

# ADVANCED COST ACCOUNTANCY

J. Batty

2nd Edition

# ADVANCED COST ACCOUNTANCY

*by*

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SECOND EDITION



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*By the same author:*

CORPORATE PLANNING AND BUDGETARY CONTROL  
INDUSTRIAL ADMINISTRATION AND MANAGEMENT  
MANAGEMENT ACCOUNTANCY  
MANAGERIAL STANDARD COSTING  
STANDARD COSTING

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## PREFACE

THIS volume is intended as a companion to *Management Accountancy*, which is now accepted as a standard textbook in many countries. The contents of this earlier book have been considered in presenting this new work, and as far as possible overlap has been avoided.

The title *Advanced Cost Accountancy* is not intended to imply that every aspect of costing at an advanced level is covered. It would need a much larger volume to include every subject which comes within the orbit of this varied and complex subject.

In selecting the areas to include, an attempt has been made to put forward the latest ideas on the changing face of cost accountancy. More detail than normal has been included on process costing. Students are now expected to understand and compile process accounts; this is a complex subject and for this reason no apology is made for the extensive coverage given.

Special attention has been paid to marginal costing and a comparison is made with absorption costing. Answering a need for information often requires a compromise approach which combines the best features of both techniques, and for this reason the term "responsibility costing" has been coined and a conceptual framework developed.

Moving with the times, a brief outline of the behavioural implications is also given. This does not mean that the accountant has in the past ignored the personnel aspects, but he should be able to understand the language and work of other experts. Moreover, a formal approach can often place in the correct perspective many of the practices which are carried out.

My thanks are offered to individuals and companies who gave advice and information. In particular, I would like to mention The Ford Motor Company and The International Time Recording Company who allowed me to include material supplied by them. Professor A. J. E. Sorgdrager was responsible for initiating some of the concepts which I have extended and applied. A number of professional bodies kindly gave permission for past examination questions to be included. Once again, my wife had the mammoth task of typing and related work, without which the book would not have reached the publication stage.

October 1973

J. BATTY

## PREFACE TO SECOND EDITION

EXAMINATIONS in Cost and Management Accountancy continue to present formidable difficulties for students, often because they do not understand the nature of the subject as a practical tool for the benefit of more efficient management. This is especially the case when they have not received a thorough grounding in Management principles.

In this book an attempt is made to bring together the so-called conceptual aspects with the practical methods and procedures necessary for achieving results. I hope that the fact that a second edition is required is an indication that the approach adopted is successful.

*July 1978*

J. BATTY

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## CHAPTER 1

### THE STUDY OF COST ACCOUNTANCY

#### WHAT IS COST ACCOUNTANCY?

“Cost accountancy” is the comprehensive term used to describe the principles, conventions, techniques and systems which are employed in a business to plan and control in detail the utilisation of its resources. Usually the latter are taken to mean the assets, facilities and employees, together with any materials and services which are consumed.

This definition will be expanded as the chapter proceeds. At this stage, it will be seen that the subject falls into a number of categories, which may be summarised as follows:

#### 1. *Principles*

Cost accountancy grew out of the needs of businessmen to know in detail the costs involved in producing goods and services. Many of the principles observed have developed as part of *management* and, therefore, to be applied with success cost accountancy should provide managers with the information required for planning, control and decision-making. Examples of management principles which are an integral part of cost accountancy are as follows.

- (a) *Specialisation is necessary in any business of reasonable size.* This has led to the functional breakdown of the business and the establishment of “cost centres” and “responsibility accounting.”
- (b) *Costs represent economic sacrifices, whereas losses are waste.* Management should be concerned with the conversion of resources with the minimum of waste. Cost accountancy gives formal recognition to this principle.
- (c) *Authority and responsibility should go together.* The responsibility for costs should be made clear to all concerned and any necessary authority to incur expenditures should be given to those who are expected to control.
- (d) *Corporate planning requires a clear statement of objectives.* What a company is going to produce and sell, together with the *means* of achieving these objectives, should be stated by the board of directors. As a corollary, managers who are to achieve the objectives should understand the part they can play. Predetermined costs allow plans to be made and, therefore, objectives to be stated, in specific terms. Without the breakdown of costs into their main *elements* there would be considerable difficulty in understanding the nature of the objectives.

- (e) *Use the principle of exceptions.* Managers have to make the best use of the time available. Cost accountants recognise this fact and follow the *principle of exceptions* whereby all significant variations from plans are reported upon. This allows managers to concentrate upon essential facts and thus raise the level of efficiency.

These are some of the principles; others will become apparent from the study of later chapters. They should be used within the framework of management and, at the same time, within cost accountancy. There should be no conflict between the two; a sound management principle should also be an equally sound cost accountancy principle.

