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MEETING THE NEED FOR E-COMMERCE AND E-BUSINESS EDUCATION: CREATING A GLOBAL ELECTRONIC COMMERCE CONCENTRATION IN THE MASTERS OF BUSINESS ADMINISTRATION (MBA) PROGRAM [CASE STUDY]

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ABSTRACT

This case describes a problem facing many Schools of Business and Universities today and how the problem was addressed and solved at the Merrick School of Business at the University of Baltimore. Following a brief introduction, the environment and problem are described. Next the process used to develop a Global Electronic Commerce concentration is presented with the philosophy that guided the development process. Next, the characteristics embodied in the model are described and, the specific program, including course descriptions and structures are provided. Finally, a preliminary evaluation based largely on student responses is presented.

1. INTRODUCTION

Global Electronic Commerce (Business-to-Business, Business-to-Customer and Customer-to-Customer) is now growing at a phenomenal rate. Some experts predict that all businesses will be .com businesses by 2005. If you are in business you must understand what Global Electronic Commerce (GEC) is and what it is doing to your business, industry and society. There is a shift of power from the supplier to the customer-businesses must be consumer-centric. Information, not capital, is the lifeblood of GEC businesses, requiring integrated information systems to fuel the learning organization. Change is not constant; it is accelerating. New competition is constantly emerging from unforeseen areas.

This has caused growing demand for GEC education in all areas of business--information systems and technology, management, marketing, finance, organizational design, etc. [6]. As business makes its needs and demands public, students are quick to respond seeking courses and programs that provide education in GEC [10]. Government agencies are also effected in the same manner. Demand for GEC education is high and growing. It is also evolving, from the technical toward the managerial. What are Universities doing to meet this demand, this need?

There have been courses in GEC offered in many schools and departments for the last five years. In the MIS area, the first thrust was in the area of Web page design and the associated programming languages. This was rapidly followed by a variety of specialized topics -- linking of databases to the Web site, customer data

collection, catalog development and the integration of the Web page to the back office. These classes frequently focus on a specific software tool. More recently, many MIS academic units have recognized the need to provide a broad understanding of GEC to provide the context for understanding the technology and its application. In management, courses have been developed focusing on the changes in business and industry occurring because of GEC: disintermediation, partnering, government regulations, etc., and focusing on the development of e-business, both structure and strategy. In marketing, both the marketing practices and the process of marketing research have been the focus of course development.

However, GEC has certainly not been fully recognized or integrated into business programs. In most business school facilities, at this time, the interest in GEC far exceeds the knowledge of GEC. This has led to a number of recent articles critical of GEC Programs, largely taught by "marginally qualified" faculty [11]. The challenge is clear: How do you provide business students with the knowledge and skills they require to be valuable to any organization in this age of GEC? This paper describes the process and product of one such effort--the creation of a GEC concentration in the MBA program at the Merrick School of Business at the University of Baltimore.

2. THE ENVIRONMENT

E-Business and E-Commerce are growing at phenomenal rates. This has resulted in an equally growing demand for employees with knowledge in e-business and e-commerce. Students were quick to get the message and demand for e-commerce courses, concentrations and programs exploded. Academic administrators simply could not (nor should they) ignore the demand for their customers – students, and the people from both the private and public sector that employ them upon graduation.

In January 2000 the question was not whether to offer educational programs in e-commerce and e-business, the question was how. Many models existed ranging from crash courses [4], regular courses [6], concentrations [5], full degree programs [1], or even new Schools within the University [13]. U.S. businesses have been willing to support initiatives at all levels [13]. These models are not just an American phenomena. Examples are evident around the world: Korea [15], England [8], etc. Selection of a model, for any school depends on how that School and its faculty and administrators view e-commerce and e-business

One Critical question is should e-commerce and e-business be taught as a separate academic subject or as an inseparable part of the general business curriculum [9]. Another critical question is where are the competent and dedicated faculty coming from to teach these e-courses and will/can business schools provide the resources for the technology and training required keeping faculty up-to-date in the field. Further, is e-commerce and e-business simply being over-hyped. Is it a fad or a real trend? Surveys seem to show that most people believe its real and going to continue to expand and grow [3].

