## Book Review

Accounting Information Systems, Second edition by James A. Hall, South-Western College Publishing, 1998, pp. 797. Reviewed by Thomas G. Amyot, (amyott@rosnet.strose.edu), College of Saint Rose

he conceptual framework of this text-book emphasizes the professional and legal responsibility of accountants, auditors, and management for the design, operation and control of AIS applications - specifically those that deal with financial transactions. The text uses the cycle approach to allow instructors and students to focus on the sources of data, key tasks, accounting records, and internal controls that constitute business cycles of revenues, expenditures, conversion and the general ledger system. Issues relating to manual, automated, and reengineered systems are addressed as the various subsystems in the cycles are presented.

Throughout the text, the emphasis on internal controls is based on the AICPA's Statement on Auditing Standards No. 78. This approach is used to discuss control issues for both manual and computer-based information systems. Both instructors and students can see how the internal controls are considered as the cycles in an AIS are explored. This allows students to see how internal controls can be built into a system and to see the audit implications of the controls that they will address in an auditing course.

Since computer technology exists in varying degrees in almost every business, the text successfully presents information about technology and end user computing in each of the chapters dealing with the cycles. For example, in the chapter on the revenue cycle, the author lays out a description of the forms and the processes used in a manual system, then uses that de-

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scription as a basis for introducing Electronic Data Interchange (EDI) technology, and the considerations that need to be addressed as computers are used in the revenue cycle, especially since many of the manual processes are no longer performed or no longer visible and the traditional audit trail is blurred.

The author has one chapter that deals with Management Reporting Systems, which are considered to be discretionary systems implemented by management at its discretion, based on its needs for information. This chapter explains the differences between information that is required by such authoritative bodies as the AICPA, IRS, and SEC (non-discretionary) that is contained in an organization's AIS and the information used by management to monitor business activities.

Another chapter focuses attention on the data base approach to data management. chapter very clearly contrasts the flat file approach to data management with the data base approach and advocates why the data base approach is the better of the two. The material is similar to that contained in other texts, as the issues discussed include data structures, data base models (hierarchical, network, and relational), data normalization, and control issues. For instructors who are not comfortable dealing with the data normalization topic, most of the detailed material is in an appendix, and could be omitted. This chapter very logically follows through on the data base concepts introduced in the chapter on the conversion cycle which introduces the REA Model. This model is an alternative accounting framework for modeling an organization's critical Resources, Events, and Agents and the relationships among them. Advances in data base technology have made the REA model a practical alternative to the traditional accounting framework.

Material relating to the computerized support systems such as decision support systems, neural networks, and expert systems is all grouped in a single chapter dealing with advanced information systems technologies. These technologies are considered to be alternative technologies that are available for decision support when traditional data processing is insufficient. This chapter is highlighted by a lengthy case that students could use to build an expert system to evaluate a loan granting operation, using a software product called "VP-Expert." Such a hands-on case is an asset to student learning.

As with other texts, this text has three chapters devoted to the Systems Development Life Cycle (SDLC) approach to systems development. Very early in the discussion, the author is very clear as to why accountants should be involved in the process - as users, as members of a development team, and as auditors. This is a great help since accountants can be end users of some accounting applications, but are clearly stakeholders in all AISs that are developed. This theme is reinforced in the material in each of the chapters, so the students who are our future accountants are continually reminded of why they need to be knowledgeable of the SDLC process.

The text concludes with chapters dealing with general and application computer controls and with auditing issues relating to a computerized environment. The text has 17 chapters, which may be more material than can be covered in a 15 week semester. Although no options are offered, it does not seem to be difficult for instructors to be selective in the material they could cover in a normal term.

As a way of summarizing and integrating much of the course material, the text contains five separate cases that are useful for group work. Each case requires students to analyze a current system that has one or more cycles, identify the weaknesses, propose a new system, and design and document the proposed new system. These cases should give students the opportunity to apply the course material to specific cases and to work with other students in a group environment.

Each of the chapters is supported with review questions, discussion questions, multiple-choice questions, and problems. This material should be more than adequate for classroom assignments, homework, or as test material beyond that included in the test bank. The text is supported by a test bank of true/false, multiple-choice, and essay questions, an instructor's manual with teaching notes, learning objectives, a degree of difficulty grid for the essay questions, and transparency masters, and a solutions manual for the questions and problems in the text. Additional resources such as power point slides and internal control cases will be available through the publisher's web site under controlled access.

There are two supplements offered by the publisher that complement the material in the textbook and may be helpful to instructors in making an adoption decision. These are: Integrated Accounting for Accounting Information Systems by Dale Klooster and Warren Allen and Building Accounting Systems Using Access 7.0 and Windows 95 by James T. Perry and Gary P. Schneider. Although I did not review these supplements, material that I have indicates that Integrated Accounting is a Windows-based system that performs tasks relating to sales order processing, cash receipts, billing, accounts payable, cash disbursements, payroll, fixed asset accounting, general ledger processing, and financial reporting. The Access book offers instructors and students the opportunity to use the database program "Access" to learn about database concepts and to build a database accounting system that incorporates the revenue, purchase, payroll, and production cycles.

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