Preface

Organizations of all types are finding it essential to effectively manage their information resources. From implementing new knowledge management strategies to maximizing the human aspects of effective information management, new technologies and strategies are being constantly developed to improve information management. These technologies and the personnel necessary to manage and implement them often demand a considerable financial investment. These measures can be very costly since assuring the highest efficiency and effectiveness possible is paramount. Access to scholarly and practical research can provide an invaluable tool to help businesses and researchers alike understand ensure success in the IT endeavors. *Advanced Topics in Information Resources Management, Volume III,* offers a broad spectrum of the most current research into effectively managing the technological, human and organizational demands of information use and management. Contents of this volume will assist researchers, scholars, teachers and professionals interested in understanding "the big picture" and the small details essential to successfully managing emerging technologies.

Chapter I, "An Empirical Examination of the Impact Organizational Culture Has on Employees' Computer Self-Efficacy," by Yihua (Philip) Sheng and J. Michael Pearson, Southern Illinois University (USA), and Leon Crosby, Grand Valley State University (USA), examines the role of IT utilization in the workplace and discusses the influence of organizational culture on employees' computer self-efficacy. Specifically, this chapter examines how the specific aspects of organizational culture affect employee's self efficacy. The results of this extensive study indicate that effective teamwork and information flow encourage the highest levels of computer-self efficacy.

Chapter II, "Information Systems Expenditures and Firm Value: Further Evidence from Financial Services Industry," by Ram S. Sriram, Georgia State University (USA), and Gopal V. Krishnan and Kam Wah Lai, City University of Hong Kong, offers an overview of assessing the payoff from investments in IT as an

exercise for managers. This chapter examines the *A number,* the elusive notion of firm-level information system effectiveness and specifically looking at the association between market value of equity and IT-related investments for a sample of firms in the financial services sector. The authors note a positive association between investments in IT and market value. Overall, their findings support the notion that investors perceive investments in IT as value-relevant.

Chapter III, "Electronic Supply Chain Partnerships: Reconsidering Relationship Attributes in Customer-Supplier Dyads," by Rebecca Angeles, University of Nevada at Reno (USA), and Ravinder Nath, Creighton University (USA), focuses on the development of trade relationships in using electronic data interchange (EDI). This chapter reports on six trading partner selection factors which both customer and supplier firms thought were critical in selecting partners: strategic commitment of top management; readiness for high-level EDI; joint partnering; trading partner flexibility; communications; and EDI infrastructure. This chapter is of particular importance to managers of organizations who want to improve their strategic posture in developing electronic relationships.

Chapter IV, "Perceptions, User Satisfaction and Success: Testing the DeLone and McLean Model in the User Developed Application Domain," by Tanya J. McGill and Valerie Hobbs, Murdoch University (Australia), and Jane E. Klobas, Bocconi University (Italy) and the University of Western Australia, presents and empirical test of DeLone and McLean's (1992) model of information systems success in the user-developed application domain. The model presented provided strong support for the relationships between perceived system quality and user satisfaction, perceived information quality and user satisfaction, user satisfaction and intended use, and user satisfaction and perceived individual impact. This chapter is an excellent step toward understanding the relationship between user perceptions of IS success and objective measures of success, and provides a model of IS success appropriate to end user development.

Chapter V, "A Qualitative Study of Small Business Internet Commerce: Critical Success Factors and Challenges" by Lei-da Chen, Steve Haney, Alex Pandzik, Creighton University (USA), John Spigarelli, Getzs Incorporated, and Chris Jesseman, SEEIT Company, presents a qualitative approach to study the case of a small traditional retailer, Getzs Incorporated, transforming itself to enter into Internet commerce. The study examines the company's e-commerce strategies, experiences, and transformation from a 100-year-old traditional retailer to a successful brick-and-click store and provides important insights to the under reported area of small business Internet commerce.

