

Economics of information Goods: An interdisciplinary Subject for the Library and Information Science and MBA Curricula

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The study of information is not exclusive to Library and Information Science (LIS) curricula any longer. Graduate schools of management and business have also incorporated some information-related courses such as management information systems and electronic business. The present research aims to explore the attitudes of LIS and business/management students, lecturers, and practitioners regarding the possibility of incorporating a course on the economics of information goods into the respective curricula. The current study shows that the overall attitude scores for various information-related subjects are high in both communities, information science and business, and by all stakeholders, lecturers, students, and professionals. Information Management and Search Skills generated more positive attitudes than the other topics. A deep learning strategy characterized master's students from both schools and was associated with higher overall attitudes scores as well as high attitude scores for information economics. We recommend that both LIS and MBA master's programs will expand to include economics of information goods in the curriculum.

Introduction

Most Library and Information Science (LIS) programs prepare students mainly for fulfilling traditional information tasks such as indexing, retrieval and library management (Crosby, 1999; Hill, 1999; Tenopir, 2004). The LIS profession, and with it LIS education, must respond to the fundamental changes in the information world brought by rapid advances in technology and by the rise of the information society in conjunction with the information economy. The study of information is not exclusive to LIS curricula. Graduate schools of management and business have also incorporated some information-related courses such as management information systems and electronic business. The present research aims to explore the attitudes of LIS and business/management students, lecturers, and practitioners regarding the possibility of incorporating a course on the economics of information goods into the respective curricula.

Changes in the Information Landscape and Information Education

The advance of the information society enhances the importance of the information economy (Durrance, 2004; Van House & Sutton, 1996), an economy where information is a key input, intermediate, and product of many, perhaps most, organizations. This environmental change raises the

significance of the perception of information as an economic strategic asset; its acquisition and control are a source of organizational power and competitive advantage (Myburgh, 2004; Pfeffer, 1993; Senge, 1990).

LIS programs provide traditional training while also trying to accommodate the rapidly changing information landscape. Recently the Kaliper Report (2000) found active movements towards a change in the education of information professionals for libraries and other information environments (Durrance, 2004). Some of the trends identified in the Kaliper report are explained below:

The first trend represents the idea that by the end of the 20th century, LIS education began the change from a library-focus model to an information-focus paradigm.

Another trend addresses two related areas: increased user-centeredness and increased interdisciplinarity. Certain LIS programs focus on the users: individuals, groups or societies and offer courses in information seeking and use, user interaction with information systems etc. Other LIS programs include multidisciplinary perspectives such as: information technologies, information systems, human information behavior and more. The third trend stresses the notion that LIS programs are increasing the investment and infusion of Information Technology into their curricula.

Professional information managers have traditionally monopolized whole areas of information work, especially those in the area of information retrieval. Since the 1990s it has become apparent that LIS training no longer automatically guarantees students the first pick of all work opportunities in the field of information work (Theakston, 2000). The role of information in creating power and wealth is now attracting the attention of various programs such as: computer science, business schools, communications and schools of library and information science (Rehman, 2000). Graduates of these programs enter careers in business, industry, libraries, educational institutions and more (Wallace, 1994). The LIS profession and education are facing new competition (Van House & Sutton, 1996). Examining various LIS programs during the past decade reveals that many have introduced new courses into their curricula such as: social context of information technology, changes in use and user behavior, human machine interactions and information technology, economics of information goods, communication skills, information policy and information brokering (Hwey & Kehoe, 1997; Rehman, 2000; Theakston, 2000).

Economics of Information Goods

The past twenty years have seen a growing body of academic research about the value of information and about the unique characteristics of information as an economic good (Ahituv, 1989; Bates, 1989; Levitan, 1982; Raban & Rafaeli, 2006; Repo, 1989; Shapiro & Varian, 1999).

The unique characteristics of information as an economic entity are:

1. Information can be a public good, a private good, or a hybrid good (S. Rafaeli & Raban, 2005).
2. Depending on the type of good, public, private, or hybrid, the value of information may increase or decrease as a function of availability.

3. Information is an experience good. The value of information is revealed only after use (Shapiro & Varian, 1999).
4. The value of information is largely subjective (Ahituv, 1989; Sheizaf Rafaeli & Raban, 2003).
5. Information is transferred mostly by copying, therefore, ownership rights do not, or at least should not, pose a problem (Bates, 1989; Cleveland, 1982).

The value of information is one of the more difficult ideas to conceptualize. Researchers have analyzed this concept in a variety of ways, each complementing the other and increasing the complexity of this concept. Information can be a commodity, a product, a service, and an experience (Pine & Gilmore, 1999) with value increasing along this continuum. Seeing the complete picture of the multitude of information forms, the various values assigned to them, the marketing methods, and the diversity and incompleteness of measurement methods is a formidable task for anyone, and even more so for people whose interests and responsibilities lie elsewhere.

Learning strategies: deep and surface

Learning processes can be based on Biggs' teaching- learning model (Biggs, 1993). Biggs suggested that a student's approach towards the learning process is a combination of the motivation and the strategy that he or she adopts during the learning process. In the present research we distinguish between 'deep' and 'surface' learning approaches, terms first coined by Marton and Saljo (Marton & Saljo, 1976, 1976b). These researchers distinguished between the deep and the surface learning strategies on the basis of qualitative analysis they performed in order to define the differences in the students' approaches toward written texts.

