

IMPLICATIONS OF THE COMING TECHNOLOGIES ON MARKETING EDUCATION

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ABSTRACT

Advancing technologies in computers and the Internet could profoundly change business education in the future. While the pedagogical advantages of emerging technologies have been widely discussed, other implications have been largely ignored. This paper looks at some of the practical implications of modern multimedia and Internet systems and how they will change not only the classroom but the very nature of our concept of a university.

INTRODUCTION

At the 1997 AACSB Continuous Improvement Symposium, a large number of presentations dealt with using the Internet and multimedia in business schools. Most of these presentations were practical in nature, detailing the experience and giving the advice of the presenters. Very few discussed the implications of the new technologies beyond the pedagogical benefits. This is an interesting oversight, given modern computer and Internet potentials for creating immense changes in education. This paper will explore some of the problems and opportunities that could potentially change the very nature of what marketing educators do. It is a discussion of the possible futures which may await us.

DISCUSSION

The market for education is no longer what it was. The era of perpetual learning is already here. Over 40% of all U.S. adults report that they are currently in some learning program, nearly 40 million for work related purposes and another 38 million for personal enrichment. About 12 million are in a credential, degree, or certificate program. Much of this education is being conducted by business itself. In 1988, there were 400 "corporate universities;" in 1995 the number had grown to 1,000. These include the AT&T School of Business, the Motorola University, Harley Davidson University, and the Volvo University... just to name a few. Virtual universities are already a reality but are fewer in number. The University of Phoenix, Regents College, California Virtual University, and the World Lecture Hall are examples. Others on the web are looking at education as a business and have high expectations. The Sylvan Learning Systems (<http://www.educate.com>) has a stated mission of being the WORLD'S leading provider of educational services to families, schools, and industry (Mescon 1997).

About 35 U.S. business schools now offer MBA degrees partly through remote instruction. Some of

these schools are the University of Michigan, Harvard, Dartmouth, and Queen's University (Bruce 1997).

These changes will not be reversed. Multimedia and the Internet provide advantages that students and faculty want. Morrissey (1997) listed some of the advantages of these systems even at the present level of technology:

- Enhances collaborative learning, especially in decision making and case studies
- Enables more one-to-one tutorial support
- Supports course management for part time programs, such as executive programs
- Provides platforms for course development and custom publishing
- Presents course publishing opportunities
- Simplifies distribution of course material, handouts, and updates
- Provides for an expanded communication system.

These advantages already exist with emerging technologies. What will happen when the technologies become more mature and more readily accessible? What are some of the implications for the future of marketing education?

DRIVING CONCEPTS

Three concepts become paramount in the thinking that will drive the creation of "online interactive multimedia instructional materials and support systems," a term recently used in *The Journal: Technological Horizons in Education* (1997), and eventually to the ultimate virtual university.

1. Technology drives process. As an historical example, the size of farms has always been directly related to how much could be farmed with any given technology. The Midwest originally had about four farms per section; today modern farming equipment can easily plant or harvest several sections of land. While the fields now produce more than ever, abandoned farmsteads already dot the Midwestern landscape. As with any other human enterprise, if a technology exists to deliver educational service, it *will* be used.

2. One need not be physically present unless one does physical labor. Any job or learning environment that does not demand that two or more people manipulate the same physical structure in the same temporal-spatial dimension, does not have to have those people in the same place at the same time. This applies to work environments as well as

teaching and learning environments.

Part of the system necessary to fully implement this concept are already a technological reality. Putting the parts into place for its full realization is proceeding at a dizzying pace.

Programs are currently being developed that will allow two or more people to meet in a virtual space of their own choosing. The computer would create a virtual body that would duplicate the actions of a terminal operator. I, for example, could contact two colleagues anywhere in the world and agree to meet in the Taj Mahal at noon Greenwich time. At the appointed hour, my virtual body and the virtual bodies of my two colleagues would arrive at a computer-generated Taj Mahal and we could shake hands, sit down, and discuss our business, all without ever leaving our office or home. Some rather interesting classes could be conducted in the same manner. Imagine teaching marketing strategy to a class of 20 MBA students in AT&T's boardroom while at your computer in your cabin in British Columbia.