Chapter VI, "Business Process Re-Engineering, IT-Labor Intensities and Firm-Level Productivity" by Stephan Kudyba, New Jersey Institute of Technology (USA), presents an empirical of the profitability function of IT investments over a period of time. The results indicate that IT can enhance firm level profitability. This chapter examines the factors such as advanced computer processing, the proliferation of PCs to the consumer and business environment, the development of the Internet,

and advanced software applications that have significantly augmented previously existing information technology. This new IT has provided infrastructure for advanced information networks which facilitate the flow of value added information to decision makers and enable corporate enterprises to more easily operate in the new global economy.

Chapter VII, "Collaborative Decision Making in Web-based GIS" by Iftikhar U. Sikder and Aryya Gangopadhyay, University of Maryland Baltimore County (USA), describes the development of collaborative spatial decision support systems and presents the challenges, ranging from technical to societal and institutional, this new system presents. This chapter demonstrates a Web-based Spatial Decision Support System GEO-ELCA (Exploratory Land Use Change Assessment) for typical decision-making tasks by urban or municipal planning agencies where resource managers or stakeholders of different interest groups can express their options for future land use changes and assess the resulting hydrological impacts in a collaborative environment.

Chapter VIII, "Novice's Performance and Satisfaction Improvement Through Expert Decision Support Usage," by Michel Plaisent and Lassana Maguiraga, University of Quebec in Montreal (Canada), Lucila Pérez, CIDGET (Canada), and Prosper Bernard, University Consortium of the Americas, reports the conclusions of a study conducted to verify the impact of the use of the EDSS technology (expert decision support systems) on the performance and satisfaction of new employees in the business world. The authors describe a laboratory experiment using to test their research model. The results indicate that EDSS technologies do have a positive impact on the performance of the users.

Chapter IX, "A Knowledge Base for Information Systems Success Research" by Mark I. Hwang, Central Michigan University (USA), investigates the creation of a knowledge base for MIS research. The author's model was tested using data from 82 empirical studies in a meta-analysis. Results showed that all but one independent variable, external environment, had a significant relationship with success variables. In addition, each independent variable had varying strengths of relationships with different success variables. This chapter is especially important as the findings yield important guidelines for the selection of variables in future research and the systems success model is general and theory based and will prove useful in providing directions for future research.

Chapter X, "A Comparison of the Perceived Importance of Information Systems Development Strategies by Developers from the United States and Korea" by Chung S. Kim and Dane K. Peterson, Southwest Missouri State University (USA), examines the perceptions of Information Systems (IS) developers from the US and Korea regarding the strategies that they consider crucial for IS success. The chapter presents an analysis that reveals that the IS development strategies can classify into four categories: (1) organizational integration, (2) team member characteristics, (3) project leader traits and (4) project development management. The chapter then provides an overview of the similarities and differences between IS developers from the two countries.

Chapter XI, "Virtual Team Trust: Instrument Development and Validation in an IS Educational Environment," by Saonee Sarker, Joseph S. Valacich and Suprateek Sarker, Washington State University (USA), contains reports on the development of an instrument to capture three bases of trust in virtual teams: personality-based, institutional-based, and cognitive trust. Cognitive trust is further subdivided into three dimensions: stereotyping, unit grouping and reputation categorization. The authors verify the psychometric properties of the construct(s) in the context of US-Canadian student virtual teams engaged in systems development projects and describe their findings that stereotyping in virtual teams can be of three distinct types: message-based, physical appearance/behavior-based, and technology-based.

Chapter XII, "Matching Facilitator Style and Agenda Structure in Group Support Systems: Effects on Participant Satisfaction and Group Output Quality," by Todd J. Hostager, Scott W. Lester, Kathryn J. Ready and Marilyn Bergmann, University of Wisconsin-Eau Claire (USA), describes a 2x2 factorial controlled experiment that examined effects of agenda structure and facilitator style on participant satisfaction and output quality in meetings employing group support systems (GSS.) Participants were assigned to one of four conditions: (1) relationship style/relationship agenda, (2) task style/task agenda, (3) task style/relationship agenda, and (4) relationship style/task agenda. The chapter concludes that groups in the matched conditions produced higher quality outputs than groups in the mismatched conditions.

