



Chapter 2

One Size Does Not Fit All: Potential Diseconomies in Global Information Systems

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Managers, IT practitioners, and IS researchers are easily seduced by the latest information technology wave. Consequently, we tend not to question conventional assumptions about the implementation of IT systems in organizations. Instead of providing managers with directions, IS researchers can sometimes turn into prognosticators of the latest information technology fad. We call on researchers to delve below the surface of new IT trends to expose inconsistencies between technological promises and the reality of deploying information systems in global organizations.

Many IS researchers are turning their attention to the area of global information management (Gallupe and Tan, 1999). This journal is a vehicle for publishing such research work. Interest in integrated global information systems is fueled both by the developments in information and communications technologies and the trends in business towards globalization of products and markets. Conventional wisdom suggests that businesses operating in global markets would benefit from implementing global information systems and achieve economies of scale and scope. This may be true in some cases, but does it hold for all cases? I suggest it may not. In certain cases deploying global IT systems could lead to diseconomies of scale.

A major selling point for implementing global enterprise-wide information systems is the potential for achieving economies of scale and scope in

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managing the activities of widely dispersed operations. The thrust of most integrated global IT systems deployment efforts is to provide common information firm wide. By deploying common global information systems, firms hope to increase the efficiency of their global business processes and benefit from cross-functional information transfer and sharing. One way of realizing the benefits of common information systems is through the deployment of enterprise-wide systems. Thousands of companies worldwide have implemented enterprise-wide systems. Companies such as Owens-Corning, Colgate Palmolive, Microsoft, and Cisco Systems have reported tangible benefits as a result of deploying an enterprise resource planning (ERP) system. These systems are very complex to deploy and manage and require huge investments to support business process and structural change, IT systems acquisition and deployment, and human resource development.

Business managers typically buy into the concept that implementing common integrated IT systems will lead to efficiency and effectiveness payoffs. They are sold on the idea that simplified processes and better systems will speed data and information flows across the organization. But do organizations always achieve economies of scale by providing common information? One IT manager involved in implementing an ERP system globally suggests that benefits may not be realizable in some circumstances. He suggests that many consultants in their attempt to sell companies on enterprise systems, use stories of ERP implementation success to try to convince managers to spend the many million dollars necessary to implement such systems. In doing so, they may cite examples such as that of Colgate Palmolive where, “before SAP R/3, it took Colgate U.S. anywhere from one to five days to acquire and order, and another one to two days to process an order. Now, order acquisition and processing combined takes four hours, not up to seven days. Distribution planning and picking used to take up to four days; today, it takes 14 hours. In total, the order-to-delivery time has been cut in half” (Kalakota and Robinson, 1999 p. 183).

The implication that any company might be able to achieve similar benefits is seductive. However, this type of reasoning is fraught with difficulties. All companies do not face the same circumstances. Companies are affected differently by both internal and external environmental forces. They have different strategies, structures, business processes, products and culture. A coal mining company with a few large customers may not have to turn around an order in four hours. Should such a company then invest millions of dollars implementing an enterprise information system just to be able to say it can process an order in four hours? Would this be valuable to

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