Preface

Electronic commerce has seen extraordinary growth in the past decade, as businesses, educators, and practitioners have begun to buy, sell, and trade on the Internet. In order to provide a comprehensive and current assessment of the latest developments in the e-commerce revolution, a source containing the latest research on the innumerable discoveries, advancements, and implementations of e-commerce has emerged. *Consumer Behavior, Organizational Development, and Electronic Commerce: Emerging Issues for Advancing Modern Socioeconomies*, part of the *Advances in Electronic Commerce Book Series*, uncovers the rewarding prospects associated with the adaptation of e-commerce for business, academic, and global organizations, while identifying the most effective strategies for employing them worldwide. This book includes many valuable contributions from researchers discussing important social, managerial and organizational issues of e-commerce applications and management in society.

Chapter I, *Consumer-to-Consumer Electronic Commerce: An Emerging Stream of Research* by Kiku Jones and Lori N. K. Leonard, University of Tulsa (USA), presents a study which adapts constructs from a B2C e-commerce study of satisfaction to determine what, if any, the differences are in the C2C e-commerce arena. The constructs include elements of the technology acceptance model (TAM). Participants in the study answered questions regarding these constructs in relation to their experiences with C2C e-commerce. The findings indicate that TAM, TCA, and SERVQUAL all impact satisfaction in C2C e-commerce. Reliability and responsiveness (areas of service quality) were found to influence C2C e-commerce satisfaction, though they were not found to be an influence in the B2C study. These findings warrant further research in the C2C e-commerce arena.

Chapter II, *Online Consumers' Switching Behavior: A Buyer-Seller Relationship Perspective* by Dahui Li, University of Minnesota Duluth (USA), Glenn J. Browne, Texas Tech University (USA), and James C. Wetherbe, Texas Tech University (USA) investigates online consumer loyalty and retention from a relationship orientation, seeking to understand the differences in relationship orientations between people who have the propensity to stick to particular web sites ("stayers") and people who have the propensity to switch to alternative web sites ("switchers"). This study proposes a relationship-based classification schema consisting of five dimensions, i.e., commitment, trust, satisfaction, comparison level of the alternatives, and non-retrievable investment. Using discriminant analysis, the authors found that stayers and switchers were significantly different along the five research dimensions. Satisfaction with the current website was the most important discriminant factor, followed by trust, commitment, comparison level of alternative websites, and non-retrievable investment in the current website. Implications of the findings for researchers and practitioners are discussed.

Chapter III, *From High Tech to High Touch: The Effects of Perceived Touch on Online Customers' Intention to Return* by Hong-Mei Chen, Qimei Chen, and Rick Kazman, University of Hawaii (USA) defines a new construct, Perceived Touch, and provides theoretical underpinnings for the "high touch" assumption of eCRM systems. An empirical study was conducted to examine both the cognitive and affective effects of Perceived Touch on online customers' intention to return after their initial visit in the eCRM context. While past studies of traditional information systems paid more attention to cognition

than affect, the affective effect is critical to examine, so that eCRM strategy and system design can be better informed. The current research results validate the antecedent role of Perceived Touch to Perceived Ease of Use (of the Technology Acceptance Model—TAM) and further argue for the renewed importance of Attitude for user acceptance in the eCRM context. This study illuminates the significance of the affective impact of Perceived Touch on online customers' Behavioral Intention to Return through both the Affective Route and the Alternative Cognitive Route where affective effect precedes cognitive effect.

Chapter IV, *A Movie E-Shop Recommendation Model Based on Web Usage and Ontological Data* by Andreas Aresti, University of Patras (Greece), Penelope Markellou, University of Patras (Greece), Ioanna Mousourouli, University of Patras (Greece), Spiros Sirmakessis, Technological Education Institute of Messolonghi (Greece), Athanasios Tsakalidis, University of Patras (Greece) offers a perspective on recommendation systems—special personalization tools that help users to find interesting information and services in complex online shops. The authors contend that by monitoring, analyzing and understanding the behavior of customers, their demographics, opinions, preferences and history, as well as taking into consideration the specific e-shop ontology and by applying web mining techniques, the effectiveness of produced recommendations can be significantly improved. In this way, the e-shop may upgrade users' interaction, increase its usability, convert users to buyers, retain current customers, and establish long-term and loyal one-to-one relationships.

