Foreword

THE NATURE OF GLOBAL IT RESEARCH

Managing information technology (IT) on a global scale presents a number of opportunities and challenges. IT can drive the change in global business strategies and improve international coordination. At the same time, IT can be an impediment to achieving globalization. IT as an enabler of and inhibitor to globalization raises interesting questions. To what extent does IT facilitate globalization? In what ways can IT be a constraint to globalization? Is managing IT in a global context largely the same as managing IT in a domestic context? If it is not, then what aspects are different? How are differences in culture important to the implementation of global information systems?

Research into these and other related topics have grown tremendously over the last 10 years. Journals focusing on global aspects of IT (i.e., global IT) were established driven by the need to understand the relationship between IT and globalization. New research tracks on global IT were created at international conferences to generate interest and permit research to be disseminated as soon as they are completed.

What characterizes research into global IT? First, it is a narrow field of study. Global IT research is a subset of information systems (IS) research. It focuses on IS issues that are international in flavor. Global IT research is also an extension of the traditional IS field—beyond a single system in a single location to multiple systems, with diverse users in a global environment. However, global IT research is distinct from general IS research. One way of differentiating is by the research themes examined. Brent Gallupe and I (1999) identified six major themes in global IT research. The following table describes the key global themes. These themes distinguish global IT research from other IS research.

| Research Themes In Global IT Research | Description |
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| Global Enterprise Management | Functional management of enterprises across national boundaries using IT. Includes the management of multinational and transnational corporations. For example, the impact of IT on global supply chains, global distribution or global marketing, including global electronic commerce. |
| Global Information Resources Management | The development, operations, management and use of IT in a global context. Includes the management of information resources in a regional but not domestic context. For example, managing global IT outsourcing, motivating global IT development teams; and managing the introduction of telecommunications technology in Latin America. |
| Comparative Study of Nations | The comparison of IT development, operations, management and use between two or more countries. Culture is not a variable in these studies. For example, comparing the skills of systems analyst in Canada. New Zealand and Singapore. |
| Culture / Socio-economic Issues | The effect of national culture on IT development, operations, management and use. These are regarded as "pure" cross-cultural studies as opposed to those merely comparing nations. For example, exploring the effect of complex cultural dimensions on the level of IT transfer in Arab and East European nations. Also includes socio-economic issues relating to IT like government policy, legislation and economic factors. |
| Research Frameworks and Issues | Conceptual research offering frameworks, theory and research agendas on various aspects of global information management. Key issues studies in IS management from around the globe are included. |
| Single Country Studies | The development, operations, management and use of IT in a domestic context. Does not include the management of information resources in a global context. For example, the adoption of IT in rural China. |

We were surprised to observe that there were fairly few IS research into culture and its effects. We, therefore, encourage more research into the impact of culture on various IT issues. Our understanding of the relationship between culture and global IT is still very limited. There is a need for more theory-based assessment of cultures (Straub, Loch, Evaristo, Karahanna, & Srite, 2002) and the need to have a more dynamic view of culture—one that sees culture as contested, temporal and emergent (Myers & Tan, 2002). Others have warned global IT researchers not to ignore structural conditions present in different geographical locations as the differences in these conditions can exert a strong influence in global e-commerce activities (Markus & Soh, 2002).

Second, global IT research is very diverse. There are a wide variety of variables studied and methodology used. Variables examined were internal to the organization (e.g., characteristics of the development, operations and management environments, the characteristics of the IT being studied and extent of adoption and diffusion of IT), as well as the external environments (e.g., culture, infrastructure,

government policy and legal system). Both quantitative and qualitative approaches have been widely employed—primarily, field and case studies (Gallupe & Tan, 1999). Examples include a study of the fit between managerial decision tasks and types of systems and its impact on the amount of IT use between Greek and U.S. managers using field surveys (Ferratt & Vlahos, 1998); an assessment of Arab culture and IT transfer using a combination of qualitative (Hill, Loch, Straub, & El-Sheshai, 1998) and quantitative techniques (Straub, Loch, & Hill, 2001).

Third, the narrow and diverse nature of the field presents difficulties in conducting global IT research. The difficulties intrinsic in global research revolve around resource constraints and methodological problems, for example, language barriers between researchers and research participants, research instrument translation, conceptualizing and measuring culture, biases, financial and time related limitations. Karahanna, Evaristo and Srite (2002) provide a comprehensive discussion on the methodological issues in conducting cross-cultural research. The authors present an overview of the key methodological concerns and review ways of preventing or detecting these problems.

Finally, the study of IT management in the global context can be thought to have considerable overlaps with the field of international business. However, surprisingly few global IT publications have used international business theories for appropriating variables and measures or for putting discussion issues into a broader context (Niederman, Boggs, & Kundu, 2002). There is, therefore, a huge opportunity for researchers to consider the connections between international business and global IT.

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