## 2. Conventions

Conventions in this sense are principles or rules which have emerged from the recommendations of professional bodies, from agreement amongst accountants or from the observations of writers, practising managers and accountants. Usually there is a sound reason behind each "rule" such as the *convention of conservatism* that only realised profits should be included in the profit and loss account or *the rule of cost normality and comparability* that only *normal* costs should be included as part of the total cost of a product.

Cost accountancy relies on comparisons of figures and, therefore, *consistency* is essential. Changing methods from one period to another would make the figures quite incomparable.

## 3. Techniques and systems

The stress so far has been on cost *accountancy*. There is also cost *accounting*, which is concerned with the methods, techniques and systems employed to achieve desired objectives. The methods used for controlling labour times—clock cards, time recorders, time sheets—and the procedures followed, are all examples.

There is a convention of terminology which makes distinctions in the terms used. For example:

- (a) *Costing systems.* The main costing systems, such as job costing and process costing, are regarded as *systems*.
- (b) *Costing techniques.* A *technique* is a set of procedures or methods for achieving stated objectives which do not necessarily constitute a complete system. For example, job costing may be employed as the principal system of cost accounting, but marginal costing may also be used to allow costs to be controlled more effectively and for decision-making. Usually, therefore, marginal costing is regarded as a technique which is imposed upon the main costing system.

- (c) *Costing methods or procedures.* Systems and techniques, are composed of many "steps;" in material control, for example, material requisitions have to be completed, priced, extended, and then posted to the stores ledger. The overall accounting for materials consists of established ways of conduct which collectively are regarded as *methods* or *procedures*.

The *means* of achieving the desired objectives within the framework of a system or technique would also be included in cost accountancy. These cover the forms employed, ledgers, equipment and other facilities. Whether to use mechanical means, a computer or some other device would be an important policy decision.

There is no universal agreement on these terms, but those given above appear logical and will be used as far as possible throughout the book. They should lead to a better understanding of the subject under review.

### ESSENTIAL FEATURES

Cost accountancy includes a multitude of sub-systems or methods designed to give vital information on the products or services being manufactured and/or sold. The most important feature is the attention paid to the *detailed* planning and control of business resources. Although one of the objectives is to find the cost of individual products there is much more involved than simply keeping cost records: this is a relatively simple matter.

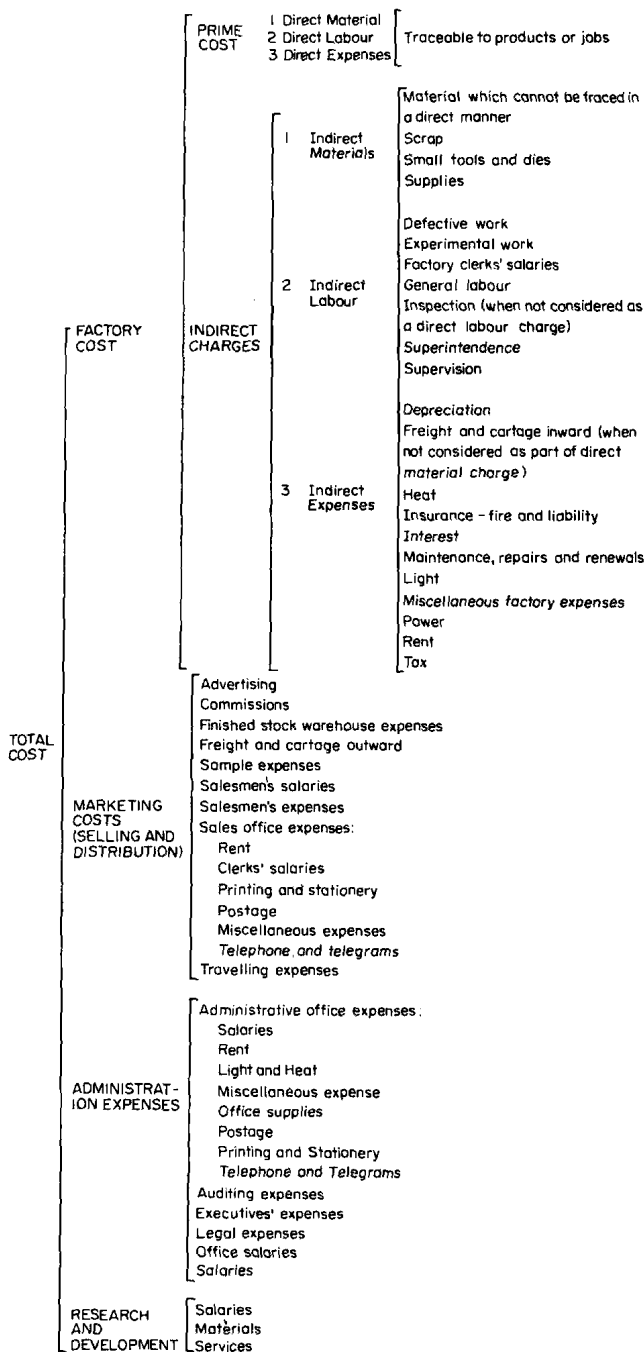
The classification and analysis adopted is very extensive. A functional analysis is usually followed; thus:

1. Production or Manufacturing (also referred to as "Factory" or "Works").
2. Administration.
3. Selling and Distribution.
4. Research and Development.