Chapter V, *Search Engine Optimization of an Action Research Project: Initial Results and Two Year Follow-Up,* by Ross A. Malaga, Montclair State University (USA) discusses the results of a search engine optimization (SEO) project that was undertaken at a new e-commerce site. The site's search engine rankings and traffic were measured after each phase in the project. The results indicate that SEO is an effective method for improving search engine rankings and site traffic. In addition, the costs and benefits of the SEO project are compared with a pay-per-click (PPC) search marketing campaign. The SEO project proved more cost effective than the PPC campaign.

Chapter VI, *A Flow Theory-Driven Integrated Model of Web IS Success* by Edward J. Garrity, Canisius College (USA), Yong Jin Kim, Sogang University (Korea), Joseph B. O'Donnell, Canisius College (USA), and Cheul Rhee, State University of New York at Buffalo, (USA) offers a theoretical analysis of evolutionary processes in Web-based shopping systems (WBSS) strategies. For that purpose, the authors propose a classification model of WBSS. Based upon the model, WBSS are classified into four types: (1) general-direct-sales (GDS); (2) general-intermediary-sales (GIS); (3) specialized-direct-sales (SDS); and (4) specialized-intermediary-sales (SIS). On the basis of these four categories of WBSS, the characteristics of WBSS are analyzed and five evolution strategies for WBSS are suggested, which have implications for both theory and practice.

Chapter VII, *Evolving a Strategy for Web-Based Shopping Systems* by Changsu Kim, Yeungnam University (Korea), Robert D. Galliers, Bentley College (USA), Kyung Hoon Yang, University of Wisconsin-La Crosse (USA), and Jaekyung Kim, University of Nebraska-Lincoln (USA) develops a new model of web IS success that takes into account both intrinsic and extrinsic motivating factors. The proposed model begins with the Garrity and Sanders model of technologic acceptance and develops an extended nomological network of success factors that draws on motivation and flow theory.

Chapter VIII, *A Review of Single-Item Internet Auction Literature and a Model for Future Research* by Jeff Baker and Jaeki Song, Texas Tech University (USA) reviews recent empirical literature pertaining to single-item Internet auctions and observes that existing work has examined the roles of the auctioneer, bidder, and seller in Internet auctions. As this stream of research matures, research will necessarily move from concept discovery and process explanation to theory deepening. As a first step towards synthesis of findings in Internet auctions, the authors compile a comprehensive list of the various factors that have been examined in empirical studies and note their general impact upon auction outcome. Based upon

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this extant research, a conceptual model of Internet auctions as a framework for structuring future work into Internet auctions is proposed. The existing economic, psychological, sociological, and cognitive theoretical bases for work on Internet auctions are noted.

Chapter IX, *Changing IT Skills: The Impact of Sourcing Strategies on In-House Capability Requirements* by Christine V. Bullen, Stevens Institute of Technology (USA), Thomas Abraham, Kean University (USA),Kevin Gallagher, Northern Kentucky University (USA), Kate M. Kaiser, Marquette University (USA), and Judith C. Simon, University of Memphis (USA) analyzes the results of a survey conducted in 2005, in which IT executives were asked to describe the skills they felt were critical to keep in-house now and in 2008. The top ten current skills included three in project management, five in business domain and three in technical. In 2008, the top five emerging skills are almost all business domain, while the top five exiting skills are all technical. Findings indicate that the critical skills to keep in-house are primarily client-facing skills, even when they are technical. Respondents are moving away from traditional IT skills except when their business model continues to value them. However, traditional technical skills are still important for all new hires while project management skills are the most often cited for mid level hires. The projected number of full time employees is expected to remain approximately the same by 2008 but there will be an increase in sourcing to third party providers (3PP) and a shift from domestic to offshore 3PP staff. The patterns in the data indicate that technical skills that are not client facing and can be done anywhere are the most likely to be sourced. Findings indicate that IT professionals need to have a balance that demonstrates a foundation in the traditional "hard skills" and experience with "softer" business-oriented skills.

