

This Little Piggy Went to Market

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That Little Piggy Stayed Home

The First Little Piggy Found a Niche Market

And The Second Little Piggy Got None

It is a generally accepted fact that higher education is one of America's shining achievements. Since the GI Bill, U.S. higher education has created the largest middle class in the history of the world, and it is arguably America's most popular export. Students from all over the world seek higher education in the U.S. Although the general public perceives the price of American higher education to be three times higher than it actually is, they nevertheless view it as a very good buy compared to other things people spend their resources on (Reisburg, 1998). Most university administrators would argue that the response has been quite effective to new needs and aspirations of the American public for more than a century and that universities do change, albeit slowly. There is historic precedent to believe that the future holds more incremental change and that universities twenty years from now will be incrementally different than they are today.

But when someone as thoughtful as Peter Drucker states that, "Thirty years from now the big university campuses will be relics. Universities won't survive. It's as large a change as when we first got the printed book" (Lenzner, 1997); there may be reason for pause, if not concern. How do we reconcile our incredibly successful history with such gloomy thoughts about our future?

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We believe this tension has its roots in two major societal forces. First, there is the all pervasive expectation that we are moving into a "new economy" based on knowledge and information which is rapidly changing and thus will require continuous re-skilling of the workforce, even those with higher degrees. The second force is the array of opportunities that will be presented by recent advances in telecommunications and information technology — high speed, broad band access to data and to the World Wide Web. And these two forces have combined to create a situation that brings words from the business sector into the lexicon of higher education. Words like "competitive advantage," "marketing the institution," "branding," and "responding to the market" signal our recognition, but not necessarily our acceptance, of the fact that we face a somewhat different environment. The concern of those in public higher education is how to focus energies and resources to sustain, nay enhance the central role of higher education in this nation in the new millennium.

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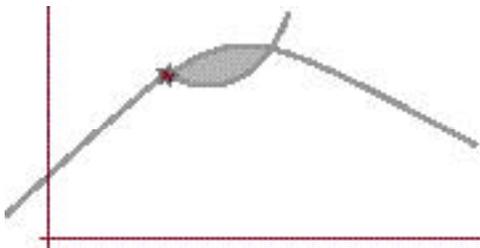
Looking Beyond the Academy

We do not have a magic crystal ball with which to divine a fail-safe strategy to address this concern, but we find helpful insights and sug-

gestions by looking at the parallels of change in our culture (public higher education) and that of the business world.

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Both Charles Handy, a leading British management consultant, and Andrew Grove, until recently the CEO of Intel, have identified a phenomenon, which they label as the sigmoid curve (Handy, 1995) and as strategic inflection points (Grove, 1996), respectively. Both of them believe that in successful corporations effectiveness increases incrementally for an extended period of time and then begins to decrease if the enterprise does not take direct action to change the organization. The sigmoid curve is described in differing terms by both. Yet Handy and Grove both argue that one needs to make major changes in the organization prior to achieving a maximum in the corporation's effectiveness. This is



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Our examination is also informed by Harvard Professor Clayton Christensen in *Innovator's Dilemma* (Christensen, 1997) that expands upon these concepts by separating technology improvements into sustaining technologies and disruptive technolo-

gies. Sustaining technologies enhance the present way of doing business whereas disruptive technologies change conceptually the way of doing business. Christensen's book centers around the case study of hard disk drives and traces the history of disk manufacturers from the 14" disk drive to the 8" disk drive to the 5.25" disk drive to the 3.5" disk drive. Christensen notes that the company which was in a leadership position in one drive technology always lost out in the succeeding technology.

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Christensen argues that the enterprises that lost out did so because they "stayed home." For example, he points out that the 14" drive maker asked their present customers (i.e., mainframe manufacturers) whether they would prefer improvement in cost, capacity, and speed in the 14" drive or would they rather investment be made in creating an 8" disk drive even though it would be more expensive, lower capacity and lower speed. Naturally the mainframe manufacturers chose incremental changes in the present technology (thus, a sustaining technology) rather than investment in a new technology which held risk, unknowns and change (a disruptive technology). Meanwhile, companies that did not have a home in the 14" technology invested in 8" drive technology and found an entirely new market, the mini-computer market. History repeated itself with new disk drive technologies, but in each case, the dominant players of the existing technology took their cues from present customers whereas the new player sought direction from the customer-to-be.

