Preface

This book presents a compilation of the research, advancements, and articles published in the Journal of Global Information Management during the 2011 publication year. Each chapter takes a detailed view of the information technology (IT) field from a global perspective, exploring case studies in countries such as Thailand and China, investigating the benefits of outsourcing IT resources in various contexts, and detailing the effects of disparate cultures on multinational collaboration. As a whole, the book is a useful reference for businesses and organizations actively engaged in the global economy and looking to make the most of their position within it.

The first chapter, "Analyzing ICT and Development: Thailand's Path to the Information Economy" by Angsana A. Techatassanasoontorn *et al.*, uses Trauth's (2000) Influence-Impact Model as a sensitizing device to examine the influence of four key socio-cultural factors—policy, infrastructure, economy, and culture—on information economy development efforts in Thailand. The authors' assessment shows that progress has been made but gaps remain. Thailand's infrastructure challenges include unequal development across regions, a small skilled workforce, and low R&D expenditures in the ICT sector. Future economic growth of Thailand will depend on an increase in investments and improvement in technology and innovation. The authors' cultural analysis reinforces the need to develop a synergy between Thai cultural systems and development needs. To highlight strategies that Thailand might follow, the authors compare their findings to the lessons learned from the case of Ireland, India, and China. These include facilitating ICT sector work, ensuring a supply of qualified workers, exploiting the country's distinctive capacities, and reconfiguring policy to adapt to changes in the global ICT market.

In "Country Environments and the Adoption of IT Outsourcing," Wen Guang Qu and Alain Pinsonneault describe how research on information technology (IT) outsourcing adoption has been confined to a single-country perspective. The understanding of how country-specific variables influence the adoption of IT outsourcing is limited. This chapter uses new institutional economics to build a framework that links country-level factors to the adoption of IT domestic outsourcing. The authors suggest that country-level factors, such as the maturity of the IT-related legal system, social trust, uncertainty avoidance, Internet penetration, and the maturity of the IT outsourcing market, affect the opportunism costs and coordination costs involved in domestic IT outsourcing and influence its adoption among firms. The results show that the maturity of the IT-related legal system, social trust, and the maturity of the IT outsourcing market are positively associated with IT outsourcing adoption. The authors conclude the chapter with a discussion of the study's implications for practice and future research.

Chapter 3, "Evaluating Web Site Support Capabilities in Sell-Side B2B Transaction Processes: A Longitudinal Study of Two Industries in New Zealand and Taiwan" by Wei-His Hung *et al.*, longitudinally compares how Web sites supported the Business-to-business B2B transaction process in New Zealand and Taiwan between 2001 and 2007. Business-to-business (B2B) transactions supported by the World Wide Web have become a major portion of e-commerce transactions. Despite growth, knowledge of the

degree of Web site support capabilities in the B2B transaction process is limited. The results indicate that, on average, New Zealand Web sites scored higher than those in Taiwan in both years. Yet, the rate of improvement of Taiwanese Web site scores is significant. Specifically, the support capability of several Web functions, including privacy, company information, financial information and product catalog has improved over the study period. The authors found that the sampled Web sites in New Zealand and Taiwan provide different support capabilities to the activities in the B2B transaction process. Taiwanese Web sites are more concerned with providing after-sale services via the Internet, whereas New Zealand Web sites are more concerned with sharing information. These two countries' Web sites share a similar focus on supporting B2B transactions, which provides strong support for users to conduct product promotion and information provision related activities over the Web. Based on these findings, this chapter suggests several implications for associated academics and practitioners.

In the next chapter, "Contextual Factors, Knowledge Processes and Performance in Global Sourcing of IT Services: An Investigation in China" by Rong Du *et al*., the authors explore the influences of two major contextual factors—supplier team members' cultural understanding and trust relationship—on knowledge processes and performance in global sourcing of IT services. The authors discuss a joint investigation conducted by a cross-cultural research team in China. Cultural understanding is measured by individualism with *guanxi* and *mianzi*, two Chinese cultural concepts, and trust relationship is measured by adjusting trust, a notion reflecting the uniqueness of the Chinese people. Knowledge processes are characterized by knowledge sharing. Performance is measured by the outcomes of global sourcing, which is represented by product success and personal satisfaction. Data are collected in 13 companies in Xi'an Software Park, with 200 structured questionnaires distributed to knowledge workers. The results of quantitative data analysis indicate that cultural understanding influences trust relationship greatly, as well as knowledge sharing and performance in global sourcing of IT services. Trust relationship significantly impacts knowledge sharing, whereas trust relationship and knowledge sharing have no impact on performance. This chapter suggests that special aspects of the Chinese context have significant direct impacts on knowledge processes while no direct and immediate impacts on performance in global sourcing of IT services.

