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THE IS CORE - III THE CORE DOMAIN DEBATE AND THE INTERNATIONAL BUSINESS DISCIPLINE: A COMPARISON

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Abstract

This paper raises questions for the IS community that contribute to the ongoing debate of defining the core properties and unique identity of the information systems field. The international business (IB) discipline encountered similar problems in its journey to establish its own unique identity. The paper investigates the ongoing debate and solutions for the IB discipline to obtain insights and lessons learned that may be helpful to IS academicians as we continue the same debate for the IS field.

Keywords: IS discipline, IB discipline, research domain, information systems, theory.

I. INTRODUCTION

The struggle to define the boundaries for a field of study and research domain is not unique to the Information Systems (IS) field. The purpose of this paper is not an attempt to define the core domain for the IS field or to propose a research framework that sets forth a set of criteria and proposed boundaries for the body of knowledge that emerges from this discipline. Rather, the purpose of this paper is to extend the dialog as the IS academic community continues to search for answers and direction at a time that is described by Benbasat and Zmud [2003] as an "identity crisis". Similar debates surfaced for other disciplines with eclectic properties and domains that are pervasive throughout the other functional dimensions of business and organizations. In particular, the International Business (IB) discipline underwent similar debates and also suffers from an identity crisis. As the international business environment continues to change, new issues are presented to the field and the debate continues. The same is true for the IS field. The role of information technology evolved over time from a support role to that of playing a central role in core operations and core strategy. This evolving role opens the door to more research questions and opportunities to explore phenomena that are, according to Benbasat and Zmud [2003], as "distantly associated with IT-based systems."

The emergence of electronic commerce further complicated the issue for the IS field. The transformation to digitized information flows and web-based systems have taken place. It can be argued, however, that e-business belongs to all disciplines of business. Since e-commerce was initially highly dependent on technology, it became associated with the IS field. These trends

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contributed to the “identity crisis” and overemphasis on research that is not intimately associated with traditional IT-based systems.

Alter [2003] argues for a broad definition of the field that would encompass most of the current diversity of research under the umbrella of “systems in organizations.” Although he gives a compelling argument, it can still be argued that the systems approach is not broad enough to encompass all the behavioral, managerial, strategic, and functionally related IT interests. Defining a broad core for the purpose of encompassing eclectic research can be dangerous to the field.

A need to define the IS domain is clear. What distinguishes the field and sets it apart as a unique entity with a clear identity? How that core will be defined is still to be discussed and determined. Sub-domains that intersect with other academic disciplines may also be defined. Research outlets are currently available that address areas that intersect with other academic disciplines. Publishing outlets might be established that fill current gaps and would be owned by the IS discipline.

Much work is ahead as the IS community comes to grips with these issues. As we move forward with this discussion, the following question might help shed some light on the debate: Are there lessons we might learn from other disciplines? In this paper the international business field is used as a comparable field to investigate. Although it might also be helpful to study these issues from the perspective of other disciplines such as marketing or accounting, international business is the one most similar to the IS field in terms of the problems and issues an eclectic interdisciplinary field encounters.

II. SIMILARITIES BETWEEN IS AND IB

Both information systems and international business are rooted in the management field. Roebuck and Simmonds [1983] are credited with a formal definition of international business 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 the supervision of personnel.”

In a like manner, Dickson, et al. [1982] describe information systems as a distinct dimension of management study for the purpose of addressing unique issues associated with information systems development in corporations.

The historical development of both information systems and international business progressed through similar paths. Both fields are eclectic and recognize several reference disciplines, thus making it more difficult to define domain boundaries. The interdisciplinary nature is a common characteristic of both disciplines since they each represent integral components of the functional areas of business. The international business discipline, for example, includes well defined sub-domains including international marketing, international finance, international human resources, and international information systems to name a few. IB cuts across every functional dimension of the organization. Likewise, IS cuts across every functional dimension in the firm including marketing information systems, financial information systems, human resource information systems, and international information systems. The problem that arises in both areas is in defining the core that uniquely identifies the discipline apart from its integral components.

