Preface

To keep pace with the rapidly expanding world of global business, it is vital to stay abreast of the latest advances in management and technological strategies for a globalized market. This book of advances in management practices offers just those set of tools to a manager, IT professional, business student, or any member of the global business chain.

Narrowing the field of global business to give the most relevant and helpful practices exposure, “International Comparisons of Information Communication Technologies: Advancing Applications” offers fifteen chapters in three sections. The authors of these chapters hail from a dozen countries around the world, offering insight in case studies and comparisons of international enterprises.

The first section, “The Role of Culture” introduces some of the latest in the field of global information technology, its governance, and the trends in terminology and semantics surrounding these advances. Section one includes five chapters that introduce the book and lay a framework for implementing practices discussed in further chapters.

In chapter one, “User Attitude Towards Mandatory Use of Information Systems: A Chinese Cultural Perspective,” by Xunhua Guo and Nan Zhang, the authors argue that cultural factors should be treated as aggregate characteristics at the population level instead of personal attributes at the individual level. The authors also propose that theoretical models could be developed for specific cultural contexts when examining IT/IS user behavior. In this regard, a model for analyzing user attitude toward mandatory use of information systems is proposed. Drawing on generally recognized cultural characteristics of China, three factors are introduced as determinants of user attitude—leader support, technology experience, and perceived fit. An empirical study is conducted with regard to the acceptance of a mobile municipal administration system in Beijing, China, for validating the proposed model with survey data and analyzing the adoption mechanism of the target system. The moderating roles of gender, age, and education level on the model are explored by interaction effect analyses and the findings provide helpful insights for related studies in other cultural contexts.

Chapter two, “The Impact of National Culture on Information Systems Planning Autonomy,” by Dinesh A. Mirchandani and Albert L. Lederer, suggests that national culture may influence the information systems planning autonomy of the subsidiaries of multinational firms, but such an impact has not yet been tested empirically. A postal survey of 131 chief information officers and 103 senior non-IS managers of U.S. subsidiaries of such firms collected data to test hypotheses based on the model. Structural equation modeling using PLS-Graph 3.0 revealed that Individualism-Collectivism, Masculinity-Femininity, and Uncertainty Avoidance predicted autonomy for particular IS planning phases (as rated by the CIOs). On the basis of the supported hypotheses, the study provides evidence of the relevance of the national culture model to IS planning effectiveness and IS contribution. The study also suggests to subsidiary managers that an understanding of the national culture of their parent firm can help them gain an insight into the parent’s management perspective.
Chapter three, “Cultural Impacts on Acceptance and Adoption of Information Technology in a Developing Country,” by Elizabeth White Baker, Said S. Al-Gahtani, and Geoffrey S. Hubona investigates technology adoption behavior of Saudi Arabian knowledge workers using desktop computers within the context of TAM2, and the unique effects of Saudi culture on IT adoption within the developing, non-Western, country. Following the guidelines of the etic-emic research tradition, which encourages cross-cultural theory and framework testing, the study findings reveal that the TAM2 model accounts for 40.3% of the variance in behavioral intention among Saudi users, which contrasts Venkatesh and Davis’ (2000) explained 34-52% of the variance in usage intentions among U.S. users. The model’s explanatory power differs due to specific Saudi Arabian emic constructs, including its collectivist culture and the worker’s focus on the managerial father figure’s influence on individual performance, a stark difference from TAM findings in more individualistic societies. The authors’ findings contribute to understanding the effects of cultural contexts in influencing technology acceptance behaviors, and demonstrate the need for research into additional cultural factors that account for technology acceptance.

Chapter four, “A Comparative Study of the Effects of Low and High Uncertainty Avoidance on Continuance Behavior,” by Hak-Jin Kim, Hun Choi, and Jinwoo Kim, examines the effects of uncertainty avoidance (UA) at the individual level on continuance behavior in the domain of mobile data services (MDS). It proposes a research model for post-expectation factors and continuance behavior that considers the moderating effect of UA, and verifies the model with online survey data gathered in Korea and Hong Kong. Post-expectation factors are classified as either intrinsic or extrinsic motivational factors, while respondents are classified according to their propensities into low-UA and high-UA groups. The results indicate that UA has substantial effects not only on the mean values of the post-expectation factors studied but also on the strength of those factors’ impact on satisfaction and continuance intention. The effects of intrinsic motivational factors on satisfaction and continuance intention are stronger for the high-UA group than for the low-UA group. In contrast, the effects of extrinsic motivational factors are generally stronger for the low-UA group.