One of the groups that participated in our study included students from two populations: Graduate School of Management and Department of Information Science. Exploring their learning strategies may help to inform motivations for attitudes and perceptions of information economics and information usage patterns revealed in our research.

Research Goals

The present research set out to explore the following hypotheses:

- H1:** There is a significant difference in the attitudes towards information-related subject areas between students, lecturers, and information professionals.
- H2:** There is a significant difference in the attitudes towards information economics in two different curricula: a business school and an information studies curriculum.
- H3:** There is a significant difference in the attitudes towards information economics between two practitioner sub-groups, academic librarians and information professionals from the business/industry sector.
- H4:** A deep learning strategy is associated with higher attitude scores towards information-related subject areas among students than a surface learning strategy
- H5:** A deep learning strategy is associated with higher attitudes scores towards information economics among students than a surface learning strategy.

Method

The research was conducted in the first semester of the academic year 2005-6. We administered questionnaires to three main groups of stakeholders: lecturers, students, practitioners. The students and practitioners groups were further divided into two sub-groups each. Practitioners were divided to academic librarians (31) and information professionals (28) working in business and industry. Students were divided into information studies (44) and business school (50) sub-groups. Lecturers were divided to information studies (25) and business school (12) sub-groups. The students, lecturers, and librarians were from two different universities in Israel. The students were randomly selected.

We used the following research tools: a personal details questionnaire, a discipline attitude questionnaire a motivation for studying information economics questionnaire (this instrument was only used for the students), and a learning strategies questionnaire (this instrument was only used for the students).

Results and Discussion

The present study shows that the overall attitude scores for various information-related subjects are high in both communities, information science and business, and by all stakeholders, lecturers, students, and professionals (Tables 1-2 below). This is unexpected because we believed that business majors would value more business and management oriented topics compared to information studies students whom we expected to prefer more search-related or technical topics. These results may explain a tendency towards a change and openness in the information landscape and especially within the LIS education towards new information-related areas.

Table 1: t-test results for mean attitudes towards information economics.

Test Group	N	Mean	t value	Sig.
Students	44 business*	3.88	2.10	0.04
	43 information*	3.59		
Staff	12 business	3.73	-0.34	0.77, n.s.
	22 information	3.82		
Staff+Students	56 business	3.85	1.49	0.14, n.s.
	65 information	3.67		

* "business" stands for the business school curriculum; "information" stands for the information studies curriculum

Table 2: Mean scores for each factor for the entire student group and for the business and information studies sub-groups (standard deviation in parentheses).

	All Students (N=87)	Information Studies Students (N=43)	Business School Students (N=44)
InfoEcon	3.74 (0.65)	3.59 (0.56)	3.88 (0.70)
CI	3.93 (0.59)	3.95 (0.62)	3.92 (0.56)
InfoMgmt	4.07 (0.68)	4.29 (0.57)	3.86 (0.70)
Search	4.33 (0.77)	4.69 (0.55)	3.99 (0.80)
MBA	3.87 (0.62)	3.92 (0.59)	3.83 (0.64)
Overall Questionnaire A	3.96 (0.43)	4.03 (0.37)	3.88 (0.48)
Deep Strategy	3.37 (0.57)	3.35 (0.60)	3.39 (0.54)
Surface Strategy	2.11 (0.54)	2.10 (0.59)	2.12 (0.48)

Information Management and Search Skills generated more positive attitudes than the other topics. This result points toward a definite desire by all stakeholders to learn more in areas that seem more practical and less academic. Possibly the current environment of accelerated development of search technologies and search companies (Google, Yahoo, MSN) draws more attention to these particular areas. The finding about Information Management may reflect a tendency among the three groups to change the landscape of traditional roles and titles associated with librarians and information specialists.

A deep learning strategy characterized students from both schools and was associated with higher attitude scores for information economics (Table 3). This result is not surprising as some of the deep learners' characteristics reflect the ability to reach a complete understanding of the subject matter, to study different aspects of the material in order to obtain the entire picture. (Beishuizen & Stoutjesdijk, 1999; Biggs, 1993; Entwistle, 1997).

To sum up, we would like to recommend that both LIS and MBA master's programs will expand to include information economics in the curriculum. The results of our present study portray master's students as deep learners, therefore, they would welcome a broader professional horizon in the curricula as they understand the importance of this unique subject.

Table 3: correlation coefficients between attitudes to subject areas learning strategies for the entire student group (N=90).

	Overall	InfoEcon	CI	InfoMgmt	Search	MBA
Deep Strategy	0.20 (n.s.)	0.25*	0.01 (n.s.)	-0.02 (n.s.)	-0.02 (n.s.)	0.37**
Surface Strategy	-0.27*	-0.14 (n.s.)	-0.18 (n.s.)	-0.23*	-0.25*	-0.20 (n.s.)

* Correlation is significant at the 0.05 level (2-tailed).

** Correlation is significant at the 0.05 level (2-tailed).

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