



COSTING AN INTRODUCTION

COLIN DRURY

FOURTH EDITION



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Costing: An Introduction

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Preface

The aim of the fourth edition of this book is to provide an introduction to the theory and practice of cost and management accounting. A cost accounting system accumulates financial information for stock valuation and profit measurement, whereas a management accounting system accumulates, classifies and reports information that will assist managers in their decision-making, planning and control activities. This book is concerned with both cost and management accounting, with equal emphasis being placed on both systems.

Intended primarily for students who are pursuing a one year cost and management accounting course, the book is ideal for those approaching this subject for the first time. The more advanced topics contained in the final stages of the cost and management accounting syllabuses of the professional accountancy bodies and final year of degree courses are not included. These topics are covered in the author's successful *Management and Cost Accounting*, the fourth edition of which is also published by International Thomson Business Press.

Feedback from teachers in a large number of colleges and universities indicates that they have found the structure and presentation of *Management and Cost Accounting* extremely satisfactory and most appropriate for students pursuing a two year management accounting course at an *advanced* professional or degree level. It was also indicated that there was a need for a book (based on *Management and Cost Accounting*) tailored to meet the specific needs of a one year introductory course in cost and management accounting. Many lecturers, in particular those running introductory accounting courses, felt there was a need for an introductory text which covered the required ground in an academically sound manner and which was also appropriate for students on non-advanced courses. This book is aimed specifically at students who are pursuing a one year non-advanced course and is particularly suitable for the following courses:

- Foundation preliminary professional (ACCA, CIMA and one year college foundation courses)

- Association of Accounting Technicians

- BTEC higher and national diploma

- A first level costing course for undergraduate degree students

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

Major changes in the content

Feedback from teachers in many colleges and universities has indicated that the structure of the first three editions was most satisfactory. The organizational structure of the book has therefore remained unchanged. The notable alterations are:

1. New text in Chapter 1 describing the new management practices that companies are adopting to compete in today's changing business environment.
2. New text in Chapter 2 describing how a single database should be maintained, with costs appropriately classified and coded, so that relevant information can be extracted for meeting the different user requirements.
3. Rewriting the material in Chapter 5 relating to contract costing.
4. Rewriting and the simplification of accounting for by-products in Chapter 7.
5. New text in Chapter 11 on the classification of activities and the factors to be considered when designing ABC systems.
6. The introduction of new text in the Appendix to Chapter 12 on the effects of taxation on capital investment decisions.
7. New text in Chapter 16 on just-in-time production methods.
8. Rewriting of Chapter 17 relating to the emerging issues in management accounting.
9. The introduction of multiple choice questions for most of the end-of-chapter questions.
10. A substantial number of new end-of-chapter questions have been added from the professional accounting examinations set subsequent to the previous edition.

Structure and plan of the book

In writing this book I have adopted the same structure as that in *Management and Cost Accounting*. The major theme is that different financial information is required for different purposes. The framework is based on the principle that there are three ways of constructing accounting information. One is conventional cost accounting with its emphasis on producing product costs for stock valuation and profit measurement. The second is the notion of relevant costs with the emphasis on providing information to help managers to make good decisions. The third is responsibility accounting which focuses on the costs and revenues of responsibility centres.

The book has 17 chapters divided into five parts. Part One consists of two chapters and provides an introduction to cost and management accounting. The following three parts reflect the three different ways of constructing accounting information. Part Two has six chapters and is entitled 'Cost Accumulation for Stock Valuation and Profit Measurement'. The focus here is on cost accounting, with the emphasis on allocating manufacturing costs to products to separate costs between the cost of goods sold and the closing stock valuation. We also consider briefly the extent to which product costs accumulated for stock valuation and profit measurement are suitable or unsuitable for decision-making and responsibility accounting. Part Three consists of four chapters and is entitled 'Information for Decision-Making'. Here we consider the notion of relevant cost and the information which should be presented to help managers make good decisions. Part Four consists of four chapters and is entitled 'Information for Planning and Control'. We emphasize here the process for integrating the decisions into a meaningful, coordinated package via the budget process. We also focus on responsibility accounting and the assignment of costs to managers. The emphasis here is on the accounting process as a means of providing information to help managers control the activities for which they are

responsible. Finally, in Part Five we focus on current developments in management accounting. The major criticisms that have been made against existing management accounting practices are described and the impact of advanced manufacturing technologies and potential future developments in management accounting are discussed.

In devising a framework around the three methods of constructing financial information there is a risk that the student will not appreciate that the three categories use many common elements, that they overlap, and that they constitute a single management accounting system, rather than three separate systems. I have taken steps to minimize this risk in each section by emphasizing why financial information for one purpose should or should not be adjusted for another purpose. In other words, each section of the book is not presented in isolation and an integrative approach has been taken.

