GLOBAL

ACCOUNTING
Information Systems

会计信息系统

Mawdudur Rahman [美] 莫杜德·拉赫曼／著

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His innovative concept of Knowledge globalization conference has attracted scholars from many different fields. He is currently working in Social Business for poverty alleviation projects. His research interests embrace design and implementation of AIS and MIS, continuous quality improvement, distance learning, change management and global knowledge sharing.

He coauthored three books in AIS and Management Information systems. He contributed a large number of articles to academic and professional journals, and news media globally.

He teaches courses in cost accounting, managerial accounting, AIS and management topics. He did consultation/training projects for corporations, international agencies, foreign governments, and US State and Federal Government agencies, serving on the Boards of non–profit organizations.He has a Ph.D. from Manchester University, England, an MBA from Indiana University, Indiana.

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PREFACE

This book provides an introduction to accounting information from the accountant's perspective. In my search for AIS text book to use in undergraduate and graduate courses to teach students across different countries, I discovered a number of excellent books on the subject those emphasize computerized information systems and use accounting applications liberally. These texts are more appropriate for a course in systems analysis than for accounting. It is sometime difficult to use these books indifferent cultures given specific examples from one culture only.

This textbook is designed to assist students in understanding the rationales for developing different forms and types of accounting information; the relationships between and among accounting departments, information services departments, operating departments, and staff agencies of private and public sector organizations; and the several support modes available via emerging computer technologies, along with their capabilities, limitations, and liabilities. It incorporates examples and applications from different cultures.

The book is divided into four parts.

Part I consists of three introductory chapters. Chapter 1 covers the uses of accounting information. This chapter is particularly useful in broadening the perspective of undergraduate students. Beginning accounting students tend to compartmentalize learning according to the content of courses offered in the different branches of accounting. Chapter 2 provides an overview of the systems approach to analyzing organizations. We find that the systems view clearly represents both the static and dynamic elements of organizations. Chapter 2 uses systems concepts to define the AIS, to provide a distinction between the AIS and its computerized components, and to examine those environmental factors that facilitate AIS success or constrain its development. Chapter 3 briefly reviews basic accounting principles. We have found this to be especially useful for our in-service MBA students, who have relatively weak accounting

preparation or who have been away from academia for some time. It is not intended to be a comprehensive accounting review, but rather emphasizes fundamentals. The chapter establishes the basic procedures followed in a manual accounting system and illustrates how these are accomplished via automated procedures available to large and small organizations.

Part II identifies and discusses the essential components of AIS and the interfaces among them. This section focuses on the static features of the AIS. Chapter 4 deals with the primacy of the accountant in the human-machine relationship. Chapter 5 provides an overview of the hardware available to support accounting requirements. Chapter 6 reviews the levels of software and the generation of software that activates the hardware. Chapter 7 investigates the capabilities and limitations of different data storage configurations.

Part III turns to the more dynamic aspects of the AIS. Chapter 8 considers the relative merits of batch and on-line processing techniques. This is the dynamic of the AIS in the short run-the use of existing capabilities. Chapters 9 and 10 outline the alternatives open to the accountant faced with the need to acquire additional capabilities, given the reality that accounting information requirements change over time. Chapter 9 describes the traditional application development life cycle. Chapter 10 is devoted to more innovative methods of developing or procuring the necessary software for accounting support.

Part IV deals with the practical day-to-day considerations in using AIS to support the needs of management. This section provides an in-depth understanding of the roles of the AIS in supporting management's requirements and objectives at all levels in the organizational hierarchy. The issue of control is emphasized throughout these chapters. Chapter 11 describes control perspectives in an organization and deals with different operating control frameworks. Chapter 12 is devoted internal controls in accounting, to highlighting the Chapter 13 introduces AIS role in management control. Chapter 14 incorporates new materials to the AIS subject areas and provides guidance for future directions. Chapter 15 is devoted to the current issues in AIS.

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Introduction

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A course in accounting information systems deals with the multiple facets of accounting, and integrates organizational aspects relevant to the design, operation, and use of accounting information. Students of accounting learn the technical aspects of the profession from various accounting courses. For example, financial accounting deals with the manipulation of financial transactions that must satisfy relevant accounting principles; cost accounting deals with the process of assigning costs to individual product units, and tax accounting deals with the technicalities of tax computation. The scope of any one of these individual subjects does not include the manipulation of information from an overall systems perspective. A course in accounting information systems is an evolving subject It is not solely a data processing course, nor is it limited to computer-assisted functions. It requires a multidisciplinary perspective on the design, implementation, and use of machine-processed information.

An accounting information system integrates accounting techniques with data processing hardware and software, managerial decision-making processes, and human behavior and motivation Thus the subject matter of the course relies on tools, techniques, and theories from other subjects in a business curriculum. The study of AIS helps students to relate different accounting functions to a common base and to use the knowledge acquired from other subject areas. More specifically, it helps them to:

1. Identify effective ways to report and communicate financial information

2. Identify efficient techniques of data manipulation

3. Satisfy organizational needs and environmental constraints in accounting reporting

4. Understand the distinction between data processing and an accounting information system

5 Relate more effectively to other people, departments, and functions

6. Develop a broader organizational outlook

01 Accounting Information Systems — An Overview

Chapter Outline

Introduction
Objectives of Financial Accounting
Objectives of Managerial Accounting
AIS and MIS
Attributes and Principles of Accounting Information
Users of Accounting Information Systems
The Roles of Accountants in the AIS
Systems Concepts and the AIS
The Computer and Accounting Information in Historical Perspective
Summary
Review Questions, Discussion Questions, and Problems and Cases
Suggested Readings

Introduction

We live in an era of interesting changes and challenges. Information technology is defining our modes of life and ways of thinking. It is opening endless opportunities to expand our intellectual, academic and professional visions. It is no wonder that today we study accounting information systems not only emphasizing the mechanics and functions of accounting but also incorporating the opportunities in innovative applications of IT. AIS have truly become information systems for decision making and control because of increasing applications of information technology.

Accounting is a service function. It provides financial information to people inside and outside the organization. Organizations provide information to people within the organization who need information for management decision making. People external to organization also need accounting information. These information are provided as regulatory requirements like filing to the SEC (US Securities and Exchange commission) or for business decisions relevant to the organization, like external financing for the organization. Users like financial analysts, investors, researchers rely on the publicly available information e. g. , annual reports. A well developed accounting systems meet the needs of all these different kinds of users.

The accounting profession has evolved slowly, over a long period of time. Control and audit-ability have been the hallmarks of this evolution. Automated information systems have burgeoned in modern society at a rate unparalleled by any comparable technological development in history. Rapid change, technological obsolescence, and exponential expansion have been the hallmarks of this revolution. The study of AIS is an exercise in understanding how these two apparently