is whether costs and benefits are considered implicitly (as part of a 'gut feeling') or explicitly, where effects of different estimates can be examined.

Product cost information permeates all three functions. In the scorekeeping function, accountants accumulate product cost information for both external and internal reportings. Product cost information can help identify cost management opportunities (i.e. attention directing) and it is used in make-or-buy decisions, where managers compare the cost of making the product or component with the cost of buying it from an external supplier (i.e. problem solving).

### **Costs, benefits and context**

The 'best' information system depends on both technical and human aspects of the specific situation. This is a major difference between financial accounting, where firms generally need to comply with external reporting requirements where they exist, and management accounting, where choices are based on an explicit or implicit cost–benefit analysis. Management accounting students must do more than memorising rules. They must evaluate the situation and context, decide which technique or information system is most appropriate and implement it.

### **Themes in the design of management accounting systems**

Customer satisfaction is the dominant theme. All other themes are directed toward attracting and retaining profitable customers who remain satisfied.

These themes can also be applied to functions within a business. For example, management accountants (MAs) must satisfy their customers (managers) by satisfying key success factors. MAs must provide high-quality information on a timely basis for a reasonable cost. MAs can develop innovative formats and analyses to facilitate management decisions. They should provide information regarding all elements of the value chain and must prepare information for internal decisions as well as external financial reporting. MAs should continually strive to provide better quality information, faster, at a lower cost.

### **Solutions to review questions**

**1.1** The five broad purposes are:

*Purpose 1:* Formulating overall strategies and long-range plans.

*Purpose 2:* Resource allocation decisions such as product and customer emphasis and pricing.

*Purpose 3:* Cost planning and cost control of operations and activities.

*Purpose 4:* Performance measurement and evaluation of people.

*Purpose 5:* Meeting external regulatory and legal reporting requirements where they exist.

**1.2** **Management accounting** measures and reports financial as well as other types of information that may be useful to managers in fulfilling the goals of the organisation.

**Financial accounting** focuses on external reporting that is guided by generally accepted accounting principles.

- 1.3** The business functions in the value chain are:
- Research and development – the generation of, and experimentation with, ideas related to new products, services or processes.
  - Design of products, services and processes – the detailed planning and engineering of products, services or processes.
  - Production – the coordination and assembly of resources to produce a product or deliver a service.
  - Marketing – the process by which individuals or groups (a) learn about and value the attributes of products or services and (b) purchase those products or services.
  - Distribution – the mechanism by which products or services are delivered to a customer.
  - Customer service – the support activities provided to the customers.
- 1.4** **Cost management** refers to actions that managers undertake to satisfy customers while continuously reducing and controlling costs.
- 1.5** A successful accountant requires general business skills (such as understanding the strategy of an organisation) and people skills (such as motivating other team members) as well as technical skills (such as computer knowledge).
- 1.6** Yes. Drucker is advocating that accountants do more than scorekeeping, which is often interpreted as being a ‘bobby on the beat’ or a watchdog. It is also essential that accountants emphasise their attention-directing and problem-solving functions.
- 1.7** The new accountant could reply in one or more of several ways:
- a.** Demonstrate to the plant manager how he or she could make better decisions, if the plant accountant was viewed as a resource rather than a dead weight.  
  
In a related way, the plant accountant could show how the plant manager’s time and resources could be saved by viewing the new plant accountant as a team member.
  - b.** Demonstrate to the plant manager a good knowledge of technical aspects at the plant. This approach may involve doing background reading. It certainly will involve spending much time on the plant floor speaking to plant personnel.
  - c.** Show the plant manager’s examples of the new plant accountant’s past successes in working with line managers in other plants. Examples could include:
    - assistance in preparing the budget;
    - assistance in analysing problem situations;
    - assistance in submitting capital budget requests.
  - d.** Seek assistance from the corporate accountant to highlight to the plant manager the importance of many tasks undertaken by the new plant accountant. This approach is a last resort but may be necessary in some cases.