Next, "Knowledge Transfer in Offshore Outsourcing: A Case Study of Japanese and Vietnamese Software Companies" by Nguyen Thu Huong *et al*., discusses the knowledge transfer process in offshore outsourcing. The focus is a case study of software offshore outsourcing from Japan to Vietnam. Initial results confirm that willingness to cooperate and good impressions facilitate the knowledge transfer process. In addition, communication barriers, cultural differences, lack of equivalence in individual competence, and lack of common rules slow down the transfer process. The chapter also identifies the Bridge System Engineer (Bridge SE),-a type of coordinator who mediates and enhances the relationship between Japanese clients and Vietnamese service providers. Employing a Bridge SE is an effective way to fill the communication gap, the cultural gap, and generally improve the business relationship. Bridge SEs use their background of higher education and long-term residence in Japan to give advice to Vietnamese software teams on Japanese cultural characteristics, such as the apology culture and the separation between work and private time. In other situations, Bridge SEs use their IT background and communication skills to verify and adjust communication contents before information is sent from one side to another.

The following chapter "Factors Affecting Usage of Information Technology in Support of Knowledge Sharing: A Multiple Case Study of Service Organizations in Hong Kong" by Ngai-Keung Chow explores key factors affecting the usage of information technology (IT) tools in support of knowledge sharing in service organizations in Hong Kong. In a case study of five firms, the usage of IT tools is influenced

by an array of factors acting as enablers, barriers, and motivators. The findings support extant theories on knowledge management (KM). This research discovers relationships between multiple factors and the usage of IT tools for knowledge sharing at various hierarchical levels. Operational factors like perceived usefulness, perceived ease of use, staff capability, and nature of work induce higher usage of IT for knowledge sharing. These findings and related analyses have managerial implications for firms engaging in service business.

Wen-Ting Lee *et al*., in "Influence of Knowledge Management Infrastructure on Innovative Business Processes and Market-Interrelationship Performance: An Empirical Study of Hospitals in Taiwan," explores knowledge management (KM) infrastructure, the foundation for managing and embodying valuable knowledge in firms. Based on the resource-based view (RBV) and process level analysis, this chapter investigates how KM infrastructure influences market interrelationship performance through innovative business processes. The chapter collected a sample of 126 hospitals in the Taiwanese healthcare industry. The results suggest that technological capability and cultural capability positively affect market interrelationships via innovative business processes. Cultural capability is associated with market interrelationship performance, whereas structural capability is unrelated to innovative business processes. The findings advance understanding of the influence of KM infrastructure on market interrelationship performance as well as provide managerial insights on the influence of innovative business processes on market interrelationships performance.

Chapter 8, "Offshore Vendors' Software Development Team Configurations: An Exploratory Study" by Suranjan Chakraborty *et al*., uses configuration theory and data collected from a major IT vendor organization to examine primary configurations of distributed teams in a global off-shoring context. The chapter indicates that off-shoring vendor organizations typically deploy three different types of configurations, which the authors term as thin-at-client, thick-at-client, and hybrid. These configurations differ in terms of the size of the sub-teams in the different distributed locations and the nature of the ISD-related tasks performed by the distributed team members. In addition, the different configurations were compared on their inherent process-related and resource-related flexibilities. The thick-at-client configuration emerged as the one that offers superior flexibility (in all dimensions).However, additional analysis also revealed contingencies apart from flexibility that may influence the appropriateness of the distributed ISD team configuration, including the volatility of the client organization's environment and the extent to which the ISD tasks can be effortlessly moved to the vendor's home location.

Studies summarized by the United Nations Commission on Trade and Development show that companies in developing countries face problems executing e-commerce strategies. In "Persistent Barriers to E-Commerce in Developing Countries: A Longitudinal Study of Efforts by Caribbean Companies" by William Wresch and Simon Fraser, to determine which barriers might be transitional and which might be persistent, a longitudinal study was conducted of companies in five Caribbean countries. Interviews were conducted with 23 companies in 2004. Interviews were repeated in 2008 with those companies that were still in operation. Some improvements were found in general telecommunications support, but persistent barriers were found in logistics services, and new problems were identified in increased competition and increased shipping costs. As a result of these changes, the general focus of managers shifted from establishing web sites and making them visible to more general managerial tasks connected to finding a place in an increasingly competitive environment. The results of this study suggest improved strategies for companies in developing countries seeking to use e-commerce to expand their markets.

"Asymmetric Interaction in Competitive Internet Technology Diffusion: Implications for the Competition Between Local and Multinational Online Vendors" by Peijian Song *et al*. explores the diffusion of competitive Internet technology products in the context of competition between local and multinational

corporations as well as how the diffusive interactions between technologies affect their dominance in electronic markets. Drawing on existing theories of innovation, diffusion, and competitive dynamics, the authors adopted a new diffusion model that incorporates the influence of one technology's adoption on the diffusion of another technology. The authors then validated the model using longitudinal field data of the two pairs of Internet technology products in Chinese electronic markets. The findings of this investigation suggest that Internet product diffusion can be better predicted by a competitive dynamic model than by an independent-diffusion-process model. Further, results indicate that the diffusive interaction between local and multinational corporations' technologies can be a two-way asymmetric interaction. Such a pattern supports a conclusion of significant second-mover advantage for local online vendors in fast-growing emerging markets. The authors also examine the policy implications of these results, specifically with respect to how asymmetric interaction effects can help domestic online vendors gain second-mover advantage facing the entry of multinational corporations.

