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ABSTRACT

What are the implications of globalization to information technology (IT) management? Some argue that the global context requires a substantial change in IT requirements and constraints. Selig (1982) points out the complications due to cultures, languages, business environments, legal requirements, inconsistent vendor support, and varying technology availability. Cash, McFarlan and McKenney (1988) similarly argue that the management of IT involves far more issues and contingencies in the international context than in the domestic context. Other IT scholars accentuate the similarities between domestic and international issues in managing information systems (e.g., Watson and Brancheau 1991). The universal applicability of IT issues is largely assumed.

In the current project, we explore the determinants of a major aspect of organizational IT — its distribution policy — and how the determinants change in degree and type from domestic to global IT. By IT distribution policy, we are referring to where the control for an information system should be (for instance, a single firm-wide solution versus solutions determined at the departmental or divisional level). By global IT, we are referring to information technology applications that are used in multiple countries, usually with the intention of business integration across country boundaries. By local IT, we are referring to information technology applications that are confined to a domestic context (the U.S. context). On the basis of prior research, we expect the IS distribution decisions to be relatively more dependent on the external firm factors in the global context than in the local context. We expect the internal firm factors to play a greater role than the external factors in the local context. Internal factors include power, information processing, communication, and control requirements. The external factors include the economics of computing, the availability of vendor support, governmental regulations, diversity in cultures, and the like.

Based on the prior literature on IT centralization-decentralization, we compiled forty-one items that have all been proposed as having importance in influencing the degree to which the control for the application’s data, hardware, and software is centralized or decentralized, or some compromise or combinations of both. We are using experienced project managers to rate these items based on their understanding of the relative importance in making the distribution decision. Half of the project managers have had substantial international project management experience; the other half have had only domestic project management experience. The project managers use the Q-sort technique to rate the items.

At this point, we have conducted sessions with thirty-five project managers. The results from the first eighteen field interviews tentatively suggest that the most critical issues in making the IT distribution decision remain the same in a global versus local context. The overriding issue is what particular distribution alternative will best serve the customers' need to get reliable and consistent computing service. After meeting the basic IS service requirements, communication and information processing requirements appeared to be the second most important category followed by organizational control requirements. Differences between global and local did exist. The intensity and the number of considerations increased in the global context. For example, it appeared to be much harder to accommodate the varying information processing needs of local units in a global versus local context. Interestingly, language, culture, and currency issues were not considered to be one of the most important factors in the global context. By the end of the summer of 1992, we plan to complete another thirty to forty research sessions and will present the final results at the conference.

From a managerial perspective, the study begins to address what priorities, principles, and practices the global context changes in the management of IT. From a theoretical perspective, the study is an initial attempt to begin to understand how research models developed in the domestic context must be altered to take into account the global context.
REFERENCES