The IB discipline defines its core domain through its definition of international business research. A well defined domain is necessary to evaluate the relevance of theory and empirical contributions to the evolving body of knowledge. In the process of development, the discipline establishes credibility in the academic community.

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The definition of international business research that has been recognized by IB scholars for approximately 30 years now is credited to Nehrt, Truitt, and Wright [1970]:

IB research involves scholarly investigation that meets the following criteria:

1. It is concerned with firm-level business activity that crosses national boundaries or is conducted in a location other than the firm's home country.
2. It is concerned with the interrelationship between the operations of the business firm and international or foreign environments in which the firm operates.
3. It does not include studies devoted to economic development, development planning, foreign trade, and the international monetary system, which belong to developmental and international economics. Excluded also are studies of foreign legal, political, economic and social environments. These belong to the fields of law, political science, economics and behavioral science unless the study itself relates the environment directly to the organizational, operational, or decision-making problems of international business firms.
4. It does not include studies of business activities in given foreign countries. A study of marketing channels in Turkey, whether it be done by a U.S., French, or Turkish professor, is still a study about domestic business in Turkey.
5. As an exception to point 4, however, *comparative* business studies are included within this definition. For example, a study of pharmaceutical marketing channels in Germany, Italy, Brazil, and Japan which makes comparisons and analyzes the causes and effects of similarities and differences, would be considered international business research even though it is not concerned with the relationship between the marketing channels within each country and international business firms.

In this definition, the multinational enterprise (MNE) is explicitly recognized as the primary focus of IB research in the context of operating in multiple environments. It is important to note that a study of an international environment that excludes the MNE is not considered to be within the IB research domain. Comparative studies are part of the IB research domain while one country studies are considered to be domestic studies regardless of the country or origin of the researcher. This definition is recognized by the Academy of International Business (AIB), the primary organization for IB academicians. Scholars publishing research studies that integrate with other functional dimensions may publish in the international business literature as long as it meets the criteria and/or in the functional domain body of literature.

The purpose of providing this definition and subsequent discussion is primarily to provide an example of how a research domain was defined by another similar discipline and to raise the question as to whether a formal definition of IS research is warranted. Scholars may view a formal definition as too limiting or it may be viewed as providing the needed guidance to the research community.

Although the IB field established a defined core, much debate went on over the years among IB scholars as to the nature, scope and issues of relevance to the field. This debate continues today. At the most recent meeting of the Academy of International Business in Monterrey, California in July 2003, a major focus of the discussion centered on defining or redefining the research domain. Much of the focus was on broadening the domain to include a wider area of interests and to include ideas that are perceived as new or not necessarily fitting with the traditional research streams. This view is similar to the purpose of the CAIS for IS scholars. There is a need for an outlet to address avenues of scholarly communication that do not fit the traditional paths. An analysis of the IB research over time showed a clear trend in recent years toward strategy focused research. Not as much work was being done in areas that were previously well represented. This analysis had not been done for several years. It shows the need to monitor the research directions and interests of scholars on an ongoing basis and the value of using quantitative methods.

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International Business is a more advanced field of study than the IS field. The field of IB traces its origins shortly after World War II. The period between the late 60's and 1975 is identified by Dickson [1981] as the "take off" period for the IS field. Since 1975 the IS field matured and changed but is far from complete. The IB field also developed a stronger theoretical base but this growth is probably due to its more mature status. All theory developed in the IB field, however, did not stand the test of time. A core set of theories evolved over time to explain foreign direct investment (FDI) and the behavior of the multinational enterprise (MNE). Foundation theories include the Hymer [1960]– Kindelberger [1969] Tradition that provides the core theoretical explanation of foreign direct investment. Aliber's Currency Area Phenomena [1970 -71] represents a variation of the Hymer-Kindelberger view. In addition, Aharoni [1971] takes a behavioral approach to explaining FDI. Other well developed theories include Vernon's Product Life Cycle [1966, 1979] and Denning's Eclectic Theory [1972, 1978, 1980].

This diversity of theories is to some degree a result of differences in views as to the domain of international business. Each theory has its limitations and possible criticisms that are debated in the literature. The purpose of this discussion is not to review international business theory but to recognize that the IB literature contains a set of theories that are well known by scholars in the field.