The many models currently being implemented in Business Schools around the world indicates that educators are not in agreement on how these questions should be answered. Ultimately each School must wrestle with these questions in the context of its internal and external environments on the road to selecting their model for coping with the new e-world. What follows is a description of how e-commerce and e-business are being handled at the Merrick School of Business, University of Baltimore.

3. THE PROCESS

Recognizing the need to provide students with the knowledge and skills required to function and succeed in the world of e-commerce and e-business, the dean's office of the graduate business school created a faculty committee--The Electronic Commerce Committee in January of 2000. The committee was charged with creating a concentration of four, three-credit-hour classes that would prepare students expecting to seek employment in e-business organizations. Since the MIS department was already offering two graduate e-commerce courses, one of its faculty was chosen to chair the committee. In order to attract able and willing faculty members to this committee, an announcement of the formation of the Electronic Commerce Committee was made to all business school faculty. Numerous individuals responded expressing interest.

Following a meeting of all interested parties, the committee was formed with membership as follows: two faculty each from the MIS and Marketing departments and one faculty each from Management, Entrepreneurship, Finance, Economics and International business departments. The committee remains open to all interested faculty.

The committee met on only two other occasions during the next three months. However numerous e-mail and e-forum exchanges occurred almost daily. The primary topics discussed were the philosophy and the structure of the concentration.

The current literature on the topic was explored and exchanged, and discussions were held with faculty at several other universities who had already begun work on similar programs. There was a lively discussion on all topics and papers, the result of which was a broader conceptualization of Global Electronic Commerce and its many facets. The results of the committee deliberations are presented in the next three sections. These results were presented to the school's curriculum committee and faculty senate where the program was approved. The Global Electronic Commerce Concentration in the Master of Business Administration program will be officially offered in the 2000-2001 academic year.

4. THE PHILOSOPHY

The philosophy described here evolved in the committee over the four months of its work and is based on the nature of the subject matter and on the nature and constraints of the university environment. It was at once obvious that such a concentration as this must be inter-disciplinary. But how inter-disciplinary, how all encompassing the concentration could and should be was not at first obvious. We knew that the MIS Department could not hold it, but we did not realize that the Business School could not hold it either. It became clear that our philosophy must be able to encompass all the relevant facets of Global Electronic Commerce, wherever they reside. The EC Institute has developed a "Body of Knowledge Schematic" that reflects the scope of e-commerce [2].

Who can/should teach this material? Our philosophy is that one should know it to teach it. But in this arena, when you teach it, you must learn more. There are few, if any, experts in Global Electronic Commerce as we see this topic. Faculty with the knowledge required to teach this material are largely self-taught, and to stay current requires extensive reading. The trick then is to find someone who has a strong interest in this field and has developed a sound knowledge base, and is willing to share what she/he knows with students, and learn with the students. Further, we believe that integrating practitioners in the classroom experience adds considerable value to the class and the learning process.

We anticipate faculty from all of the traditional disciplines in Business, and beyond, will have to deal with e-commerce and e-business in their disciplines. By forming a set of colleagues from all of these disciplines we anticipate sharing knowledge and technology between faculty that will benefit each course offering and the students.

5. THE MODEL

Our concentration in GEC cannot be closed and inflexible; it must be open and accommodating of change. Since the objective will evolve as GEC evolves, it must be a dynamic program. The concentration should be an operational prototype evolving to meet the changing needs of its users. The concentration should have these characteristics:

- Broadly based, to accommodate a variety of interests and perspectives i.e., technical, organizational, managerial, etc.
- Flexible, to accommodate changes in the subject matter and the demands of the students

- Customer-centric, focusing on the changing needs and demands of students and their prospective employers
- Cohesive but loosely coupled, to provide multiple cogent paths through the concentration
- Current, exciting and challenging, so much of the material discussed in the classes will not come from texts but from the newspapers and newscasts of the day

6. THE PROGRAM

GEC is a rapidly evolving field, crossing traditional academic disciplines; thus it is the intent of this program to keep the course content open and free to change. As faculty/departments create new courses addressing GEC in their disciplines, we would expect these courses to be added to the GEC Concentration. As technological and managerial material becomes integrated into other courses, some existing courses will change, and some may disappear. This is simply the nature of a dynamic program.