Chapter five, “Untangling the Web of Relationships between Wealth, Culture, and Global Software Piracy Rates: A Path Model,” by Trevor T. Moores, examines the relationship between Hofstede’s national culture indices (IDV, PSI, MAS, and UAI), economic wealth (GNI), and national software piracy rates (SPR). Although a number of studies have already examined this relationship, the contribution of this article is two-fold. First, we develop a path model that highlights not only the key factors that promote software piracy, but also the inter-relationships between these factors. Second, most studies have used the dataset from the pre-2003 methodology which only accounted for business software and did not take into account local market conditions. Using the latest dataset and a large sample of countries (n=61) we find there is an important triadic relationship between PDI, IDV, and GNI that explains over 80% of the variance in software piracy rates. Implications for combating software piracy are discussed.

The second section, “International Perspectives,” comprises the bulk of the book, containing seven chapters that draw experiences from different sectors of global industry and enterprise.

Chapter six, “ICT for Digital Inclusion: A Study of Public Internet Kiosks in Mauritius,” by L.G. Pee, A. Kankanhalli, and V.C.Y. On Show examines the factors influencing individuals’ use of one such ICT, public internet kiosks, in Mauritius. Findings from a survey indicate that individuals’ self-efficacy, perceived ease of use, perceived usefulness, subjective norm, and perceived behavioral control have significant effects. This study contributes to research by highlighting key factors influencing the use of public internet kiosks and discussing how the factors’ perception and assessment differ from those in the developed world. Mauritius also provides an interesting context for this study, as her government has
been actively promoting the diffusion of ICT in the country yet there have been limited empirical studies on Mauritian and sub-Saharan African users in the digital divide research. Suggestions for promoting the use public internet kiosks in less-developed countries are also provided.

Chapter seven, “E-Business Assimilation in China’s International Trade Firms: The Technology-Organization-Environment Framework,” by Dahui Li, Fujun Lai, and Jian Wang, investigates technological, organizational, and environmental factors which determine e-business assimilation in these firms. Based on survey data collected from 307 international trade firms in the Beijing area, we found that environmental uncertainty was negatively associated with e-business assimilation, while a firm’s internal IT capability, relative advantage of e-business, learning orientation, and inter-organizational dependence were positive determinants of e-business assimilation. The effect of a firm’s ownership type was also significant. Environmental uncertainty was the most important inhibitor, and IT capability and inter-organizational dependence were the most salient enablers of e-business assimilation.

Chapter eight, “An International Comparative Study of the Roles, Rules, Norms, and Values that Predict Email Use,” by Mark F. Peterson, Stephanie J. Thomason, Norm Althouse, Nicholas Athanassiou, Gudrun Curri, Robert Konopaske, Tomasz Lenartowicz, Mark Meckler, Mark E. Mendenhall, Andrew A. Mogaji, and Julie I. A. Rowney extends communication and technology use theories about factors that predict e-mail use by explaining the reasons for cultural contingencies in the effects of managers’ personal values and the social structures (roles, rules and norms) that are most used in their work context. Results from a survey of 576 managers from Canada, the English-speaking Caribbean, Nigeria, and the United States indicate that e-mail use may support participative and lateral decision making, as it is positively associated with work contexts that show high reliance on staff specialists especially in the U.S., subordinates, and unwritten rules especially in Nigeria and Canada. The personal value of self-direction is positively related to e-mail use in Canada, while security is negatively related to e-mail use in the United States. The results have implications for further development of TAM and media characteristic theories as well as for training about media use in different cultural contexts.

Chapter nine, “Critical Factors of ERP Adoption for Small- and Medium- Sized Enterprises: An Empirical Study,” by She-I Chang, Shin-Yuan Hung, David C. Yen, and Pei-Ju Lee, develops and tests a theoretical model including critical factors which influence ERP adoption in Taiwan’s SMEs. Specifically, four dimensions, including CEO characteristics, innovative technology characteristics, organizational characteristics, and environmental characteristics, are empirically examined. The results of a mail survey indicate that the CEO’s attitude towards information technology (IT) adoption, the CEO’s IT knowledge, the employees’ IT skills, business size, competitive pressure, cost, complexity, and compatibility are all important determinants in ERP adoption for SMEs. The authors’ results are compared with research on IT adoption in SMEs based in Singapore and the United States, while implications of the results are also discussed.