IB research is also generally recognized as more complex than research in the domestic setting. From a methodological perspective, a majority of problems are in data collection. Cultural values, language issues, and the high cost of collecting quality data are but a few of the complexities. Multi-country, cross-cultural research designs are also more complicated. In addition, Berhman [1992] argues that the IB field can appropriately borrow methodologies from any discipline. Since its beginnings, the IB field attracted scholars from many disciplines. This diversity is seen as both a strength and a difficulty for systematic integration of research findings. The IS field encountered similar difficulties.

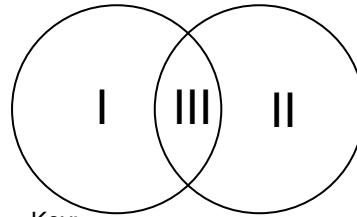
Interdisciplinary research is strongly supported by the IB academic community [Dunning, 1989, Daniels, 1991]. Dunning [1992] stresses the importance of core disciplines working together because it is the only way to achieve a holistic view of international business. Likewise, Daniels advocates the importance of interdisciplinary research to address cross-functional issues of IB research. In particular, he suggests linkages through connections between past and present research, collaboration with scholars in other countries, and cooperation between international and non-international specialists. These endeavors are advocated as ways to add richness to the research agenda. The IS discipline, likewise, is enhanced by interdisciplinary research.

III. INTERDISCIPLINARY RESEARCH

Attempts were made to define a research stream for particular areas of interdisciplinary research. In most cases, these efforts were not very successful. The research that develops tends to be fragmented with little integration or theoretical underpinnings. Using the research interface between IB and IS as an example, much work by IS scholars addresses the international dimensions of IS. However, the research stream that emerged is ad hoc and does not build on previous work. Deans and Ricks [1993] identified a research domain and research agenda for scholars interested in the research domain that lies at the intersection of IB and IS (Figure 1). In a like manner, interdisciplinary work can be defined for other functional areas and academic disciplines. The intersection of research between IB and the functional dimensions developed over a period of years. Likewise, the intersection of work between IS and the functional dimensions developed over time but with no formal foundation or research direction. The intersection that addresses research that cuts across IB, IS, and a functional area may represent areas ripe for investigation. However, previous research that may be used to build theory or empirical foundations is dispersed in a variety of locations and across several disciplines. Figure 2 shows this area of research. This lack of coordination and well defined research streams leaves

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the scholar with little direction. Other disciplines likely face similar problems when addressing issues of interdisciplinary research that cut across several disciplines.

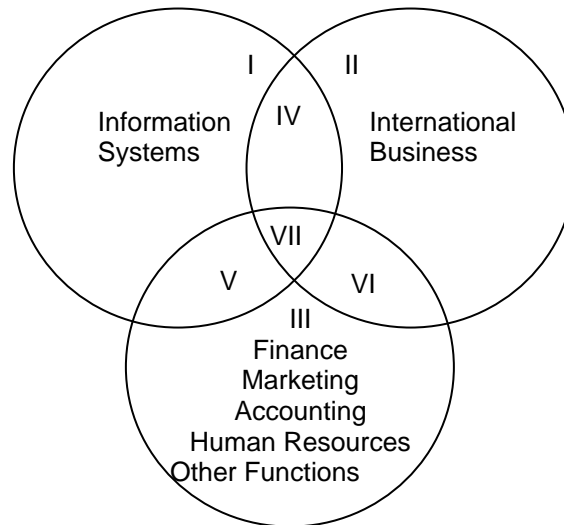


Key:

- I: Information Systems (IS)
- II: International Business (IB)
- III: Interface IS / IB

Source: Deans and Ricks [1993]

Figure 1. Information Systems/International Business Research Interface



Key:

- I. Information Systems (IS)
- II. International Business (IB)
- III. Functional Area
- IV. IS/IB Interface
- V. IS/Functional Area Interface
- VI. IB/Functional Area Interface
- VII. IS/IB/Functional Area Interface

Source: Deans and Ricks [1993]

Figure 2. Intersection with Functional Areas

IV. CONCLUSIONS AND QUESTIONS FOR THE IS FIELD

To address the questions raised by Benbasat and Zmud [2003] and the issues raised in response by Alter [2003], additional questions need to be answered. These questions arise from some of the lessons learned from evaluating similar crisis points from the perspective of the international business discipline.