Assignment materials and supplementary manuals

Throughout this book I have kept the illustrations simple. Students can check their understanding of each chapter by answering the self-assessment questions, answers to which are contained in a separate section at the end of the book. More complex problems are set at the end of each chapter to enable students to pursue certain topics in more depth. A *Students' Manual* and a *Teachers' Manual* accompany this book. The former provides suggested answers to the problems which are marked with an asterisk immediately after the question number and the latter answers to the remaining questions. Students are strongly recommended to purchase the accompanying manual which complements this book and contains suggested answers to approximately 100 questions. Both manuals have been revised and extended. New answers have been added and the content of both manuals has been substantially increased. Where possible, problems are arranged in ascending order of difficulty.

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I wish to acknowledge the valuable assistance of Alan Nelson from International Thomson Business Press and my wife Bronwen whose task it has been to convert my original manuscripts into one final typewritten form. My appreciation also goes to the Chartered Institute of Management Accountants, the Chartered Association of Certified Accountants, the Institute of Chartered Accountants in England and Wales, the Association of Accounting Technicians, the Institute of Chartered Secretaries and Administrators, the Associated Examining Board and the Joint Matriculation Board for permission to reproduce examination questions. Questions are designated as follows:

- Chartered Institute of Management Accountants (CIMA)
- Chartered Association of Certified Accountants (ACCA)
- Institute of Chartered Accountants in England and Wales (ICAEW)
- Association of Accounting Technicians (AAT)
- Joint Matriculation Board 'A' Level (JMB 'A' Level)
- Associated Examining Board 'A' Level (AEB 'A' Level)
- Institute of Chartered Secretaries and Administrators (ICSA)

The answers in the accompanying teachers' and students' manuals are my own and are in no way the approved solutions of the above examining bodies.

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Part One

Introduction to management and cost accounting

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. We then examine the role of management accounting in providing information to managers for decision-making, planning and control. In Chapter 2 we consider the various ways in which costs can be classified to meet the various requirements of the different users of accounting information.

The two chapters in this part provide a framework that is used to develop the remaining sections of this book. A thorough understanding of Chapters 1 and 2 is therefore essential.



The scope of management accounting

Learning objectives

After studying this chapter, you should be able to:

- differentiate between management accounting, cost accounting and financial accounting;
- list and describe each of the seven factors involved in the decision-making, planning and control process;
- justify the view that, broadly, firms seek to maximize the present value of future net cash inflows;
- explain the factors that have influenced the changes in the competitive environment;
- outline the key success factors that directly affect customer satisfaction;
- explain the role of management accounting in the management process.

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. An understanding of accounting therefore requires an understanding of the decision-making process and an awareness of the **users of accounting information**. The objective in this first chapter is to provide a framework that will enable you to achieve a more meaningful insight into the issues and problems of accounting that are discussed in this book. We shall begin by looking at the **users of accounting information** and identifying their requirements.

The users of accounting information

Accounting is a language that communicates financial and non-financial information to people who have an interest in an organization – managers, shareholders and potential investors, employees, creditors and the government. 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 that are made by the organization. Shareholders require information on the value of their investment and the income that is derived from their shareholding. Employees require information on the ability of the firm to meet wage demands and avoid redundancies. Creditors and the providers of loan capital require information on a firm's ability to meet its financial obligations. Government agencies like the Central Statistical Office collect accounting information and require such information as the details of sales activity, profits, investments, stocks, dividends paid, the proportion of profits absorbed by taxation and so on. In addition, the Inland Revenue needs information on the amount of profits that are subject to taxation. All this information is important for determining policies to manage the economy.

Accounting information is not confined to business organizations. Accounting information about individuals is also important and is used by other individuals; for example, credit will be extended to an individual only after the prospective borrower has furnished a reasonable accounting of his private financial affairs. 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 cricket 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 its members. Similarly, local authorities 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.

The foregoing discussion has indicated that there are many 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.

An examination of the various users of accounting information indicates that they can be divided into two categories:

1. internal parties within the organization;
2. external parties outside the organization.

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, whereas financial accounting is concerned with the provision of information to external parties outside the organization.** In this book we shall focus on management accounting, and for simplicity we shall concentrate mainly on the applications of management accounting to manufacturing business organizations that are operated for the purpose of making a profit. Note, however, that many of the applications are equally appropriate to non-manufacturing and non-profit organizations, and the questions at the end of each chapter include many problems that are relevant to these entities. Solutions to selected problems are contained in the *Students' Manual* to this book.