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Christensen further argues that it is in the nature of large, successful corporations to resist embracing new technologies as "disruptive technologies." In order to overcome the resistance, he recommends that such corporations must create independent subsidiaries within the corporation whose mission is to embrace disruptive technologies and take risks even while the parent corporation sees improvements in the old technologies as sustaining.

How does this model of business relate to the issues of public higher education? Clearly, America's public and nonprofit private colleges and universities are the dominant educators of the traditional college students (18–24 years old) and, to a large extent, the current lifelong learning community. However, present universities and colleges view the dominant market as the traditional student, even as the non-traditional student and the lifelong learner population grows. Are we listening to our current clients and ignoring our current nonclients and therefore focusing on the present but not the future? (We would argue that our students are legitimately clients but not customers.)

The Competitive Marketplace

A number of initiatives are underway by new players, for-profit higher education organizations seeking to address the new market of lifelong learners. The most visible of these players is the University of Phoenix with 66,000 enrolled students and 79 locations. Examples of other would-be providers include the British Open Universities subsidiary, the U.S. Open University, the Western Governors' University, Sylvan's subsidiary Caliber, for-profit subsidiaries of Columbia University and NYU, Jones International University (recently accredited with only two fulltime faculty), Penn State's World University, California's Virtual Uni-

versity (which closed the same year it opened), Motorola University (presently dedicated to non-credit education of Motorola employees and suppliers), and Michigan's Virtual Automotive University. To underscore the extent of potential intrusion into traditional university market space, the magazine *University Business* identifies 62 sites in the state of Washington representing 40 out-of-state institutions taking market share in the state of Washington (*University Business*, 1999). The competitors are targeting the "home market" of Washington's public and private institutions.

And there are other emerging interests in our markets. We can anticipate initiatives led by a variety of large-scale, public, for-profit corporations such as Microsoft, Disney, ABC, Time Warner-Microsoft, etc. They are positioned to offer lifelong learning through the use of technology and also to try to capture high-demand, large-scale courses in traditional university curriculum. If Disney put their vast experience and resources behind creating an introductory course in American History or Psychology, does anyone doubt that they would produce an attractive alternative to the traditional talking head lecture?

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A Wall Street analysis of higher education as a profit center is helpful as we try to consider whether or not such corporate giants represent a serious threat to today's colleges and universities. Scott Soffen, of Legg Mason Wood Walker, Inc., analyzed the higher education marketplace a year ago and, even though the for-profit higher education stocks have suffered badly in the last year, his analysis is

worth exploring. Soffen is bullish on higher education. He estimates that presently \$680 billion is spent annually on education. This represents nine percent of the gross domestic product of the U.S. and makes education the nation's second largest industry. This compares with one trillion dollars spent on healthcare and \$270 billion spent on defense. In 1999, the postsecondary education market represented \$211 billion of which less than \$10 billion was in the for-profit sector. There is a market here! Soffen notes also that 45 percent of students in college today are adults over 24 years of age with unique needs and expectations: high interactivity, immediate practical value, convenient access, fewer meeting times, shorter program completion times and rolling admissions. The market is growing and changing.

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After an extensive look at this market, Soffen concludes that the success of the nation will be driven by its educational system. He argues that there is an economic shift to an information economy and that the 18–24 group (our traditional market) will grow at 1.6- percent annual rate over the next decade. With the long-term military downsizing, there will be an increase in demand for higher education. He also notes that the economic value of a bachelor's degree over a high school degree has grown from 60 percent in 1980 to 84 percent in 1994. Moreover, education is a counter-cyclical industry; job loss and career threat lead to an increase rather than a decrease in the consumption of education. Soffen concludes that education has exceptional revenue and earnings potential. In words that

are alien to traditional higher education providers, he describes an enrolled student as a "predictable recurring revenue stream" for a number of years. He also argues that education will never go out of style, and there is no threat of substitution or change in consumer taste. Perhaps of special importance is his conclusion that the value of face-to-face learning is substantial and given a balanced choice, students will always prefer face-to-face learning over distance learning. Thus, Soffen concludes that the growth in distance learning will come from a latent market of learners, that is, older workers demanding retooling in a rapidly changing information-rich economy.

What do we see in Christensen, Drucker and Soffen's work when we look for parallels in the public university sector? We can expect incremental change to continue in the future because there is much that we should retain from the successful model of the past. The parallel of the disk drives only partly works in higher education. The core function of universities will not disappear, and the basic products of our home market — instruction and research — will remain. But the impetus provided by new, expanding markets and technological advances are certain to bring about significant change in how we go about our business — what we do, whom we serve, and how we do serve them — but not necessarily the sea change that Drucker might expect.

