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# MANAGEMENT AND COST ACCOUNTING

Tools and Concepts in a Central European Context

WILEY

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### Preface

#### Idea of this Book

Management and cost accounting has been the basic toolbox in business administration for decades. Today it is an integral part of all curricula in business education and no student can afford to not be familiar with its basic concepts and instruments. At the same time, business in general and management accounting in particular are becoming more and more international. English clearly has evolved as the "lingua franca" of international business. Academics, students, as well as practitioners exchange their views and ideas, discuss concepts and communicate with each other in English. This is certainly also true for cost accounting and management accounting.

We are aware that there is a wealth of textbooks available on various areas and aspects of accounting. Yet, we think that a growing niche has been neglected by textbook authors in the past. More and more universities in non-English speaking countries in Europe or Asia teach entire business programs or at least selected courses in English. At the same time, the classic US-focused management accounting textbooks do not cover concepts and methods that have been developed outside the US and that are widely used in business practice in Europe, for instance. Such US-focused textbooks therefore are partly incomplete or incompatible with the way management accounting, cost accounting, and management control is taught – and used in business practice! – in these countries.

In German-speaking countries, as well as in other European regions, companies often choose English as their corporate language, creating a need to communicate domestic concepts in the English language. Managers and management accountants in regional subsidiaries of internationally operating corporations must be able to understand both the systems as well as the terminology of their parent companies.

Therefore, we introduce a new English textbook covering concepts and instruments of cost accounting and management accounting. The book combines the "best of both worlds." It covers all topics that are typically dealt with in undergraduate courses and introductory graduate courses of German universities. At the same time, it applies the managerial emphasis, the decision-oriented approach and the easy reading style of US-American textbooks. Cost accounting is not rocket science. Yet, we know from our own teaching that some students are afraid of accounting or anything involving numbers. This book aims at luring students towards the exciting topic of cost accounting.

Our book differs from the plethora of German textbooks available by its unique combination of German/Central-European concepts written in accessible English language. It also deals with German/Central-European peculiarities that are left out in other English-language textbooks and integrates contents that are considered necessary from our understanding of management and cost accounting.

#### Structure of the Book

After an introduction to the topic in Chapter 1, including major differences between the German approach and the purely Anglo-Saxon approach of management accounting, the book describes different cost terms and concepts applied in German cost accounting (Chapter 2). The book is much more specific here compared to US-American standard textbooks. Based on different cost concepts, the topic of cost behavior is discussed in Chapter 3, including the determination of cost functions. The core of the book guides the reader through the general structure (Chapter 4) of a fully developed cost accounting system following the German and Central-European standard: It starts with cost type accounting (Chapter 5), moves on to cost center accounting (Chapter 6) and finally deals with cost unit accounting (Chapter 7), assigning cost to goods and services offered in the market.

The remainder of the book deals with decision making and how management and cost accounting data can support managers in this task. A comparison of absorption costing and variable costing in Chapter 8 introduces the reader to management decisions such as product portfolio and outsourcing decisions. Additionally, cost-volume-profit analysis (break-even analysis) is covered. The book closes with a comprehensive treatment of cost planning and variance analysis in Chapter 9.

#### **Target Audience**

This textbook covers all relevant topics that are typically dealt with in German and Central-European bachelor and master level university courses on cost accounting and management accounting. The book has been written primarily for students of study programs run in the English language at universities in non-English-speaking countries (such as Germany, Austria, Switzerland but also Scandinavia, Eastern Europe, and Asia). The book is written for lecturers who are looking for an alternative to the classic US-focused management accounting text-books. It can be used for any of the following:

- Introductory courses in management and cost accounting for undergraduate students
- Introductory courses in graduate programs (MBA, MSc. in General Management, etc.) to introduce students without a deeper knowledge of accounting
- Introductory courses in executive development certificate programs
- A handbook for practitioners such as general managers and consultants in multinational corporations
- A book for non-European readers interested in understanding German/European concepts of cost accounting and management accounting, in contrast to a purely Anglo-Saxon approach to management accounting.

#### Features of this Book

#### Understandability and readability

Many accounting books, especially in the German language, fail to take into account that their readers may come across issues they hear for the first time. Numerous books are written in a sophisticated academic language style, emphasizing mainly accuracy and a high level of detail.