- 1.8** A customer-driven management accountant function would:
- a. approach its customers (such as managers in different parts of the value chain) to determine how it can facilitate those managers making better decisions;
  - b. solicit regular and systematic feedback from those customers about its performance.
- 1.9** Yes, management accountants have customers just as companies have customers who purchase their products or services. Management accountants provide information and advice to many line and staff people in the organisation and to various external parties. It is essential that they provide information and advice that line and staff customers and external parties view as timely and relevant.
- 1.10** Five themes that affect the way managers operate and have prompted developments in management accounting are the following:
- Customer satisfaction is priority one
  - Key success factors (cost, quality, time, and innovative products and services)
  - Total value-chain analysis
  - Continuous improvement
  - Dual external/internal focus.

## Solutions to exercises

**1.13 Value chain and classification of costs, computer company (15 min)**

Cost item	Value-chain business function
a	Production
b	Distribution
c	Design
d	Research and development
e	Customer service
f	Design (or research and development)
g	Marketing
h	Production

**1.14 Value chain and classification of costs, pharmaceutical company (15 min)**

Cost item	Value-chain business function
a	Design
b	Marketing
c	Customer service
d	Research and development
e	Marketing
f	Production
g	Marketing
h	Distribution

**1.15 Uses of feedback (10 min)**

Item	Use of feedback
a	2
b	6
c	4
d	3
e	5
f	1

**1.16 Scorekeeping, attention directing and problem solving (15 min)**

Because the accountant's duties are often not sharply defined, some of these answers might be challenged.

Activity	Function
a	Scorekeeping
b	Attention directing
c	Scorekeeping
d	Problem solving
e	Attention directing
f	Attention directing
g	Problem solving
h	Scorekeeping, depending on the extent of the report
i	This question is intentionally vague. The give-and-take of the budgetary process usually encompasses all three functions, but it emphasises scorekeeping the least. The main function is attention directing, but problem solving is also involved.
j	Problem solving

**1.17 Scorekeeping, attention directing and problem solving (15 min)**

The accountant's duties are often not sharply defined, so some of these answers might be challenged.

Activity	Function
a	Attention directing
b	Problem solving
c	Scorekeeping

Activity	Function
d	Scorekeeping
e	Scorekeeping
f	Attention directing
g	Problem solving
h	Scorekeeping
i	Problem solving
j	Attention directing

**1.18 Changes in management and changes in management accounting (15 min)**

Change in management accounting	Key theme in newly evolving management approach
a	Total value-chain analysis
b	Key success factors (quality) or total value-chain analysis
c	Dual external/internal focus
d	Continuous improvement
e	Customer satisfaction is priority one

**1.19 Planning and control, feedback (15–20 min)**

- 1. Planning** is choosing goals, predicting results under various ways of achieving those goals and then deciding how to attain the desired goals. One goal of the European Starting News (ESN) is to increase operating income. Increasing revenues is potentially one way to achieve this if the increase in revenues exceeds any associated increase in costs. ESN expects daily circulation to increase from 250,000 per day in April to 400,000 per day in May. This budgeted circulation gain is expected to increase newspaper revenues from €5,250,000 in April to a budgeted €6,200,000 in May.

**Control** covers both the actions that implement the planning decision and the performance evaluation of the personnel and operations. At ESN, the price drop would be announced to its sales force and probably to customers. Requirement 2 illustrates a performance report for May 2003.

2.

	Actual results	Budgeted amounts	Variance
Newspapers sold	13,600,000	12,400,000	1,200,000 fav
Price per paper	€0.50	€0.50	€0.00 fav
Newspaper revenue	€6,800,000	€6,200,000	€600,000 fav

3. Based on the €600,000 favourable variance for circulation revenue, Saunier might take the following actions:
  - a. Change predictions. ESN underestimated the daily circulation gain by 40,000 copies per day. It might examine the procedures it uses to estimate the response of circulation to price changes.
  - b. Change operations. ESN might now change its advertising rates to reflect that circulation in May is 76% above that of April. This gives advertisers a much larger audience they can reach with each advertisement in the ESN.

#### 1.20 Professional ethics and reporting divisional performance (10–15 min)

1. Devallois's ethical responsibilities are well summarised in Ethical Guidelines. Areas of ethical responsibility include:

- Competence
- Confidentiality
- Integrity
- Objectivity.

The key area related to Devallois's current dilemma is integrity. Devallois should refuse to book the €200,000 of sales until the goods are shipped. Both financial accounting and management accounting principles maintain that the sales are not complete until the title is transferred to the buyer.