In addition, the elements of cost are used as a basis for the logical accumulation of cost figures. These are labour, materials and overheads as defined in Figure 1.

For cost control, a manufacturing unit is divided into "cost centres" and other divisions. These indicate the responsibilities of managers for the resources under their control. The costs actually incurred show the degree of efficiency being achieved. If too high, in the absence of other reasons, the assumption made is that a manager is falling down on his work. Costs are, therefore, an important yardstick in the operation of a business. Departments involved in producing the products to be sold are known as "producing cost centres," whereas those providing necessary facilities (e.g. stores, maintenance) are "service cost centres."

Whether the costs become an integral part of the products made, and



TOTAL COST + PROFIT = SELLING PRICE

FIG. 1.—Cost elements chart.

can conveniently be traced to them determines whether costs are "direct" or "indirect." The correct placing of costs in these two categories is one of the essential requirements if accurate cost accountancy is to exist. How costs are classified is indicated in Figure 2.

CLASSIFICATION	SUB-DIVISIONS	REMARKS
1 COSTING SYSTEMS	(a) JOB COSTING (b) PROCESS COSTING	Individual jobs treated separately Processes treated separately and costs averaged
2 COSTING TECHNIQUES	(a) STANDARD COSTING (b) MARGINAL COSTING	Uses pre-determined costs Concerned with cost behaviour
3 OVERHEAD COST BEHAVIOUR	(a) TOTAL COSTING (b) MARGINAL COSTING	Also known as "absorption costing" In the U.S.A and some other countries the term used is "direct costing"
4 COSTS EMPLOYED	(a) HISTORICAL COSTING (b) PRE-DETERMINED COSTING	Concerned with actual costs only; job or process costing Costs are determined in advance of production and used as a basis for standard costs and budgets

FIG. 2.—*Costing classification.*

1. These two main systems may be further classified on the basis of specific applications, *e.g.* batch or unit costing.

2. Although standard costing is strictly a technique, it is often described as a "system"—in effect, it supplants the process system being used as a framework for standard costing.

3. There is no preference for this term—absorption costing is in some ways a better description—this denotes that all costs are absorbed.

Although historical costs are a feature of cost accounting systems, the accountant also uses *estimated* costs and *pre-determined* costs. The latter, when used as part of a standard costing system, provide managers with meaningful information for planning and control.

Cost accountancy is not limited to the classification and accumulation of costs—ascertaining detail. The valuation of stocks and the calculation of the optimum output (the "capacity" to adopt) are also included in its sphere. Selling *some* products at a profit and *others* at a loss may be part of the policy being pursued. Producing one product rather than



another; sub-contracting; dropping a product line or making other decisions are all vital questions for any business. The determination of policy or the making of decisions should not be performed blindly. This means that besides paying attention to detail, managers should also consider the overall position—there should be an adequate volume of business at prices which are profitable.

On the question of prices, economists quite rightly point out that costs do not determine prices. The existence of demand is essential if products are to be sold. Whilst not denying these facts, there should be full recognition of the importance of costs in price determination. In the long run *all* costs have to be recovered in the prices charged, or a company will incur losses and may be forced into liquidation.

In designing systems, methods and techniques the cost accountant has to produce the information without excessive spending on salaries, equipment and other accounting facilities. In addition, the definition of “cost” adopted should be the one most appropriate for the business concerned. Moreover, it should be based upon sound principles and employed consistently. Whether to use “average price,” “first-in first-out,” or some other method of pricing material should be determined. How overhead costs are to be absorbed in products is also a vital factor. These and similar questions have to be considered for each business.

Considerable emphasis is placed upon *cost control*. The use of pre-determined costs has already been mentioned. In addition, the division of overhead costs into “fixed” and “variable” is an indispensable feature of cost accountancy, enabling a distinction to be made between costs which are “controllable” and those which are “uncontrollable” by specific managers.

There are other features to be found in cost accountancy, blended together to enable managers to carry out their functions as efficiently as possible. Other related disciplines also exist. Cost accountancy is part of “management accountancy,” which is the combination of budgetary control, financial management, cost accountancy and related techniques, all integrated into a master system which is designed to assist management.

### SUB-DIVISIONS OF COST ACCOUNTANCY

A further analysis of the systems and techniques which are contained in cost accountancy are summarised in Figure 2 and below:

1. Costing Systems.
2. Costing Techniques.
3. Overhead Cost Behaviour.
4. Costs Employed.

#### 1. *Costing systems*

There are two basic systems of cost accounting—job costing and process costing. Details are given in Chapters 5, 6 and 8. Job costing is