A good textbook, however, needs to have more than that. This text has been written with the student in mind. When writing the book, the key was to remember what we needed to understand when we faced the topic for the first time.

#### Theory and practice

Managing organizations is by nature a practical task. This textbook equips the reader with the required theoretical background, but puts the emphasis on a practical application in real business situations. Theoretical discourses with little practical relevance are not covered in this book.

#### Case starting each chapter

Every chapter starts with a feature story to underline the practical relevance of a concept or question covered in the book. The feature stories address problems discussed by managers, accountants, and operating staff. They illustrate the key questions that are answered in the chapter. The stories are fictitious, but typical of managerial decisions found in modern business organizations.

#### Addressing cutting edge topics

Although written as an introductory text, the book addresses the relevant up-to-date topics in management and cost accounting. It outlines recent developments and puts the covered concepts in relation to the contemporary business environment of the 21st century.

#### Syllabus-oriented chapter sequence

The sequence of chapters is not chosen without reason. From our long teaching experience, as well as from industry insights, we believe that it makes sense to introduce first cost terms and cost behavior before presenting the flow of accounting data from cost types to cost centers to cost units. We acknowledge that there are textbooks claiming a complete freedom of chapter sequences, but we have some pedagogical doubts about this approach. While the chapters are written mostly independent of each other, we would recommend setting up a course in management and cost accounting in a similar sequence. Of course, readers with some background knowledge are free to choose from the covered topics in whatever sequence desired.

#### Learning objectives

Each chapter outlines the learning objectives to be reached after having worked through the text. Learning objectives are clearly formulated knowledge, skills, or competences that a reader should know, be able to understand and discuss, or be able to do after having read the chapter.

#### Comprehensive and precise summaries

Each chapter closes with a summary, addressing the learning objectives to be reached in that chapter. It gives the reader the possibility to check whether they have covered and understood all relevant concepts introduced in the chapter.

#### Glossary

Each chapter contains a glossary of the most important accounting concepts covered in the text. In short form, it repeats and defines management and cost accounting terms used and explained in the chapter.

#### Review questions

Review questions at the end of each chapter complement the topics discussed. The review questions help the reader recapitulate selected issues in a particular cost accounting context. A set of PowerPoint slides and answers to the review questions are available to instructors within the companion website located at www.wiley-vch.de/textbooks.

#### About the Authors

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# Introduction to Management Accounting and Cost Accounting

#### **FEATURE STORY**

JETS Unlimited SE is a European-based airline positioned in the low-cost flight sector. Since its foundation in 2008, the company has been successfully competing with the incumbents in the market. Joana Hansen, Head of Operations and member of the executive board, meets with Carol Marino, Chief Management Accountant, to discuss the most recent management report and other upcoming decisions.

- Joana: Carol, thanks for sending me last month's management report this morning. I've already had a couple of minutes to look at it.
- Carol: No problem. I'm sorry, though, that it came through a day later than usual. My team and I had to adjust data for the extraordinary effects resulting from the strike at Paris Airports two weeks ago.
- Joana: I saw that. More than 50 of our flights were cancelled. We've lost 10 per cent of the monthly revenues, and operating profit is down by almost 35 per cent!
- Carol: Yes, but without this one-time effect, our sales and profits would have been in line with the plans. Fortunately, they've now reached an agreement in Paris, so that further strikes are called off. I'm confident that next month's plan will be met.
- Joana: Another thing that caught my attention was the capacity utilization. Our seat-load-factor has slightly decreased from 87 per cent to 84 per cent. This means that our planes are less utilized. Is this anything to worry about?

- Carol: I noticed that too. But the decline is a cyclical effect. I checked with the reports from the previous two years. We've had this situation every year around this time. I'm not expecting this to become a negative trend. That's why I didn't highlight it in the report.
- Joana: The other thing I wanted to talk to you about is the pending decision about outsourcing our on-board catering. You know, we have the offer of an external airline caterer on the table. Have you made any progress in the analysis?
- Carol: My team needs one more day to finalize the presentation for the management board. We were able to extract all relevant information from the cost accounting system. It looks as if outsourcing is a feasible option. But I want to wait until all the number crunching has been finalized.
- Joana: I'm glad I've got you and your team. The other board members have become increasingly impatient in this matter. They want a decision soon. However, I'm not going to decide anything without having seen a thorough cost-benefit analysis.
- Carol: Absolutely. We've measured the performance of our internal catering services over the last two years. This is a good basis for comparison with the outsourcing offer. A large amount is characterized by fixed costs. If we're able to eliminate most of the fixed costs within a year, the outsourcing deal makes sense.

