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SHOULD THE CORE INFORMATION SYSTEMS CURRICULUM BE STRUCTURED AROUND A FUNDAMENTAL QUESTION?

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Overview

This panel will discuss and debate whether the core Information Systems course in a business school should be structured around one central, fundamental question, and if so, what are the competing alternatives for this question. A recent Association to Advance Collegiate Schools of Business (AACSB) report strongly recommends including IT as part of the MBA core education. But there is little consensus at the current time on whether this core education should address a fundamental question, and if so, what the question should be. Moreover, a substantial fraction of leading MBA programs do not have an IS core course. The current situation is especially striking for the following reasons:

• Information technology continues to be both a major factor in productivity as well as the major driver of changes in industry structure and business models
• There is evidence of significant variance in the performance of companies based on how they use information technology
• Knowledge about how systems work and how they enable commerce is becoming increasingly important for people in their careers
• Using and managing systems as an executive requires a clear understanding of the possibilities that are enabled by information technologies in markets and organizations, as well as an appreciation of the risks and time scales associated with management of technology projects and personnel

At New York University's Stern School of Business, there is a belief that a successful core MBA course answers a fundamental question, and successive questions flow from this first question so that the course proceeds from a big idea and is not just a selection of topics. The following are representative questions for core courses in other disciplines:

• Finance: How do you price assets and assess their risk?
• Economics: Why are some countries rich and others poor?
• Marketing: How do you profitably find and develop customers?
• Operations: How do you choose and implement the right business process?

The Core Question in IS Business Education

A candidate central question focusing on our discipline, similar in spirit and brevity to the set above that has been proposed by the IS group at NYU is:
Information Systems: Why do some organizations succeed with their information technology investments while others do not?\(^1\)

The answers to the above question depend on a number of factors, and the following three seem to cover a large number of situations over the last few years:

- Whether managers adequately appreciate that a market has been transformed (or is being transformed) by information technology
- Whether managers adequately understand the enabling potential of information systems, and can effectively facilitate the implementation of systems that realize this potential
- Whether managers invest in and manage their IT infrastructure properly

This “NYU question” was discussed informally at a recent IS teaching workshop organized by Haim Mendelson at Stanford in March 2004, and the prospect of structuring the core IS curriculum around it raises many issues. First, the nature of the IS field may not lend itself to a single core question. Rather, it may be more natural (and effective) to base a core course on a selection of topics. Second, the question proposed above has been criticized as being self-referential—that is, it refers to information technology in its definition, unlike the other candidate questions. This may be a problem intrinsic to a field defined around a specific technology, or it may simply be a flaw in the statement of the proposed core question. Third, the effective use of information systems is implicit in all of the core questions from other disciplines. It has been suggested that, rather than running an independent core course, IS departments might design IT-intensive modules that can be infused into other courses. If IS does not do this, these disciplines may well do this themselves. Fourth, many schools have a “choose one course from a menu of IS electives” option rather than a required cohesive IS core course. Apart from being a pragmatic strategy, this precludes the need for a single core question, but it is not clear whether this is a pedagogically sound alternative for IS education in business.

**Format of the Panel**

The panel will proceed in three stages.

1. The panel chairs will spend 10 minutes providing the background that led to the panel, will state the central question, and will argue why it is an appropriate core question for information systems.

2. Each panelist will spend 10 minutes presenting his or her views supporting the proposed question, providing an alternative question that is more appropriate, or refuting the need for a fundamental question. Under the current plan of the panel, there will be at least one panelist who takes each of these three points of view.

3. In the final 30 minutes, the audience will be invited to ask questions that lead to further discussion and debating of the ideas presented by the panelists and panel chairs.

The output from this panel will be edited and published as a paper in an Information Systems journal.

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\(^1\) Shorter though less precise formulations might be “How do you make your IT investments successful?” or “What makes an organization’s IT investments successful?”