The Current Status of the IS Discipline: A Survey of American and International Business Schools

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Questions of IS's status as an academic discipline have been debated within and outside the IS community since the inception of the field. Strangely, members of the IS community find ourselves asking those same questions as did our peers some 25 years ago. The community has answered critical questions relating to reference disciplines, dependent variables, and the building of a cumulative tradition. Yet we are still grappling with such issues as our status in relation to and interaction with other disciplines, IS practice in the business environment, the role of IS in business school curricula - and in some cases the survival of IS departments - and a new issue, our place in the developing international business arena. This study surveyed over 1,000 business school deans and IS department heads in the United States and over 50 overseas countries to determine the current status of the IS discipline. The survey queried respondents concerning the status of IS curricula and research issues in their institutions. Analysis indicates that differences exist between academic methodology in North American and International institutions in both curriculum and philosophical approaches to degree requirements. Universally, IS scholars believed that the future of IS as an academic discipline is more certain than in the field's early years, although there is a wide range of opinions as to the optimum areas for academic exploration.

During the first ICIS convention in 1980, Peter Keen posed questions that have helped define the field of information systems (IS). Interestingly, IS scholars are today pondering some of the same questions proposed in 1980 and are additionally attempting to assess the field's academic status, both current and future. Bill King, in his solicitation for members in the newly founded Association for Information Systems, noted that the academic community, particularly deans, does not recognize the importance of the IS discipline. Many IS departments and faculty members are concerned about the perceived status of IS given the current situation of declining enrollments, budgetary pressures, and the lack of inclusion of IS in the new American Assembly of Collegiate Schools of Business (AACSB) standards for core education. As a result, programs are being adapted to meet changing market demand and produce students who better meet the needs of the dynamic global environment -- a world where all national economies depend on global markets, material sources, and production.

In his keynote address to the first annual Association for Information Systems, Thomas Davenport suggested that the IS discipline is at a crossroads. He stated that the IS academic community is no longer society's cognitive authority on IS topics and that we must reorient ourselves and our programs. Our research should influence practice while focusing on information and how it is used. Our academic programs fail to be responsive to the business community which we serve and currently suffer from narrow focus, are insufficiently cross functional, and topics are in decline by the time they are administratively acceptable. Lee, Trauth, and Farwell (1995) surveyed IS professionals and discerned that current IS curricula in many universities are not aligned with
business needs and that the concept of a generic IS curriculum is obsolete. Before any organization can determine its future course, it must assess its current strengths and weaknesses. This study seeks to investigate the current state of the IS discipline while assessing issues critical to its continued success. To assess the current status of our discipline, over 1,000 IS department heads were surveyed to answer basic questions about the discipline. The resulting descriptive study is organized as follows. The first section describes changes in business school programs and cites literature illustrating changing demands on IS graduates. The next section describes the sample frame and the development of the survey instrument. Section three reviews the first portion of the survey. This descriptive discussion analyzes the responses of the sample with regard to the current state of IS curricula, highlighting department makeup, IS infusion, course offerings, and special requirements such as internships. The role of IS departments in various institutions and perceptions of the current status of IS as an academic discipline are also investigated. Section four examines the current state of IS research and analyzes opinions of IS' future as an academic discipline. Respondents discuss major obstacles facing faculty with regard to conducting IS research and speculate about factors that will contribute to change, the future directions and research opportunities of IS, and the most likely areas for specific IS and cross-disciplinary research.

Background

Information systems as an academic discipline has been inspired by practitioners whose field has been driven by technical changes. The rate of technical change has made it difficult for practitioners to maintain the currency of their systems and has increased their reliance on academia for a pool of highly trained professionals. Academic programs are also strained as the demands to update programs, improve facilities, link with industry, and place graduates increase during times of diminished resources. During the mainframe era, IS and computer science departments produced programmers—technical experts whose management and interpersonal skills were of secondary importance to their technical skills. The widespread introduction of the personal computer (PC) into business introduced the begins of a series of changes in IS education which continues today. Dickson, Benbasat, and King (1980) suggested that the basic challenge is providing rigorous and effective academic programs which will produce people who fill the need of the market place and that these needs are best filled by information system programs rather than computer science programs. Dickson et al. (1980) pointed out that IS programs of that day produced a diversified product, from "programmers" to computer-oriented management scientists to information analysts.

As PCs became a tool of business, the management and interpersonal skills of IS graduates became more important, but it was not until the late 1980s, with the expansion of corporate-wide networking and the use of information systems for competitive advantage that the strategic role of IS and the importance of the CIO became recognized. Graduates of IS programs were no longer cloistered to basements and back rooms, instead they interacted with all elements of corporations. These changes challenged academic IS programs to incorporate more "business" oriented courses into what in the past had been technical curricula. Effective IS managers are becoming more management oriented and the role of the chief information officer (CIO) has become more of a consensus builder and communicator than technical expert (Freeman, 1994; Synott, 1987). The CIO is increasingly being brought into early discussions about many critical issues facing the organization, but historically IS senior professionals emphasized technology over business needs (Emory, 1989). Curiously, a recent survey of mid-level IS professionals, rated "technical" aspects of IS education more important than "business" aspects (Richards and Pelly, 1994).

The academic environment today is as dynamic and precarious as that of the practitioner's world. Business schools of all sizes are faced with flagging interest in business, declining enrollments (AACSB, 1994; Cale et al., 1991), and budget pressures. As a result, many business schools are examining their programs and revising departments and curricula to meet changing demands. "Business schools are tackling the problem in a variety of ways. Strategies include developing special advising programs for incoming students; creating courses, minors and majors with the cooperation of other academic units; and completely redesigning existing programs to make them more relevant to the career needs of today's students." (AACSB, 1994).

At the AACSB National Conference in 1993, Alan Bailey, AACSB President, suggested that curriculum elements should have set goals and that the objectives of students should reflect those goals. Additionally, universities should provide services, including collective responsibility for learning, to support the students and the program goals. Several universities, including Indiana University and the University of Central Florida (UCF), have adapted their programs to reflect perceived student and potential employer objectives. These programs have their foundations in integral student competencies. For instance, UCF's foundation is built upon teamwork, communication, creativity, and adapting to change. This program has extended its reach by enlisting corporate partners such as Walt Disney World, General Mills, and AT&T (AACSB, 1994).

Today, IS programs are again being challenged by technology-driven change. The growth of the Internet, and its incorporation into business methods, is changing the way business operates. These changes combined with increased scrutiny of academic budgets is causing a reassessment of many programs. The goal of this research is to understand the