Joana: Another component of this decision will be more difficult to assess. If we're really going to accept the outsourcing deal, we'll have to downsize and restructure the existing catering operations. This also means laying-off employees. We'll have to answer some ethical questions, too.

Carol: You're right, that part should not be neglected. However, our accounting system will hardly help in this aspect. This will rather require a lot of tact and sensitivity.

#### LEARNING OBJECTIVES

After completing this chapter, you should be able to:

- 1 Define the purpose of accounting
- 2 Understand the importance of accounting information for doing business
- 3 Describe the "Accounting Family" and differentiate financial accounting from management accounting
- 4 Explain conceptual differences in management accounting between countries and world regions
- 5 Understand the German approach to "Controlling" compared to Anglo-American management accounting
- 6 Describe the role of a controller in an organization
- 7 Discuss ethical aspects of accounting

#### The Purpose of Accounting

#### Information Needs in Business

Imagine you take the job of general manager in a medium-sized manufacturing company that is active as supplier for most of the major car manufacturers around the globe. You make decisions, you coordinate activities of other people working inside and outside of your own company, you motivate your direct employees, you explain tasks and goals, etc. What do you need most in order to accomplish your tasks? A brand-new computer? A personal assistant? A big office? These things might all help, but your most important resource most likely is – information!

Information has probably become the most valuable resource in modern business. In today's business environment, rational decisions and actions – that is, those that help achieve company goals – would be virtually impossible without access to information. Companies spend a great deal of effort, time, and money on making sure that the right information is available to the right people in order to make the right decisions and initiate the right actions. Information is required for many different tasks:

1. Planning: Simply speaking, "planning" is about anticipating potential future events and developments or future consequences of today's decisions and actions, respectively. Plans are by nature uncertain, because nobody can anticipate the future with absolute certainty. But plans can be made more "robust" when they are based on past experience and when they take into account what is already known about future developments. Businesses therefore strive to base plans on a solid foundation of information about past achievements and potential future developments.

- 2. Documenting: A documentation of what has happened and what has been done in the past can be a valuable source of information in business for a number of reasons: First, it can be a reference for future decisions and actions. Knowing how things have been done previously can help us avoid making the same mistakes again. Documenting the past therefore is a necessary (albeit not sufficient) condition for learning. Second, businesses also rely on documentation when it comes to assigning responsibility and accountability for past actions and decisions. Documentation can help clarify whether the right people have been involved and who has actually made a particular decision. Third, documentation can also serve as a justification: given the information available at the time of the decision, management had to act the way it did. Given hindsight, a different decision might have been more advisable, but documentation proves that the decision was justified at the time it was taken.
- 3. Decision making: Decisions involve choices between alternatives. Even the decision not to do anything is a choice one could have done something instead. A rational decision maker will try to make sure that they take the right decision that is, picking the one alternative that promises the greatest reward. Generally speaking, decision makers will try to identify the alternative that offers the highest probability of achieving the defined goals. Identifying this optimal alternative is possible only by having information on likely future consequences of each decision alternative, necessary conditions for each alternative to be realized, or potential conflicts with other decisions that have to be made at the same time.
- 4. Monitoring and Feedback: Businesses want to make sure that things evolve in the intended manner: goals have been set with the intention of achieving them, projects have been started in order to be completed as planned, and rules have been set based on the expectation that they are observed. Planning and decision making therefore inevitably involve an element of control. Again, this control would be impossible without information both about the original goals and plans as well as about actual achievements and developments.

Acting in a business environment is therefore virtually impossible without using information of various kinds. The users of business information hold different positions and follow different interests. It is common to distinguish information users belonging to the company from those that are outsiders to the company. The most important type of information user within the company is certainly company management. But management tasks are not concentrated only at the top of a company. Key account managers, project managers, product managers, or team leaders in the company's research and development (R&D) department all perform management tasks. Their scope of responsibility as well as the primary object of management differs. Depending on their area of responsibility they need information on different subjects and to differing degrees of detail, but they all must make decisions, must plan ahead, and must control goal achievement.