Even the above restrictions on physical work will be short-lived. It will be possible in the future to do physical work, virtually. A robotic worker could be manipulated by someone physically far away. The worker would see, hear, and feel what the robotic would, and all the motions of the worker would be fed back to the robotic worker.

3. Education.. any form, any place, any time. The demand for just-in-time education will increase in the future. Not only will this be available for on-the-job education, but also for other people who will discover that they can get not only information, but also education from resources that they already have available to them. The goal is to provide education seamlessly from cradle to grave.

POSSIBLE IMPLICATIONS FOR THE FUTURE

There is a possibility, with these emerging systems, to completely change what we now know as higher education. A continuum could be created that would reflect the degree of change from the current traditional teaching methods to a total virtual university that would have no centralized physical identity.

The following ideas are organized along this continuum. The list is only suggestive and far from being exhaustive.

1. No change from traditional system

Implications:

A. Marginal societies: This highly unlikely scenario would demand an almost complete rejection of modern technologies and the benefits that they generate. It is possible to imagine monastery-like

groups that would retain traditional education processes for philosophical or religious reasons, but these groups would be marginal at best.

2. Moderate change, but still mostly traditional

Implications:

A. Present reality: This position along the continuum is already a reality for many schools and instructors. This writer is presently teaching a class that is entirely computerized on the business school's server. All the class notes, overheads, cases, sample questions, and most videos are available to the student outside the classroom, including links to the web. Class time is spent in interactive conversations, questions, special topics, and discussion. There are no traditional lectures. Currently, one of our certificate programs is going on the ICN and will be available to students at various sites around the state. Other advantages were listed earlier in the paper.

3. Profound change, but some traditional methods retained

Implications:

A. The human element: The number of offerings and students will decrease on campus. It is, however, unlikely that in this mixed condition, the physical campus would disappear altogether. The college experience consists of more than classes and research. As an example, even with current technology, it is possible for a shopper to never leave home. A grocery store could be called up on its web site and the shopper could simply pick what she wanted, pay for it on a debit card, and have it delivered to her front door. But shopping areas have always been social areas as well. At markets, people hear the news, gossip, see what is new, and interact with others. It is possible to hear the news, gossip, and see what is new on-line, but the human social interaction is missing and consequently the social aspects of shopping and markets will probably never disappear. When discussing this paper with a colleague, he said, "I don't want my daughter to go to a virtual university. Most of the things I learned in college didn't come from the textbooks and lectures." As an alternative hypothesis, increased capability and capacity could increase the potential number of people that would have access to higher education, and thereby actually increase the enrollment of universities without decreasing the number of students on-campus.

B. Not all institutions impacted evenly. Different educational institutions exist to meet the needs of different clienteles. If another spectrum was drawn between purely vocational schools, to elite schools that exist primarily to further networking, it seems logical that they would not all be impacted equally by on-line educational services. Somewhat analogous

to the idea that one need not be physically present unless one does physical work, the degree to which a student would need to be on a campus would vary by the utility of that immediate social contact to their educational goals. Vocational schools that teach physical skills would still exist, but vocational schools that specialize in areas like business would simply disappear as a physical entity. State universities that cater to working class youth could disappear. Most likely to retain their physical campus would be private colleges, elite schools, and large universities with quality graduate programs.

C. No need for physical proximity: There is no need to be physically present unless one does physical labor. If students need not be physically present, there is no corresponding necessity for professors to be present. A professor that teaches at the University of Chicago could live in Albuquerque, or for that matter, in Tahiti.

D. A reduced need for faculty: Two professors at Harvard could theoretically teach every principles of marketing course in the United States, leading to an ultimate Harvard degree.

This seems to be a topic that everyone is aware of, but that few wish to discuss. I suspect that a declining need for professors (if it happens) and an elimination of tenure will occur hand-in-hand. What will the surplus professors do? While this question cannot be answered directly, it can be addressed in another context. If there are fewer faculty positions, there will be fewer graduate students. Even if graduate training at a physical location were deemed necessary for a graduate degree, the programs will shrink considerably in size.

