An Agenda for Research Linking Information Systems and International Business: Theory, Methodology and Application

P. Candace Deans
Wake Forest University

David A. Ricks
Thunderbird-The American Graduate School of International Management

Recent trends in information systems research reflect the need to respond to the realities of an increasingly interdependent, international economy. In responding to this demand, a stream of research is currently developing that directly interfaces the information systems (IS) discipline with the field of international business (IB). Research addressing this interface places an added challenge on the IS researcher to broaden his knowledge base to encompass the theory and literature foundations of an often unfamiliar body of research.

This article addresses the need to define the current state of research in international business which is relevant to the IS academician in an effort to move toward a research agenda linking these two areas. Scholarly research addressing the interface of two very different streams of research (i.e., information systems and international business) requires a knowledge of theoretical foundations, methodological rigor and application trends from both academic disciplines. However, since both information systems and international business are interdisciplinary in nature and pull on several reference disciplines for theory development, identifying the research bounds that define this interface is especially difficult. A framework is presented that provides structure for the development of a research agenda that defines this IS / IB interface.

Two very dynamic areas in business today are the impact of information technology (IT) on the operations of the firm and the corresponding globalization of markets. The combined effect of these two forces in today’s business environment is no less than profound. Information technology is playing a significant role not only as a catalyst that is driving the global marketplace but also as a solution base from which to address international managerial challenges. The firm’s information systems (IS) will provide the necessary communications infrastructure and essential links with buyers, suppliers, customers, competitors, and strategic alliances worldwide (Deans and Kane, 1992). Tomorrow’s enterprise will demand increasingly integrated and coordinated information systems for the development of competitive
globally oriented strategies and information technology applications.

The link among the various stakeholders both inside and outside the organization is information. We are currently living in an information age; power is in information. Peter Drucker (1988) refers to the organization of the future as an information-based organization. He believes that to remain competitive, possibly even to survive, the corporation of the future will have no choice but to become information-based. For some time, companies used information technology “only to do faster what they have always done before (Drucker, 1988).” As companies around the world take the first steps to move from data to information these efforts are resulting in transformations in data processes, management structure, and the way work gets done (Drucker, 1988). The information systems function, once viewed as peripheral to the operations of the firm is now becoming central to the coordination of activities across functions within the organization as well as between organizations. Information technology and telecommunications are without question playing a more significant role in shaping corporate business strategy.

Business executives today describe global telecommunications as one of the most important issues for the decade of the 1990’s. Bill McGowan (1989) believes that the 1990’s will be recognized as the period in history when telecommunications and international business finally get their act together. By the year 2000, our definition of the word “foreign” will probably not be what it is today (IBM Update, 1990). Our communications infrastructure will likely become as significant as our transportation infrastructure (Deans et. al., 1991). We are fast moving toward the reality of a single worldwide information network capable of communicating data, voice, text or image anywhere in the world. There will clearly be added complexities and unique concerns in an international context. The obstacles will be more pronounced in some parts of the world.

Today’s corporation operates in an environment in which profound changes are taking place in the economic, political, social, and technological arenas worldwide (Hax, 1989). Managing change is a key challenge for the corporation of the future. Peter Drucker (1986) argues that the world economy “is not changing - it has already changed.” Today, it is a world economy rather than a domestic economy that leads in policy decision making for successful companies. Without question, “the success or failure of the firm of the future will take place in a global setting (Hax, 1989).” Information technology has the potential to play a significant part in shaping this outcome. Companies that strategically utilize information technology applications will likely thrive in this changing environment.

As business continues to become more global in focus, the firm’s information systems and technology will provide the means for information exchange and communication. Transnational companies continue to require more cohesion, integration, efficiency and responsiveness in their international business operations (Bartlett and Ghoshal, 1989). In response, they are turning to the information systems function and telecommunications capabilities as a means for managing the complexity and rapid change in an international business environment. Reich (1991) describes large international firms and national economies as “global webs.” He suggests that flows of knowledge, money and products across national borders will eventually become commonplace and distinctions between national economies will continue to fade. Business will increasingly be conducted through electronic means recognizing no geographical boundaries (McGowan, 1989). From the perspective of the business community, the relevance of this linkage between international business and information systems cannot be overemphasized. It is imperative that the IS research focus be broadened to incorporate the unique issues and added complexities posed by operating in an international business environment.

The Information Systems / International Business Linkage

Information systems and international business (IB) both have their roots in the field of management. International business is recognized by Robock and Simmonds (1983) as a component of management training that “deals with business transactions that cross national boundaries, whether they be movement of goods, services, capital or personnel; transfers of technology, information or data; or even the supervision of employees.” In a similar manner, management information systems evolved as a distinct dimension of management study (Dickson, et. al., 1982) for the purpose of addressing unique issues associated with the development of information systems and the increased importance of information to the corporation.

The international business field is recognized as having both a unique core component as well as an international dimension of all the functional business areas. The eclectic nature of the field has been a source