The next chapter, "Technology Adoption in Post-Conflict Regions: EDI Adoption in Kosovo after the War" by Larry Stapleton, compared the experiences of Electronic Data Interchange (EDI) adoption in the extreme environment of a post-conflict region to other developing regions. Post-conflict developing regions are special cases of developing countries which have received little attention in information systems research. They are emergency situations which attract significant aid designed to help create economic stability through, for example, the use of IT. Presenting data gathered from 68 companies in Kosovo, this chapter provides an in-depth examination of EDI technology adoption in a post-conflict region. The findings suggest that EDI adoption in Kosovo comprises different features when compared with other developing countries, indicating that current theories of technology adoption have not fully accounted for EDI adoption in post-conflict regions. From this finding, implications for interventions in post-conflict regions are drawn. This chapter contributes to the understanding of technology adoption processes and offers new insight into the process of technology adoption in this context. It provides a starting point for further work which creates a basis for more effective interventions in post-conflict zones, contributing to economic development and stabilization.

In "Do Cultural Differences Matter in IT Implementation? A Multinational's Experience with Collaborative Technology," Susan A. Sherer *et al.* explain that as multinational firms increasingly adopt collaborative technology with supply chain partners in other countries, their implementation strategies need to accommodate cultural differences. This chapter draws upon Hofstede's framework for understanding national cultural characteristics to propose differences in implementation, timing, and strategy. These propositions are tested with a case study involving a large U.S. based multinational's implementation of Collaborative Planning, Forecasting, and Replenishment (CPFR) with partners in four different countries: U.S., Germany, China, and Poland. This research suggests that cultural differences impact the rollout life cycle for CPFR. The authors recommend that (1) implementation strategies should match national culture, (2) implementation timing can be a function of national culture, and finally (3) customer readiness assessments for CPFR rollout should include an assessment of national cultural differences.

Information sharing has recently received considerable academic interest because of the importance knowledge management plays in the creation of sustained competitive advantage for global firms. The interest is attributed to the need for achieving higher levels of worker empowerment and effectiveness. However, the existing research in the area lacks an examination of how national differences impact information sharing activities. Chapter 13, "An Exploratory Cross-National Study of Information Sharing and Human Resource Information Systems" by Bongsug (Kevin) Chae *et al.*, responds to this need by presenting a structured yet exploratory inquiry into factors impacting information sharing and the adop-

tion of Human Resource Information Systems (HRIS) by examining key national differences. Assessing national differences is extended beyond the examination of national culture by including institutional contexts in the study. Using a 22-country sample from the CRANET database, the study suggests there is a significant and predictable variation in the level of information sharing and HRIS adoption in firms from different countries, and that national differences, including cultural and institutional contexts, have an impact on information sharing. The chapter also indicates that the level of HRIS adoption is positively associated with information sharing. The authors discuss these findings, their implications for research and practice, and address limitations along with opportunities for future research.

The following chapter, "Modeling the Success of Small and Medium Sized Online Vendors in Business to Business Electronic Marketplaces in China: A Motivation – Capability Framework" by Shan Wang, explores the performance of Chinese small and medium sized enterprises (SMEs) on Business-to- Business (B2B) electronic marketplaces (EMs). Based on a content analysis of 155 cases of high performing online Chinese vendors, this chapter explains the success of SME online B2B vendors within a Motivation- Capability framework. This first generation of SME B2B online vendors proved highly motivated to increase sales and developed a set of Internet leveraged organizational capabilities to compete online, including capabilities for online marketing, product innovation, eCommerce management, etc. This chapter differs from traditional wisdom that online marketplaces will render Guanxi (a Chinese cultural phenomenon defined as close and pervasive interpersonal relationships, Yang, 1994) irrelevant since online marketplaces are perceived to be impersonal. In fact, Guanxi still matters online, but it takes new forms. This chapter offers important managerial implications for B2B SME online vendors on how to leverage EMs for higher performance.

Finally, Horst Treiblmaier and Sandy Chong explain in "Trust and Perceived Risk of Personal Information as Antecedents of Online Information Disclosure: Results from Three Countries" that individuals have to disclose personal information in order to utilize the manifold options of the Internet. Online users frequently trade data for benefits (privacy calculus). Trust in both the Internet and the vendor has been identified as an important antecedent to disclosing personal information online. The authors introduce the perceived risk of disclosing specific data types as an additional factor in the field of study. The results from a survey in three countries (Austria, Australia, and Hong Kong) show that the perceived risk of disclosing personal information is a stronger stimulus for the intention to provide personal information than having trust in the Internet or in the online vendor. Several significant differences are found in the relationships between the perceived risk of disclosing personal information, trust, and the willingness to disclose personal information.

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