Chapter X, *Understanding Outsourcing of Web-Based Applications in Organizations: The Case of e-Insurance* by Teuta Cata, Northern Kentucky University (USA) investigates the insurance industry and provides insights into the relationships of organizational size and age with outsourcing and organizational structure. Also, this study contained within this chapter investigates the relationship between web site age, outsourcing, and organizational structure. The main findings are that firm size and maturity are related to the decision of Web-based development approach and the best organizational structure to support online activity. The insights obtained by a new variable—Web site Age—suggests that insurance companies are trying to develop their Web-based activities within their existing organizational structures, rather than creating new e-commerce divisions.

Chapter XI, *Business Process Outsourcing Modeling* by Lai Xu and Paul de Vrieze, SAP Research, (Switzerland) demonstrates an in-house business process that has been gradually outsourced to third-parties and analyzes how task delegations cause commitments between multiple business parties. Since organizations in the new millennium face relentless pressure to perform better, faster and cheaper, while maintaining a high level of guaranteed results, enterprises have to integrate their business processes with those of their customers, suppliers and business partners. While standards and technologies make it possible for business partners to exchange information, collaborate and carry out business transaction in a pervasive Web environment, there is very limited research activity on modeling business process outsourcing underlying semantics.

Chapter XII, *Innovative Technological Paradigms for Corporate Offshoring* by Tapasya Patki, GG-SIP University (New Delhi) and A. B. Patki, Government of India, (New Delhi) presents a discussion of hardware and software requirements for efficient offshoring. The aim is to achieve higher precision, protection and throughput by applying core-computing techniques to the existing practices of outsourcing. Internet technology has impelled us to develop faith in the modern practices of business, commerce, and trade. Offshoring has been viewed as a global phenomenon on the economic frontier. While new technologies need to be framed, stopgap arrangements in the form of transient solutions to upgrade the current systems are also desired. Newer regulations and multi-jurisdictional compliance have profound

impact on the growth of outsourcing projects. The development of new technological solutions must challenge the myth that legislation and statutory practices are the only possible mechanisms to counter the unscrupulous activities in the context of outsourcing.

Chapter XIII, *Factors Influencing the Extent of Deployment of Electronic Commerce for Small- and Medium-sized Enterprises* by Sandy Chong and Graham Pervan, Curtin University of Technology (Australia) surveys the perceptions and experiences of Australian small- and medium-sized enterprises (SMEs) in the implementation of Internet-based electronic commerce (EC) as seen from the perspective of the extent of deployment. With a sample of 115 small businesses in Australia, this chapter uses regression modelling to explore and establish the factors that are related to the extent of deployment in EC. A multiple regression analysis shows that seven factors: perceived relative advantage, trialability, observability, variety of information sources, communication amount, competitive pressure, and non-trading institutional influences, significantly influence the extent of EC deployment by SMEs in Australia. The managerial implications are discussed.

Chapter XIV, *Barriers to E-Commerce Adoption in SMEs: A Comparison of the Perception of Barriers in a Developed and a Developing Country* by Robert C. MacGregor and Mira Kartiwi, University of Wollongong (Australia) examines the various adoption barriers that are faced by small business owners/managers. These barriers have been well documented in numerous research studies. However, the relationship between these barriers has not been fully examined, particularly in developing countries. Of particular concern is the fact that the conclusions concerning the nature and role of barriers to e-commerce adoption have simply been transferred from studies in developed economies to those in developing ones. In this chapter, 96 non-adopting SMEs in Indonesia are compared to 129 in Sweden to determine whether the perception of importance of barriers differs between the two locations. The data is also analysed to determine whether the underlying factors of these barriers differs across the two locations.

