Information Resources Development Challenges in a Cross-Cultural Environment

Wai K. Law
University of Guam, Guam

INTRODUCTION

Western management theory considers information the lifeblood of organization. The sharing of information lubricates the interlocking divisions within the organization, promoting the effective achievement of organizational goals with external business partners. However, in many regions of the world, information represents power, and managers often try to accumulate as much of it as they can while denying access to others (Oz, 2002). For others, the disclosure of information is considered a threat to the span of management control (Rocheleau, 1999). In some cases, administrators could be more interested in the scale of the information system and its associated budget, than in the capability and functionality of the system (Kalpic & Boyd, 2000). These are examples of conflicting cultural values in a cross-cultural environment. The introduction of Western management approaches conflicts with regional administrative styles, diminishing the effectiveness of information systems (Shea & Lewis, 1996; Raman & Watson, 1997). Sensitivity to cultural differences has been recognized as an important factor in the successful global deployment of information systems. Minor information management issues potentially resolvable through improved communication in the West often manifest as major challenges in a cross-cultural environment.

BACKGROUND

The literature provided thorough coverage on designs, development, and implementation of computer-based information systems (CBISs). Numerous studies examined various systems solutions for organization needs (Applegate, 1995; McLeod, 1998; O'Brien, 2002). However, the projected value of information technology has been formulated based on a rough assessment of the possibilities without full appreciation of the limitations due to resistance to organizational and social changes (Osterman, 1991). Increasingly, management realized that massive deployment of information systems on a global basis, even with prudent management of the systems, has not been producing the desirable outcomes of value generation. Recent studies revealed the significant influence of cultures toward the success of transferring information technology beyond the Western world. National culture, organization culture, and MIS culture induced influence over the successful development and management of information resources (Hofstede, 1980; Raman & Watson, 1997). Shea and Lewis (1996) suggested the desirability of paying close attention to the user absorptive rate in the transfer of new technology into a different cultural environment. It became apparent that adaptation of information system designs to new cultural environments was insufficient to guarantee successful implementation. User selection of technological features, driven by cultural preferences, could be a key factor for designing information systems in a multicultural environment. Other studies reported the numerous obstacles of developing CBISs under various cultural settings, even with highly motivated leaders to support the deployment of information systems (Raman & Watson, 1997; Al-Abdul-Gader, 1999).

The information system function must enhance user effectiveness and efficiency in utilizing the information to improve value delivery for the organization (Parker, 1996). New challenges emerged as nontechnical issues and clouded the measurement of information system performance. A typical information system would be designed to provide information to users with common needs. Good data reports should contain all the required information with accurate representation of events. The reports needed to be generated in a timely fashion and in a format usable by the users (McLeod, 1998). However, individual users tended to value information systems for providing custom reports to meet individual needs in specific circumstances (Heeks, 1999). Inconsistent expectations in a cross-cultural environment crippled the effective management of information resources. Cultures carried different interpretations for timeliness, completeness, and relevancy of information.

Makeshift management decisions generated new dynamics in several ways. In the spirit of promoting free information exchange, the department that owned the information system became obligated to provide information to others (Oz, 2002). However, the new responsibility seldom came with additional resources. The information owners became reluctant to supply information, because

doing so would take away that resource from other regular tasks (Davenport, 1997). Some managers shifted the data reporting responsibilities to other divisions, creating a bureaucratic nightmare for the users. Some ignored data requests, and others manipulated the data flows with respect to organizational politics (Oz, 2002; Rocheleau, 1999). Those working in the public sector faced the challenge of maintaining a delicate balance as they attempted to fulfill their responsibilities for both confidentiality and access to data (Osterman, 1991; Duncan, 1999). The problems would be more severe under a relationship-based culture, where favors could not be declined.

Cultural backgrounds shaped the preferential information system model. In some cultures, managers would be intuitive and feelings based and would have vague expectations for the performance of the information system. There would be more emphasis on group harmony and saving face than on actual problem solving (Bjerke, 1999). Others would be more interested in meeting obligations, ignoring the source and validity of the reports. The controlling manager sought a complex and broad information system that provides qualitative data (Kluckhohn & Strodtbeck, 1961; Lane & DiStefano, 1992; Shea & Lewis, 1996). All these personality extremes coexist in a cross-cultural setting, making it more challenging to design systems than in a single-culture environment. The perceived value of information resources became less predictable in a cross-cultural environment.

