Preface

What an exciting time to be alive!!! In August, the anniversary of the introduction of the IBM PC was recounted and, in some places, even celebrated. Who could have predicted the incredible changes that have occurred in our world as a result of the advent of this machine? There are few of us who have not been affected in some way by the proliferation of this and other powerful microcomputing devices. The articles in this issue address some of the ways microcomputers have aided companies in changing the way they conduct their business.

In some organizations, users are not given much input into the development of software systems to be used in their areas. Instead management and information systems personnel participate in the development of the system and then teach the user how to interact with it. The problem with this approach is that, since the users did not participate in the development of the system, they do not perceive the resulting system as belonging to them. In our first article, “Implementing a Markov-based Accounts Receivable DSS: A Prototyping Approach,” Julie E. Kendall and Marc J. Schniederjans discuss the development of a mainframe-based decision support system for accounts receivable. This system was designed to use a markov-based model, a term that had no meaning at all to the users of the system. On the other hand, the users had extensive knowledge and understanding of the company’s customers. To take advantage of this knowledge and to introduce the users to the benefits of this model’s approach to the accounts receivable problem, a microcomputer-based DSS prototype was developed. This permitted them to overcome their distrust of the computer, to make suggestions for improvements in the model and its implementation, and to verify the accuracy of the models’ predictive capabilities prior to its implementation on the mainframe computer.

In today’s rapidly changing computing environment, one of the hottest topics is laptop computers. As the price for powerful machines has dropped, the advances in computer technology have led to the development of laptop and notebook-sized computers which can easily be taken on the road. As a result, many companies are attempting to increase the productivity of their salesforce by buying such computers for salespeople. Sales of these machines are projected to increase 250% from 1988 to 1993. In the article “The Diffusion of Laptop Computers among Industrial Salesforces,” Jane M. Mackay, Susan K. Higgins, Charles W. Lamb, Jr., and William C. Moncrief, III explore the reasons for the current uses of laptop computers by salespeople and examine the validity of the projected sales of such machines in the future. This research includes comparing the proliferation of laptop computers to the diffusion of innovation theories proposed by Everett M. Rogers and F. Floyd Shoemaker. In addition, the authors delineate the characteristics of laptops which may either impede or accelerate their use by other organizations’ salesforces.

As we have mentioned many times in the preface to this journal, microcomputers can be found in virtually every business and discipline. In his article, “Microcomputer-based Decision Support for Facilities Planning and Management,” Mohammed Dadashzadeh develops a design for a decision support system to aid in the facilities planning and management process and then evaluates several existing software packages relative to this design. Whether within a company as a result of corporate downsizing and reorganization or within a commercial office rental company, knowing what space is available, how it can be configured, what each department or client needs, and information about other related issues is essential to effective facilities usage. Dadashzadeh’s model addresses the nine primary responsibilities associated with facilities management by including information in the proposed database about space, organizational activities, and equipment. Existing software to address these needs falls into two categories: (1) highly integrated systems containing both drawing and database systems, and (2) standalone systems for drawing or databases and requiring import/export capabilities to access the other type of data. Dadashzadeh reviews both types of systems and concludes that, although no existing system meets all the requirements of facility managers, an open-ended system is probably the best approach.

As usual, we have included the popular feature sections, including an interview with Tom Kirk, IBM Corporation, in The Expert’s Opinion, a hardware review of facsimile machines, a software review featuring Fullwrite Professional, and a book review on Database Design and Management: An Applied Approach.

As always, please let us hear your comments and suggestions.

Glenn Byerly
Associate Editor