

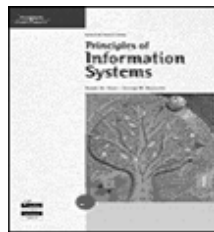
■ PETER T. ITTIG, Feature Editor, College of Management, University of Massachusetts, Boston

THE FOLLOWING GUEST ARTICLE continues a series comparing texts for courses of interest to faculty in DSI. In this article Sathasivam Mathiyalakan compares three texts for an undergraduate introductory course in M.I.S.

## Introduction to Management Information Systems

by Sathasivam Mathiyalakan, University of Massachusetts, Boston

Recently, academics from several U.S. institutions with the support of leading IS and computing bodies such as the Association of Computing Machinery (ACM), Association for Information Systems (AIS), and Association of Information Technology Professionals have proposed a model curriculum and guidelines for IS courses. The scope of the suggested introductory IS course is stated as: "This course provides an introduction to systems and development concepts, information technology, and application software. It explains how information is used in organizations and how IT enables improvement in quality, timeliness, and competitive advantage." This article reviews three texts that are suitable for teaching IS/MIS to lower division undergraduate students (100 level courses) and provide a good fit with the suggested curriculum. The three texts reviewed are *Principles of Information Systems* (6th ed.), by Ralph M. Stair and George W. Reynolds; *Management Information Systems* (3rd ed.), by Effy Oz; and *Introduction to Information Technology* (2nd ed.), by Efraim Turban, R. Kelly Rainer, and Richard E. Potter.



**Principles of Information Systems (6th ed.)**  
by Ralph M. Stair and George W. Reynolds

Thomson/Course Technology  
2003, 692 pages  
[www.course.com/](http://www.course.com/)

The Stair & Reynolds text is organized as five parts and 14 chapters, with coverage as follows: An Overview, Information Technology Concepts, Business Information Systems, Systems Development, and Information Systems in Business & Society. The authors provide several tools to assist students. All chapters begin with a vignette that shows the application of IT within a business setting. At the end of each chapter, the following materials are provided to promote student learning: key principles, self-assessment test, key terms, review questions, discussion questions, problem-solving exercises, team activities, Web exercises, and cases. At the student online companion site there are PowerPoint slides, cases, hands-on activities, on-line tests, and the glossary. The instructor-support material include the following: manual with solutions, test bank, PowerPoint slides, figures, cases, support for distance learning, database normalization supplement, and a video package.

THE STAIR AND REYNOLDS TEXTBOOK IS IN ITS SIXTH EDITION. It has a business/managerial orientation and thus it is a useful text for most business schools. The changes made to the 6th edition of the text include new cases, new vignettes, end of chapter material, international flavor, and self assessment tests. A shorter text entitled *Fundamentals of Information Systems* is also available for a course if the instructor wishes to devote significant time for hands-on exercise in popular software packages such as Microsoft Office.



**Sathasivam Mathiyalakan**

is an assistant professor of MIS at the University of Massachusetts, Boston. His research interests are in the areas of E-Business and Supply Chain Management, Small

Business Internet Commerce, and Group and Individual Decision Making Using Decision Support Technologies. His research has appeared in several journals including IEEE Transactions on Systems, Man, and Cybernetics; Decision Support Systems; European Journal of Operations Research; Journal of Organizational Computing and Electronic Commerce; and others.

[satha.mathiyalakan@umb.edu](mailto:satha.mathiyalakan@umb.edu)

The book is up to date and does cover most of the material required for an undergraduate introductory IS course. However, this edition of the text is not radically different from the fifth edition. The reviewer would prefer a greater discussion on Digital Supply Chain Management. The final chapter is devoted to issues related to security, privacy, and ethics. In the post-Enron environment, the reviewer would prefer a discussion on this topic within each chapter. The test bank is easy to use and easily integrates with another test bank from Course technology. This feature makes it a valuable tool for those instructors who teach both concepts and software packages within the same course.