Chapter ten, “Key Issues in Information Systems Management: An Empirical Investigation from a Developing Country’s Perspective,” by D. Li, W.W. Huang, J. Luftman, and W. Sha identifies and analyzes important issues faced by CIOs in the developing country of China. The results of this study are based on two national wide CIO surveys in China, where the first was conducted in 2004 and followed by a more recent survey in 2008. The authors provide insight for both IS practitioners and researchers who have interests in developing countries. Data analysis indentified key IS management issues and demonstrated similarities as well as differences between the two rounds of surveys. Although some strategic IS issues were still within the top 10 on both the 2004 and 2008 lists, their importance ratings were different. Implications of the findings are also discussed.
Chapter eleven, “Outsourcing of Community Source: The Case of Kuali,” by Manlu Liu, Xiaobo Wu, J. Zhao, and Ling Zhu studied the Kuali project through interviewing its participants. The interview analysis revealed that community source faced a number of challenges in project management, particularly in the areas of staffing management and project sustainability. A viable solution to these issues, as supported by the findings in the interview and the literature review on the drivers and expected benefits of outsourcing, is outsourcing software development in community source projects. The authors accordingly proposed a research framework and seven propositions that warrant future investigation into the relationship between community source and software outsourcing.

Chapter twelve, “IS-Supported Managerial Control for China’s Research Community: An Agency Theory Perspective,” by Wen Tian, Douglas Vogel, Jian Ma, and Jibao Gu begins with an introduction to the subject matter, discussing the following: in the first decade of the 21st century, China’s Research Community (CRC) is struggling to achieve better performance by increasing growth in knowledge quantity (e.g., publications), but has failed to generate sound growth in knowledge quality (e.g., citations). An innovative E-government project, Internet-based Science Information System (ISIS), was applied nationwide in 2003 with a variety of embedded incentives. The system has been well received and supports the National Natural Science Foundation of China (NSFC) to implement managerial control to cope with pressing demands relating to China’s research productivity. This paper explores the impact of Information Systems (IS) from the perspective of agency theory based on CRC empirical results. Since the nationwide application of ISIS in 2003, CRC outcomes have markedly improved. The discussion and directions for future research examine implications of IS for E-government implementation and business environment building in developing countries.

The third section, “Government and Development Issues,” concludes the book with three final chapters on topics such as ICT diffusion, successful e-government adoption, IT maturity, and more from research and case studies across the globe.

Chapter thirteen, “ICT Diffusion and Foreign Direct Investment: A Comparative Study between Asia-Pacific and the Middle Eastern Economies,” by Farid Shirazi, Dolores Higón, and Roya Gholami investigates the impact of inward and outward FDI on ICT diffusion in the Asia-Pacific and Middle East regions for the period 1996-2008. The results indicate that while inward FDI has generally had a positive and significant impact on ICT diffusion in Asia-Pacific economies, its impact on the Middle Eastern economies has been detrimental. In contrast, the results of this study also show that outward FDI has had, in general, the inverse effect, it has been in general positive and significant for the Middle East economies but insignificant for Asia-Pacific countries.

Chapter fourteen, “A Process Model for Successful E-Government Adoption in the Least Developed Countries: A Case of Bangladesh,” by Ahmed Imran and Shirley Gregor, reports on an exploratory study in a least developed country, Bangladesh, involving a series of focus groups and interviews with key stakeholders. A lack of knowledge and entrenched attitudes and mindsets are seen as the key underlying contributors to the lack of progress. The analysis of the relationships among the major barriers to progress led to a process model, which suggests a pathway for e-government adoption in an LDC such as Bangladesh. The chapter introduces important directions for the formulation of long-term strategies for the successful adoption of ICT in the public sector of LDCs and provides a basis for further theoretical development.
Chapter fifteen, “What Shapes Global Diffusion of E-Government: Comparing the Influence of National Governance Institutions,” by Bijan Azad, Samer Faraj, Jie Mein Goh, and Tony Feghali concludes the book. Prior research has established the existence of a differential between industrialized and other countries for e-Government diffusion. It attempts to explain this divide by identifying economic and technical variables. At the same time, the role of national governance institutions in e-Government diffusion has been relatively under-theorized and under-studied. The authors posit that, the existing national governance institutions shape the diffusion and assimilation of e-Government in any country via associated institutions in three key sectors: government, private sector and non-governmental organizations. This chapter develops and tests a preliminary model of e-Government diffusion using the governance institutional climate as represented via democratic practices, transparency of private sector corporate governance, corruption perception, and the free press. The results indicate that the level of development of national governance institutions can explain the level of e-Government diffusion over and above economic and technical variables. The authors’ research contributes to the literature by providing initial evidence that the existing national governance institutions influence and shape e-Gov diffusion and assimilation beyond the adoption stage.

It is the sincere hope of the editor of this collection of case studies, research, and best practices that it will serve as an essential reference tool for practitioners of global business. The international perspectives offered here give pointed insight into the latest word on Information Systems and Technology within burgeoning global business.

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