Some of these questions include the following:

1. How do IS academicians describe the theoretical foundations of the IS field that should provide guidance to the relevance of empirical studies and appropriate research activity? Have theories developed that help define the core properties of the field?
2. How do IS academicians describe the theoretical foundations of the IS field that should provide guidance to the relevance of empirical studies and appropriate research activity? Have theories developed that help define the core properties of the field?
3. Is there a current clear definition of the IS field that stood the test of time and weathered tremendous change in a field with only 30 years of existence?
4. Is there a clear definition of IS research boundaries and supporting domains?
5. What methodologies evolved as appropriate to the IS field?
6. Are both scholarly and practical works considered important? Are there theoretical foundations from which to launch practical research studies?
7. How is interdisciplinary research viewed by the IS academic community? What are the appropriate outlets for publication?

Although most of these questions were answered implicitly, perhaps it is time to revisit some of these questions in a more formal format. As we continue to discuss the core properties and identity of the IS field, it seems only appropriate that the above questions become part of that ongoing dialog. Identification of a core domain may then lead to identification of sub-domains that intersect with other academic disciplines and provide guidance to the IS scholar/educator.

Editor's Note: This article is the third in the series titled *The IS Core*. At the time of publication, the papers in this CAIS series included Articles 31 through 41 and the editorial in Article 42. These articles were motivated by Benbasat and Zmud [2003] in the MIS Quarterly and by Article 30 [Alter 2003] in this journal. The article was received on September 16, 2003 and was published on November 24, 2003.

REFERENCES

- Alter, S. (2003). "Sidestepping the IT Artifact, Scrapping the IS Silo, and Laying Claim to "Systems in Organizations," *Communications of the AIS* (12)30.
- Behrman, J. (1992). *Perspectives on International Business: Theory, Research and Institutional Arrangements*, Columbia, SC: University of South Carolina.
- Benbasat, I. and Zmud, R. (2003). "The Identity Crisis Within the IS Discipline: Defining and Communicating the Discipline's Core Properties," *MIS-Q*, 27(2) pp. 183-194.
- Daniels, J. (1991). "Relevance in International Business Research: A Need for More Linkages," *Journal of International Business Research*, 22 (2): 177-186.
- Deans, C and Ricks, D. (1993). "An Agenda for Research Linking Information Systems and International Business: Theory, Methodology and Application, *Journal of Global Information Management*, pp.6-19.
- The IS Core – III: The Core Domain Debate and the International Business Discipline: A Comparison by C. Deans

- Denning, J. (1989). "The Study of International Business: A Plea for a More Interdisciplinary Approach", *Journal of International Business Studies*, 20(3): 411-436.
- Dickson, G. (1981). "Management Information Systems: Evolution and Status," *Advances in Computers*, 20:1-27.
- Dickson, G, Benbasat, I. And King, W. (1982). The MIS Area: Problems, Challenges and Opportunities, *Data Base*, 14(1),: 7-12.
- Nehrt, L., Truitt, J. and Wright. R. (1970). *International Business Research: Past, Present, Future*. Bloomington, IN: Indiana Graduate School of Business.
- Roboch, S. and Simmonds, K. (1983). *International Business and the Multinational Enterprise*, Illinois: Irwin

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Candace Deans joined the faculty of the Robins School of Business, University of Richmond in 2002. Prior to that she was on the faculty at Thunderbird – The American Graduate School of International Management (1993-2002) and Wake Forest University (1989-1993). She received her Ph.D. degree from the University of South Carolina in 1989. Other degrees include MBA – East Carolina Univeristy, M.Ed. – North Carolina State Univeristy, M.L.S. – University of Arizona, and B.S. – Univeristy of North Carolina – Chapel Hill. Her research interests center on international issues of information technology management and information strategy. She is the author of six books and numerous articles on this topic.

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