2. Devallois should refuse to follow Clément's orders. If Clément persists, the incident should be reported to the corporate accountant. Support for line management should be wholehearted, but it should not require unethical conduct.

#### 1.21 Responsibility for analysis of performance (20–30 min)

This problem raises plenty of thought-provoking questions. Unfortunately, there are no pat answers. The generalisations about these relationships are difficult to formulate.

1. Apparently, the accountant's performance-analysis staff have not won the confidence or respect of Hedby and other line officers. Hedby regards these accountants as interlopers who are unqualified for their analytical tasks on two counts: (a) the task is Hedby's, not the accountants' and (b) Hedby understands his own problems best. It is unlikely that the accountant's performance-analysis staff have maintained a day-to-day relationship with line personnel in Division C.
2. Nedregotten should point out that her performance-analysis staff are doing the work in order to enable Hedby to better concentrate on his other work. The detached analyses by her staff should help Hedby better understand and improve his own performance.

Furthermore, Nedregotten should point out that Hedby would need his own divisional accounting staff in order to prepare the necessary analysis of performance, if Hedby's group did not support him. More uniform reporting formats and procedures and more objective appraisals could potentially occur if the performance-analysis staff remain as part of the corporate accountant's group.

3. Two approaches within the existing organisation reporting relationships are the following:
  - a. Placing higher priority on having her performance-analysis staff view the division personnel as important customers and actively seeking out ways to increase customer satisfaction.
  - b. Encouraging greater use of teams in which division personnel and corporate control personnel are members. Hopefully, mutual respect will increase by this close interaction.

A more extreme approach would be to change the organisation's reporting relationships and staff assignments. For example, each division manager could have his or her own performance-analysis staff member as part of the plant accountant's group.

### 1.23 Planning and control decisions: Internet company (30 min)

1. **Planning decisions** at WebNews.co.uk focus on organisational goals, predicting results under various alternative ways of achieving those goals and then deciding on how to attain the desired goals. For example, WebNews.co.uk could have the objective of revenue growth to gain critical mass or it could have the objective of increasing operating income. Many Internet companies in their formative years make revenue growth (and subscriber growth) their primary goal.

**Control** focuses on (a) deciding on and taking actions that implement the planning decisions and (b) deciding on performance evaluation and the related feedback that will help future decision making.

#### 2. Planning decisions

- a. Decision to raise monthly subscription fee.
- c. Decision to upgrade content of online services.
- e. Decision to decrease monthly subscription fee.

#### Control decisions

- b. Decision to inform existing subscribers about the rate of increase – an implementation part of control decisions.
- d. Demotion of VP of Marketing – performance evaluation and feedback aspect of control decisions.

### 1.24 Problem solving, scorekeeping and attention directing: Internet company (30 min)

1. **Problem solving** – comparative analysis for decision making.

**Scorekeeping** – accumulating data and reporting reliable results to all levels of management.

**Attention directing** – helping managers to properly focus their attention.

**2a and e**      **Decisions** to change subscription fee.

**Problem solving** – report outlining expected revenues from subscribers and advertising with different monthly fee amounts.

**Scorekeeping** – report with monthly subscribers and their revenues in prior months.

**Attention directing** – report showing the change in the number of subscribers of Internet companies at the time they change their monthly fees.

**b**      Decision in June 2005 to inform existing subscribers about rate increase in July.

**Problem solving** – report showing the cost of different ways of informing subscribers of the rate increase.

**Scorekeeping** – report showing how many subscribers immediately paid the new subscription fee when past fee increases occurred.

**Attention directing** – report showing the number of subscribers to the service that have not logged on for two months or more.

**c**      Decision to upgrade the content of online services.

**Problem solving** – report showing the expected cost of alternative ways to upgrade content.

**Scorekeeping** – labour cost tracking of software developers who work on content.

**Attention directing** – report on cost overruns relative to budget for ongoing content upgrades.

**d**      Demotion of VP of Marketing

**Problem solving** – budgeted cost of marketing department with alternative management teams.

**Scorekeeping** – report showing breakdown of subscribers into renewals and new subscribers.

**Attention directing** – report highlighting subscriber growth and rates of competing Internet news services.