Comparison between management accounting and financial accounting

The major differences are:

- **Legal requirements** There is a statutory requirement for public 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 of the use of the information by management exceed the cost of collecting it.
- **Precision** Management requires information rapidly, as many decisions cannot be delayed until the information is available. Approximate information which is processed speedily is normally sufficient for management decision-making. With financial accounting, information must be reasonably accurate, otherwise external parties would have little confidence in the content of the published accounts. Consequently, management accounting makes greater use of approximations than does financial accounting.
- **Segments** Financial accounting reports describe the whole of the organization, whereas management accounting focuses on small parts of the organization, for example individual products and activities, departments and sales territories.
- **Accepted accounting principles** With financial accounting, outside parties require assurance that the published annual financial statements are prepared in accordance with generally accepted accounting principles so that comparisons are possible. Consequently, financial accounts must be prepared so as to meet the requirements of the Companies Acts and Statements of Standard Accounting Practice (SSAPs). Outside users must normally accept the information as the company provides it. In contrast, the management of an organization can use whatever accounting rules it finds most useful for decision-making, without worrying whether it conforms to standards or legal requirements.
- **Time dimension** Financial accounting reports what has happened in the past in an organization, whereas management accounting is concerned with *future* information as well as past information. Decisions are concerned with *future* events and management therefore requires details of expected *future* costs and revenues.
- **Report frequency** A detailed set of financial accounts is published annually and less detailed accounts are published semi-annually. Management requires information quickly if it is to act on it. Consequently, management accounting reports on various activities may be prepared at daily, weekly or monthly intervals.

The decision-making process

Because information produced by management accountants must be judged in the light of its ultimate effect on the outcome of decisions, a

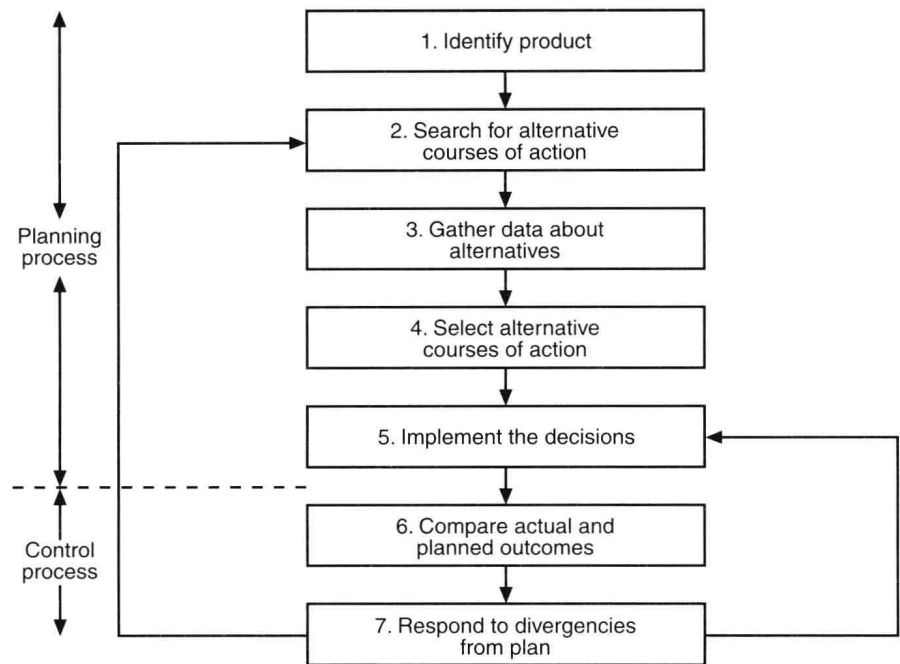


Figure 1.1 The decision-making, planning and control process.

necessary precedent to an understanding of management accounting is an understanding of the **decision-making process**.

Figure 1.1 presents a diagram of a decision-making model. The first five stages represent the decision-making or the planning process. Planning involves making choices between alternatives and is primarily a decision-making activity. The final two stages represent the **control process**, which is the process of measuring and correcting actual performance to ensure that the alternatives that are chosen and the plans for implementing them are carried out. Let us now consider each of the elements of the decision-making 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 favouring one course of action over another. Hence the **first stage in the decision-making process should be to specify the objectives or goals of the organization**

Considerable controversy exists as to what the objectives of firms are or should be. Economic theory normally assumes that firms seek to maximize profits for the owners of the firm (the ordinary shareholders in a limited company) or, more precisely, seek the maximization of shareholders' wealth. Various arguments have been used to support the profit-maximization objective. There is the legal argument that the ordinary shareholders are the owners of the firm, which therefore should be run for their benefit by trustee managers. Another argument supporting the profit objective is that profit maximization leads to the maximization of overall economic welfare. That is, by doing the best for yourself you are unconsciously doing the best for society. Moreover, it seems a reasonable belief that the interests of firms