**Management Information Systems (3rd ed.)**  
by Effy Oz

Thomson/Course Technology  
2002, 751 pages  
[www.course.com/](http://www.course.com/)

THE OZ TEXT IS IN ITS THIRD EDITION. In addition to having a business/managerial focus for each chapter, it examines the impact of technology, practice, and processes. The changes made to the 3rd edition of the text include an up-to-date coverage of e-commerce, discussion of global information systems and challenges, greater emphasis on ethical and social issues, additional hands-on reinforcement material, cases reflecting a variety of businesses, and emphasis on IS Technologies and Supply Chain Management Systems. Each chapter has a section called "Why You Should..." and "Ethical and Societal Issues." These two features distinguish this text from others in the market place.

The text is organized in five parts and 17 chapters with coverage as follows: The Information Age, Information Technology, Information Technology in Management, Information Systems in Decision Making, and Planning, Acquisition, and Controls. To enhance student learning, the authors provide several supporting features. Each section begins with a case that is examined throughout the chapters within that sec-

tion. At the end of each chapter, the following materials are provided to promote student learning: cases, review questions, discussion questions, applying concepts, hands-on activities, and team activities. There is no student online companion at present. The instructor support material includes the following: manual with solutions, test bank, PowerPoint slides, case videos, and support for distance learning.

Each chapter incorporates ethical and societal issues. This makes it easy for the instructor to integrate ethical issues throughout the curriculum and not treat ethical issues as a separate area. It is expected that this text's test bank can be easily incorporated with other test banks from Course Technology thereby making it easier to teach a course that covers both concepts and software packages. However, more visual effects would improve the text's readability.



**Introduction to Information Technology (2nd ed.)**

by Efraim Turban,  
R. Kelly Rainer Jr.,  
and Richard E. Potter

Wiley Publishing  
2002, 592 pages  
[www.wiley.com/college/turban](http://www.wiley.com/college/turban)

THIS TEXT IS IN ITS SECOND EDITION. It is targeted for use within business schools. The changes made to the 2nd edition of the text include: a new chapter on Supply Chain Management and IT's role in integration and coordination up and down the supply chain, coverage of interorganizational IT and global IT, interactive learning sessions at the end of each chapter, a recurring virtual company case, and weekly updates at the course Website. The text is suitable for one semester coverage. Two additional texts that may also be of interest to instructors are *Information Technology for Management: Transforming Organizations in the Digital Economy*, 4th Edition, Efraim Turban, Efraim McLean, and James Wetherbe; and *Information Technology for Management: Transforming Business in the Digital Economy*,

3rd Edition, Efraim Turban, Efraim McLean, and James Wetherbe.

The text is organized as four parts and 15 chapters with coverage as follows: IT in the Environment, IT Infrastructure, Applying IT for Competitive Advantage, and Achieving Informational and Organizational Goals. The authors provide several tools to assist students. All chapters begin with a business problem and how IT was used to solve that problem. At the end of each chapter, the following materials are provided to promote student learning: chapter summary, discussion questions, problem solving activities, Internet activities, an interactive learning session, team activities and role playing, a case, and a virtual company assignment. The text has a CD-ROM with video clips, cases, and exercises. The instructor support material include the following: manual with solutions, test bank, PowerPoint slides, *Wall Street Journal* articles, Web quizzes, NPR videos, and support for distance learning.

The Real World case at the end of chapter presents a business problem, the IT solution, and the results. This format is suitable for a lower division course where the intent is to demonstrate IT usage but not for an upper division/graduate course where the students have to identify the set of technologies to use to maximize organizational effectiveness and efficiency. When compared to the other two texts reviewed in this article, this text has better visual effects resulting in improved readability.

## Summary

This article reviewed three texts that are suitable for teaching IS/MIS at the undergraduate level. All three provide a suitable fit with the model curricula. An instructor should be able to cover a text within a semester for a course without a hands-on component. All three texts are suitable for students who are taking a lower division introductory course in IS. A weakness of these texts is that they may not be suitable for those readers who wish to gain some knowledge on this topic as many chapters are presented in a "dry" manner. Distinguishing features of each text are as follows:

- *Stair and Reynolds*: Support for student learning (end of chapter questions, questions on the Web etc.) and cases.
- *Oz*: Coverage of ethical and societal issues in each chapter and the use of the same case at the start and end of chapter to promote greater learning.
- *Turban, Rainer, & Potter*: Coverage of Supply Chain Management and IT Integration, the CD-ROM, and end-of-chapter study aids such as "What's in IT for me" and the Virtual Company Assignment.