Chapter XV, *A Parallel Methodology for Reduction of Coupling in Distributed Business-to-Business E-Commerce Transactions* by Anthony Mark Orme, Athens State University (USA) and Letha H. Etzkorn, University of Alabama (USA) reflects upon the recent, new standards for Business-to-Business (B2B) e-commerce transactions intended to reduce extended record locking that have relaxed standard database transaction properties. This chapter provides a parallel methodology employing a mobile/intelligent agent framework to alleviate extended record locking, while adhering to standard database transaction properties. The authors' methodology provides a minimum thirty percent reduction of record locking compared to new B2B standards.

Chapter XVI, *E-Business Triggers: Further Insights into Barriers and Facilitators Amongst Ghanaian Non-traditional Exporters (NTEs)* by Olav Sorensen and Robert Hinson, Aalborg University (Denmark) assesses the main barriers and facilitators of e-business adoption by Ghanaian export firms. The authors adopt a quantitative approach to this study and draw their study sample from a directory of active non-traditional exporters (NTEs) in Ghana. They find that an export firm's international orientation, owner/management idiosyncrasies, e-sophistication of partners, export firm's characteristics (age, number of employees and location) and weak government regulation have no significant influence on e-business adoption by Ghanaian NTE firms. On the other hand, competitive pressure significantly facilitates e-business adoption. Internal resource constraints and environmental bottlenecks also reduce the likelihood of e-business adoption by Ghanaian NTE firms. Interestingly, the authors find that Export facilitation and digitalization, perceived to facilitate e-business adoption, instead exhibit significant negative relationships with adoption. Explanations for this unusual finding are offered and general management implications for improving e-business practices amongst the various players in Ghana's non-traditional export sector are provided.

Chapter XVII, *Organizational Motivation and Inter-Organizational Systems Adoption Process: Empirical Evaluation in the Australian Automotive Industry* by Md. Mahbubur Rahim, Monash University (Australia), Graeme Shanks, Monash University (Australia), Robert Johnston, The University of Melbourne (Australia) and Pradip Sarker, RMIT University (Australia) reflects on the critical role that interorganizational systems (IOS) play in today's e-commerce environment and develops a theory of IOS adoption known as IOS Motivation Model (IMM) that explains the differences in IOS adoption processes in terms of differences in organizations' adoption motivations for any given IOS project. This chapter reports an application of the model in the Australian automotive industry. The findings provide support for the model and are useful for IT managers.

Chapter XVIII, *Inter-Organizational E-Commerce in Healthcare Services: The Case of Global Teleradiology* by Arjun Kalyanpur, Teleradiology Solutions (India), Firoz Latif, Teleradiology Solutions (India), Sanjay Saini, Harvard Medical School (USA), and Surendra Sarnikar, University of Arizona (USA) presents the case of electronic delivery of radiological services and describes the market-based and technological factors that have led to the development of internet-based service models for flexible delivery of radiological services. Specifically, the authors describe the technical, regulatory and security issues that affect teleradiology, and propose a service delivery model for providing cost-effective and flexible radiological services.

As e-commerce continues to be an expanding force in modern-day society, its importance in the information age intensifies. The adoption and implementation of e-technologies have become essential to the face of modern business and all competitive modern organizations, researchers, and educators are learning and sharing best practices for their effective utilization. Researchers and practitioners in information technology will find that the *Advances in Electronic Commerce Book Series* provides not only an overview of how far the field has come, but also an insight into the latest developments and technologies that will soon be implemented in society. As a comprehensive compilation of the latest research, most current technologies, and forthcoming tools associated within the latest developments in electronic commerce, *Consumer Behavior, Organizational Development, and Electronic Commerce: Emerging Issues for Advancing Modern Socioeconomies* serves as a pertinent resource for the most up-to-date examination of e-commerce and the pivotal role in plays in reshaping the global landscape.

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