Managing Information Technology

By E. Wainwright Martin, Daniel W. DeHayes, Jeffrey A. Hoffer and William C. Perkins

REVIEWED BY
A. DEBONS

This is a fine-tuned text designed to provide a comprehensive exposition of the role and use of information technology to field applications. It is intended to meet the needs of organizational managers confronted with day-to-day problems in dealing with information systems that are part of their organization. Its purpose is succinctly stated in the preface: "... to prepare advanced management students to be effective explorers of computer/communications technologies now and in the future."

Although there are a plethora of books that could serve as texts for courses in information system analysis and design, few focus on the individual management of such systems once they are on board. The focus of the present text is to enlighten, albeit educate, managers of organizations to the intricacies of information systems. The strategy in achieving this objective is straightforward and lucid. The manager is presented with an exposition of the information environment of the present and what is to be expected. Each of the application areas of information technology is detailed following careful attention to the critical ideas that underlie them. Particularly noteworthy is the careful attention paid to definition of terms without the use of technical jargon that could obfuscate and delay understanding of the basic concepts to which they apply. The critical terms are defined several times throughout the text obviating the reader for searching the meaning of the terms used and defined earlier in the text.

Although at first blush one would entertain the thought that the text is oriented to computer/communication technology, its perspective is system oriented. It interlaces basic concepts that are the province of traditional computer science with concepts that relate to human behavior and management. The chapter that addresses the future of information management is particularly powerful. For example, detailing the responsibilities of the manager within the context of socio-political realities, the kind of technological change that is to be expected, the nature of the work environment, the importance of standards — all these provide the reader and student with a comprehensive outline of the many faceted dimensions of information technology. These go beyond the hardware/software fix that characterize many texts in this field. The book is not intended as a text on information system analysis and design, despite the fact that it provides the basics of these functions credibly.

The text is replete with an abundance of case studies upon which the main ideas are illustrated. The case studies are positioned in the text following each chapter area that is covered. They are relevant, pertinent and timely. They serve to illustrate and emphasize, in ample illustrations from field practice the major tenets of the chapter that precedes them. This practice of including the case studies in the major text is in contrast to providing supplementary text to cover relevant case protocols. This format serves to increase continuity of presentation. Moreover, the cases are pertinent and well illustrated. The graphics are professionally rendered and lucid. The glossary at the end of the book is inclusive and expresses terms and concepts clearly — an important tool for the new student to the field. The index was tested to determine whether important terms and acronyms that were used in the text were also included in the index. For example, terms such as "distributed integration" — a concept not strange in the treatment of information systems but would not ordinarily be found in the index of other texts — were found to be included in the present text. If the book is to be faulted, it would be on its limited scope of the multi-dimensional, componential structure of information systems — a characteristic not uncommon in the general treatment of information systems. For example, there is little or no mention of the importance of the "event" and "event analysis" as the initiating and critical element or stimulus for such systems; the role of acquisition (sensor) subsystem and the importance of communication in its broader context — a context that goes beyond technological transmission and the nature of communication as a human function critical to Information Systems. Yet, it is apparent that the authors have an under-

Journal of Information Technology Management, Volume VI, Number 2, 1992
standing of the role of telecommunications and its importance to the Management of Information Technology. In sum, this text is well suited as a main text for a course in Information System Analysis and Design. It could also serve as a source book complementary to other treatments that are more hardware, software oriented.