Chapter XIII, "Information Technology Support for Interorganizational Knowledge Transfer: An Empirical Study of Law Firms in Norway and Australia" by Vijay K. Khandelwal, University of Western Sydney (Australia), and Peter Gottschalk, Norwegian School of Management (Norway), explores the knowledge-based view of a law firm. Because of their knowledge-intensity and their use of advanced technologies, law firms represent an industry that seems very well-suited to knowledge management investigation. This chapter reports empirical results from Norwegian and Australian law firms on their use of IT to support their knowledge management practice.

Chapter XIV, "Demonstrating Value-Added Utilization of Existing Databases for Organizational Decision-Support" by Nurit L. Friedman, Maccabi Health Services (Israel), and Nava Pliskin, Ben-Gurion University of the Negev (Israel), presents a case study of Maccabi Health Services, the second-largest health maintenance organization in Israel and the first to computerize clinical records of routine transactions in doctors' offices, laboratories and pharmacies. This case study presents suggestions for DSS support practices and recycling the content of existing databases made in order to make it possible to discover patterns of sub-optimal treatment without having to invest time and money in additional data-collection procedures. The chapter describes the benefits from the organization's decision-support practices include implications for such initiatives as data warehousing, data mining, and online analytical processing.

Chapter XV, "Understanding Decision-Making in Data Warehousing and Related Decision Support Systems: An Explanatory Study of Customer Relationship Management Application" by John D. Wells and Traci J. Hess, Washington State University (USA), provides an explanatory case study, undertaken at a financial services organization that implemented a Customer Relationship Management (CRM) system, a unique kind of a data warehouse decision support system (DSS). The results of this case study indicate that the decision-making support provided by these systems is limited and an extended version of the DSS-decision performance model may better describe the factors that influence individual decision-making performance.

Chapter XVI, "A Comparison of Implementation Resistance Factors for DMSS Versus Other Information Systems," by Kristina Setzekorn and Vijay Sugumaran, Oakland University (USA), and Naina Patnayakuni, Southern Illinois University (USA), explores the reasons that decision support systems (DSS), executive information systems (EIS), and knowledge-based systems (KBS) are still not widely accepted by organizations, although they have been independently used to support problem solving and decision making activities.. The chapter indicates the reasons for the lack of widespread use and speculates that integration of these technologies would enable organizations to better design and implement these support systems.

Chapter XVII, "The Effects of Synchronous Collaborative Technologies on Decision Making: A Study of Virtual Teams" by Gary Barker, University of Northern Iowa (USA), compares the performance of 64 virtual teams using four collaborative technologies: text-only, audio-only, text-video and audio-video. While the results of the study found no significant difference in the quality of the decisions for teams using text-only versus audio-only communication, the addition of video to audio-only communication resulted in a significant improvement in the quality of teams' strategic decisions.

Chapter XVIII, "The Effect of Task and Tool Experience on Maintenance CASE Tool Usage" by Mark T. Dishaw, University of Wisconsin (USA), and Diane M. Strong, Worcester Polytechnic University (USA), examines the importance of experience using software maintenance tools. The authors indicate that experience is an important factor because managers can provide training to increase experiences and ensure that project teams have some members experienced with the tools or tasks at hand. The results support the importance and value of improved CASE Tool training programs.

Technology benefits organizations in a myriad of ways. It facilitates and improves communication within and outside of the organization; it streamlines business processes and aids in decision-making. In our wired world, it is essential that organizations of all types and sizes in all industries effectively manage their information resources. Having access to the most current research and practice in effective technology management is one of the key steps to such succeeding in these endeavors. *Advanced Topics of Information Resources Management, Volume III* provides a collection of the latest research related to effective utilization and

management of information technology to coordinate and use information resources. The broad spectrum of topics provides an excellent tool in the hands of practitioners, teachers and students involved in the information resources management discipline.

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Editor
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