This concentration will be composed of four courses, two required and two to be chosen from an approved list of electives. The initial concentration is as follows:

6.1. Required Courses

Global Electronic Commerce: The general objectives of this course are: 1) to provide the student with an understanding of what global commerce is all about--the technologies used in conducting global commerce, the impact of electronic commerce on businesses, industry, government, and world markets and economies; 2) to understand, chiefly through hands-on experience, the technologies, standards, and protocols used in global commerce; and 3) to gain an appreciation for the major trends and evolving issues in global commerce; i.e., electronic currency, security, encryption, trust, wireless, business strategy and structure.

Internet Development for Business: This course focuses on the analysis, design, development, implementation, and maintenance of Web business sites and the uses of the Internet for business and electronic commerce. Languages (HTML, JAVA, CGI, etc.), software tools, and design techniques are taught in the course, and student teams develop a Web site for a real business in this course. Students will practice techniques for using the Internet to gather information, to obtain files concerning new products, tools and services and to assess the quality of information available on the Web.

6.2. Elective Courses

Internet Marketing: Among the objectives of this course are: be able to assess the nature of Internet marketing practices independently, be able to develop marketing plans utilizing the Internet, be able to identify and analyze Internet marketing problems and recommend changes and improvements, and understand the forces shaping the future of Internet marketing. The role of the Internet in conducting marketing research will be examined in detail.

Managerial Challenges of Global E-Commerce: This course explores the managerial challenges involved in global e-commerce. Students see what it is like to be a manager in an organization engaged in the brave new world of electronic commerce. This presents a new theoretical perspective merging the emerging theories of e-commerce and the nascent theories of organizational behavior in the digital economy. Among the central topics in this course are: new ways of living and working, new ways of organizing, the importance of vision, trust in e-commerce, and thriving on change.

The Digital Economy: (Note: this is a course from the Liberal Arts School). The primary goal of this course is to consider the ways the digital economy is creating a unique business culture and establishing (and reflecting) a network of economic values critical to the next phase of change in our technological society.

The secondary goal is to prepare the student to create and work in this new culture, to give students a sense of how they might effectively invest their time, talent and imagination in the digital economy. This course will analyze and discuss material drawn from a broad range of sources – history, economics, law, philosophy and theory and much contemporary news reporting.

Cyberspace Law Seminar: (Note: this is a course from the Law School). This is a true seminar class where students actively engage in dialogue focusing on a wide range of timely topics, concentrating on the legal aspects of topics, such as: Transactional Privacy, Taxation, Encryption, Intellectual Property, Pornography, Online Crimes, Copyright, Domain Names and Trademarks, etc. This course makes extensive use of a forum section of the class website where students are required to contribute to the substantive discussions on every topic in the course.

Other courses currently under development include:

Entrepreneurship in E-Commerce

E-Venturing

Finance in Cyberspace

ERP & Supply Chain Management

7. PRELIMINARY EVALUATION

The GEC Concentration has been offered for only one year and so any evaluation must be considered as preliminary and incomplete. The growth experienced in the two required courses does provide some tangible evidence of student interest. The introductory course, "Global Electronic Commerce", was offered, as a MIS elective, in the spring semester of 1999 for the first time. Twenty-four students enrolled. This course was next offered in the spring semester of 2000. Thirty-six students enrolled. The third offering was in the spring semester of 2001 where fifty-seven students enrolled. Next academic year this course will be offered each semester. The second required course "Internet Development for Business" was first offered in the spring semester of 1998 as a MIS elective. Twenty students were enrolled. This course experienced growth similar to the GEC course and currently has ninety-six students enrolled in three sections in the 2000-2001 academic year. The growth patterns in these two courses indicate a yearly growth of over 60%.

The elective courses have been offered for an even shorter period of time. But again, the early data indicates a growth rate for these courses at over 50% per year.

Currently, there are approximately thirty students who have declared Global Electronic Commerce as their MBA concentration. There is no way to project the ultimate impact of the GEC concentration on the MBA program from existing data. However, based on the current data it does appear that the GEC concentration will become a popular choice of the students.

A telephone survey of eight other MBA programs having a GEC component provided insufficient data to allow any direct comparison between programs. All of the programs surveyed indicate a growing demand for the GEC courses currently being offered and three programs indicated planned growth in their GEC offerings.

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