As a disclosure, the author uses *Stair and Reynolds* due to the richness of its instructor support materials and the student aids.

## References

Gorgone, J. T., Davis, G. B., Valacich, J. S., Topi, H., Feinstein, D.L., & Longenecker, H. E. (2002). IS 2002: Model curriculum and guidelines for undergraduate degree programs in information systems. *Communications of the Association for Information Systems*. ■

Peter T. Ittig  
 College of Management  
 University of Massachusetts  
 Boston, MA 02125-3393  
[http://www.faculty.umb.edu/peter\\_ittig/](http://www.faculty.umb.edu/peter_ittig/)

## DSI Online Membership Directory Is Available to All Institute Members

To access the DSI online membership directory, point your browser to:

<http://decisionsciences.org/directory/auth.asp>

Log in using your email address and membership number as password. If you do not remember your membership number, you can have the system send your password to you from the authentication page. If you have not registered an email address, contact us at [dsi@gsu.edu](mailto:dsi@gsu.edu) with your membership number and email address, and we will update your profile for you. Once you are logged in, you can also update your own profile. ■

## Information Technology, from page 16

homeland security scenarios handle what can be overwhelming amounts of information. The intelligent agents will anticipate the information needs of decision makers based on a mental model they share with the team and proactively assist the team by providing information related to those needs.

As the faculty teams engage in these interdisciplinary projects, increasingly cross-functional, integrative solutions that can impact all areas of business and community are being developed that draw on all three areas—people, technology, and information.

David Hall, associate dean for research, sums up the school's strategy this way. "We used to believe that the so-called 'hard sciences' were those such as physics, chemistry, and mathematics because they addressed problems related to the structure of matter, the origin of the universe, and general relativity. Now we're becoming aware that the really hard sciences are those such as IST that tackle problems involving technology and its interaction with the most complicated entities in the universe—namely, human beings."

The problem-based focus, which requires an interdisciplinary perspective, also

permeates the teaching undertaken at the school. All courses at doctoral, masters, and undergraduate levels are taught with a problem-oriented focus, where teams of students engage with complex problems to design enterprising solutions in unique contexts that they explore in depth. Examples of this include the design of interfaces in vehicles, teams of coordinating agents on a battlefield, and workflows in pharmaceutical companies for participating in drug approval processes. The examples motivate the students to learn the techniques from different disciplines necessary to devise and deploy the solutions. Through this quest they develop a strong interdisciplinary understanding and the requisite leadership to develop the new frontier of the information age.

## Engaging the Inevitable . . .

"Lock on to the center of the creature. Lay a course bearing straight into the belly of the creature. We will have to do this at warp speed."

James Tirk realized that the only way to escape the clutches of the solar system was to navigate directly through the core of this creature. It was clearly an obstacle to the path Enterprise had laid out.

His advisors agreed. "We can sense how the creature reacts and compensate," said Mickey Mesner.

"Agreed," replied Sammy Pilot. "If it is a collective, it will certainly have the ability to sense and respond by adjusting its internal workings, reorganizing."

"If each of the agents it is made up of is endowed with intelligence, it should rearrange itself," Jimmy Young whispered.

James Tirk issued the order. "Engage!" ■

**Acknowledgement:** *Information about the ongoing research projects and funding accomplishments was provided by Margaret Hopkins, coordinator for public information.*

## Subhashish (Sub) Samaddar

Department of Management  
 J. Mack Robinson College of Business  
 Georgia State University  
 P.O. Box 4014  
 Atlanta, GA 30302-4014  
 Voice: 404-651-4063/Fax: 404-651-3498  
[s-samaddar@gsu.edu](mailto:s-samaddar@gsu.edu)  
<http://www.gsu.edu/~dscscs>