Company employees with management functions are not the only users of information, though. Even if not working for a particular company (be it in a management position or in a purely operational role), one might still have a high interest in collecting information on that company's business activities:

• Investors must decide whether they want to become owners of the company (for instance by purchasing shares in the company). Thus, they are interested in the company's past performance as well as in its future outlook.

- Creditors must decide whether they can safely lend money to the company or whether they run the risk of losing their money (for instance, should the company go bankrupt in the near future). They will therefore look for information on the company's creditworthiness, its past track record of servicing debt and on its expected future business success.
- Suppliers and customers must decide whether they should enter into a business relationship with the company. This decision will depend on the company being able to fulfill contractual obligations.
- Society might be interested in learning about how the company uses natural resources, treats its employees and deals with the potential negative effects of its business activities on society. Thus, even without a direct business relationship many people might want to get information on what a particular company is doing or how it is dealing with a certain problem.
- Last but not least, public authorities need information on the company's business activities. A very important reason is the need to determine the company's tax burden. Levying taxes is possible only if tax authorities can determine the tax base. Taxes on company earnings therefore can be set only if tax authorities have information on how the company has determined its earnings and whether all business activities have been properly taken into account when determining earnings.

With potential information users and information needs being so diverse, it is clear that there is no single information source within a company that could fulfill all possible information needs. The information required is of a very different nature: some users look for "hard facts" and pieces of information that can be expressed in monetary values. Others will rather need "soft," textual information.

#### Different Sources of Information for Businesses

We have described various uses of information in a business organization and also have outlined the many different types of users of information. We have not yet, though, talked about sources of information: where can decision makers and other users find all the information they need for their job?

A considerable amount of the required information relates to the company itself and its activities. The company therefore needs systems and tools to track its diverse business activities: ordering raw materials from suppliers, hiring new staff, paying open bills, planning the manufacturing program for the next period, checking the quality of goods produced, delivering orders to customers. A modern business is a continuous stream of individual activities, which in their entirety define "what's going on" in the organization. The amount of information that can be collected is enormous and companies implement a variety of tools and systems to keep track of it.

But not all types of events and activities are equally well suited to be recorded and tracked in a systematic manner. Some events, states, or developments will best be expressed in terms of qualitative information – that is, information that is predominantly in verbal or textual form: rumors about competitors' future activities, complaints from customers, news about promising results in the research department. Information of this kind might be extremely valuable for users both inside and outside the organization and will be best expressed in qualitative form (text). Other events and states, though, can readily be expressed in quantitative form – that is, information that can be expressed in numbers. Inventory levels, monthly sales revenues, purchasing expenses, number of staff in the manufacturing department can all be documented

and further processed in numerical format. Quantitative information of this kind accounts for a large part of the business information that is continuously recorded and processed within a company. Organizations typically have set up dedicated systems for this purpose, the centerpiece being the accounting system.

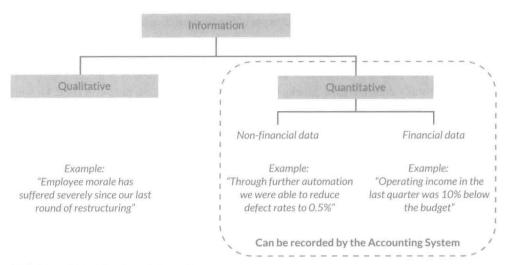


Exhibit 1.1 Types of business information

#### A Definition of Accounting

Accounting denotes the system that records, analyzes, and reports all business transactions of a company in a systematic and comprehensive manner in order to provide useful information to users inside and outside the company. Accounting is a "system" because it comprises various elements that are logically connected with each other: individuals (accountants) use various tools (for instance computers and accounting software) and follow certain procedures in order to produce its main output: information. Accounting systems typically record only quantitative information.

Accounting is not the only system to keep track of quantitative information within a company. Quantitative information might also be recorded and processed in customer databases, quality management tools, production planning systems, or HR files – to name just a few. But accounting is typically the central piece in a company's information landscape.

#### The Job of an Accounting System

As we have previously outlined, not all events and developments can be tracked in the company's accounting system. Clear rules are needed to determine what accounting does and what it does not do. Without going into too much detail we can say that the accounting system:

- 1. records and stores
- 2. the stocks and flows
- 3. of scarce goods and resources

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