E. Faculty reward: The system could reward faculty that are the most technologically competent. It would also reward the faculty that could keep abreast of technological change. The customer demands of our students may not be the same as our own perceptions and may drive constant change and adaption. This was made clear to me by my students when I asked them for suggestions on how to spend some additional moneys that we unexpectedly received, that had to be spent on student computer resources. The students said they would like us to get rid of our outdated software. "Why don't all the lab computers have Windows 98?" asked one student. "Well," I replied, "we do have Windows 95 in most of the labs." "Yes," the student replied, "but that was there when I first came here. When are you ever going to change?" To students raised in an environment of ever more rapidly changing technologies, and given the time perception of twenty year olds, three years is an eternity for a student consumer.

4. Complete change to a virtual university

Implications:

A. Academic campus not necessary: University and college campuses could become as archaic as train stations.

B. Change in talents needed to teach: The system would reward faculty that have "star" status and/or faculty that were expert at entertainment. It would be easy to imagine very well paid regional or national faculty "celebrities." This would also apply, but not as strongly, to number 3 above.

C. Cost. If classes were offered to mass audiences on-line, it would certainly affect the cost of education. Although the initial startup costs may be high, maintaining a virtual university would be much cheaper and theoretically more lucrative than a current conventional university. Suppose, for example, that one professor taught a course that was accessed by 10,000 students from the tens of millions of potential students around the world. Suppose further that the fee for the course was a very conservative \$100. This course would bring in a million dollars. The immediate costs would be the salary of one professor for a semester or term, the stipends for twenty student assistants (or salaried workers), and the share of that course's expense of the on-line services. Actually, the course could probably be taught with fewer than twenty assistants. Assignments would be sent, corrected, recorded, and returned to the student by computer. The advantages for what many people see as the business-driven and politicalized university of the future are obvious.

Many programs can now be downloaded free; other programs can be pirated. It doesn't take much imagination to see how courses could become practically free from a virtual university. Perhaps the only control the university would have would be a fee for the actual degree itself.

D. The value of a degree. It has been observed for years that higher education has different purposes for different people. For example, there are social class differences. The lower classes see education primarily as vocational. The middle classes see education as an opportunity to widen horizons, and the upper classes look upon education as a way of networking. If educational opportunities become widely available to all people in all places and times, then employers who now require degrees as a criterion for employment may begin to demand specific course work to meet their standards. Others may find that there is value in learning just for the sake of learning. Still others could find ways of networking that would surpass anything offered by current elite schools. It is possible that in the virtual university, the value of education might increase with a corresponding decrease in the value of degrees.

E. Customer orientation: The students would, more than ever before, assume the role of customers of educational services. In 1995, the Western Governors Association introduced a plan to create a virtual university which would be called the Western Governors University (WGU). As reported by Patricia Limerick (1997), the list of WGU attributes included phrases such as: "market oriented," "high quality," "cost effective," and "non-teaching." A virtual university would be created mostly by non-teaching technological experts and business people.

The implications of students of educational services being customers in the business sense has been a hotly debated issue for a number of years, with many marketing educators agreeing that educational quality will probably decline if students are seen as customers in the marketing sense of the term (Clayson 1994; Hunt 1992; Pedersen 1992)

CONCLUSION

While the above list is far from comprehensive, it is hoped that it will create discussion and awareness.

Mescon (1997) asked the pertinent question, "Will we control our own destiny?" In an era of desk-top machines that are interconnected throughout the entire world, this question needs to be addressed. At a time when what counts outside academe is what one knows and can do, and with a corresponding decrease in the value of a degree; what is the future of business education? When universities are perceived by many (including legislators) as a home for indifferent, pampered teachers who are out of touch with the population, and who conduct irrelevant research while tuition goes through the roof, who will make the decisions that govern the coming changes? If we are not prepared, the changes will take place without us.

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