CHALLENGES IN CROSS-CULTURAL INFORMATION SYSTEMS MANAGEMENT

The rapid expansion of Western influence on a global basis created an environment under the cross-currents of Western corporate culture and regional cultures. Nations in the Pacific Basin have established close relationships with the Western world. Heavy Western investments have transformed these nations into showcases for Western systems. However, underneath the formal display of the Western culture, local cultures retained strong influence on their societies. An influx of immigrants holding on to their traditions further diluted the penetration of Western influence in these regions. The predominating regional workforce challenged Western corporate culture through their deep-rooted traditions and work habits. For example, a massive absenteeism could be expected on festival days, even without approved leaves or holidays. Timely arrival at a meeting would be accepted as 15 minutes to several hours after the scheduled time. Mandated reports could be excused without penalty, and the uttermost concern, over efficiency, was to preserve group

harmony. Sometimes, this meant ignoring facts to restore stability and group harmony. Periodic acquisition of technology would be celebrated even without the appropriate infrastructure support, preventing usage of the technology. Experience in the Pacific Basin provided a sampling of information resources management issues that became significant challenges in cross-cultural environments.

Challenge One: The design objectives of an information system must expand from efficiency orientation to adaptive accommodation of cultural habits. It becomes desirable to allow and to track dynamic modification of data-processing procedures according to shifting organizational and cultural influences.

While a primary design objective of an information system was to provide efficient transaction processing, often, the affected human system was slow to accept the implicit MIS culture embedded in the system design. Western culture emphasized timeliness and accuracy, which were less important to many cultures. For example, it often took months to update databases from paper documents. Some users relied on the information system for information, while others insisted on paper documents only. Hence, circulation of multiple versions of reports was common depending on the sources of the reports. Parallel operations to accommodate parallel cultures generated organizational conflict. Influential users and administrative interventions threatened the integrity of information systems. The full potential of the information system was suppressed to a preference for cultural norms, and only system features that would not threaten cultural practices would be allowed to remain. Some local cultures emphasized protecting family members more than performance appraisal. The value of information was not as much for improving decision making, but to endorse group position, to preserve relationship, and to avoid embarrassment.

Challenge Two: There is a need for clear definitions of data ownership and responsibilities for data acquisition, data quality control, and data distribution. This is especially challenging in cultural environments, where the political attributes of information interfere with the communicative value of information.

In many Eastern cultures, credible information was deferred to leaders and elders with power and status. Political relationships dictated the availability of information and the accessibility to organizational data. This was contrary to the basic assumptions of CBIS that promoted the free exchange of information (Oz, 2002; Osterman, 1991; Rocheleau, 1999). The bureaucratic procedures for the approval of data usage defeated the designed roles of

Related Content

Critical Success Factors for IS Implementation in China: A Multiple-Case Study from a Multiple-Stage Perspective
Huixian Li, John Lim, K. s. Ramanand Yin P. Yang (2007). *Information Resources Management: Global Challenges (pp. 76-106).*
www.irma-international.org/chapter/critical-success-factors-implementation-china/23037

The Sensitivity of Research on COVID-19: An Analysis of the Response of Peer Review Systems of Predatory Journals
Rosy Janand Sumeer Gul (2022). *Journal of Information Technology Research (pp. 1-12).*
www.irma-international.org/article/the-sensitivity-of-research-on-covid-19/299389

Knowledge Acquisition Through Ontologies from Medical Natural Language Texts
José Medina-Moreira, Katty Lagos-Ortiz, Harry Luna-Aveiga, Oscar Apolinario-Arzube, María del Pilar Salas-Zárateand Rafael Valencia-García (2017). *Journal of Information Technology Research (pp. 56-69).*
www.irma-international.org/article/knowledge-acquisition-through-ontologies-from-medical-natural-language-texts/188672

The Value of Coin Networks: The Case of Automotive Network Exchange
Andew Borchersand Mark Demski (2000). *Annals of Cases on Information Technology: Applications and Management in Organizations (pp. 109-123).*
www.irma-international.org/chapter/value-coin-networks/44631

Adopting the Process View
Anthony Bryantand Veena Syan (2002). *Annals of Cases on Information Technology: Volume 4 (pp. 162-183).*
www.irma-international.org/article/adopting-process-view/44505