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Competitive Advantages

As Soffen notes, for-profits are more agile than nonprofits, they have superior cost structures and they have superior revenue structures. They

are driven by forces that are based on cost-benefit analysis and risk taking and are free of the constraints and obligations of state-funded institutions of higher education. For-profits can cherry-pick the “profit center” courses (English 101 and Psychology 101) with no obligation to also offer Philosophy 101 or Nursing 480. Moreover, as governments seek to cut spending on higher education, the political environment will advantage the for-profit schools. Like any other business, they will seek favorable public policy treatment through the political process if need be, but they are not dependent on public funds or the whims of legislators. As long as they make a profit, they are free to roam the education markets at will. There should be no doubt but that the entrepreneurial spirit will flourish in this growing, changing and lucrative market.

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But public higher education institutions have considerable competitive advantages also. The strong reputation of this nation’s higher education system, the economies of scale and accreditation requirements provide an edge, at least in the short run, for established institutions. Universities are the largest concentration of intellectual capital in the country, and individual institutions have developed brand recognition, which by now is well established. Moreover, the hidden assets of traditional institutions of higher education are significant. Indeed, Todd Nelson, president of Apollo Group which owns the University of Phoenix, is quoted in *The Wall Street Journal* as intending to send his children to “bricks-and-mortar” institutions to

take advantage of social and cultural opportunities offered in such an environment (Dreazen, 2000).

Technology’s Role

Soffen also speculates that distance learning will lead to industry consolidation and that internet-based learning may take away advantages of local colleges resulting in fewer institutions serving more students in new ways. He is clear: Because of technology, it will be a competitive marketplace that includes new providers.

Here the advantage seems to lie more with new providers than with established institutions, but not totally. For example, the large communication/entertainment entities have the design and production resources to produce first-rate materials; they have built-in marketing capabilities and can cherry-pick the most lucrative courses out from under us to realize economies of scale. As established institutions learn how to use technology to provide mass customization of courses to meet the challenges of the array of learning styles among an increasingly diverse student body, student satisfaction and success may go up but so will costs.

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Yet boards and legislatures are demanding increased productivity and accountability from universities. Seldom has technology yielded the productivity improvements its advocates have predicted would be realized by universities. Until the research on distance learning can support the conclusion that stand-alone, distance-learning, or technology-delivered instruction is qualitatively equal to face-to-face, technology-enhanced learning experi-

ences, we are honor bound to move slowly. Thus we are likely to be in a “sustaining” mode in which universities will modify current pedagogies through the use of technologies to enhance the quality of learning experiences rather than engage in technologically-based wholesale substitution.

One of the greatest advantages that traditional institutions have is the content expertise of their faculty. Without first-rate content to market and deliver, new providers will find it difficult to succeed. Herein lie the seeds for potential partnerships or for faculty entrepreneurship.

Strategic Suggestions

Given the previous discussion, what strategies might today’s public universities undertake? First, we should lead with our strength. Our universities comprise an enormous talent base in our faculties. These faculty represent cutting-edge expertise and are pushing back the frontiers of knowledge. They can bring to the student both the latest in discoveries and the enthusiasm of the researcher and scholar. University faculty are dedicated to both the discovery and transmission of knowledge. We must ensure that they retain the time to continue their contributions to scholarship and that students have the opportunity to learn from them and study with them. At the same time, the faculty must take advantage of new, best practices in learning and teaching to maximize the learning experience for their students.

As we encourage faculty to be as creative in their teaching as in their research, we have to recognize the new entrepreneurial opportunities they will find. If high-quality content is the missing ingredient for success by the Disneys and the Time Warners in the education marketplace, we can expect these for-

profits to raid our faculty. How will we respond? Will our policies be so rigid that faculty will be forced to choose between us — an either/or situation? Or will we revisit our leave policies, intellectual property policies and tenure requirements to make it possible for creative teacher-scholars to have homes in both worlds. We have done this for patents and licenses of research products, and we are working our way through the collaboration of private investments in university research such as Berkeley's controversial contract with Novartis. We need to explore these same issues as they relate to developing and delivering curriculum material. When administrators of our established public and private institutions serve on the boards of the for-profits, won't faculty expect to follow and join the club by doing what they do best?

Technology will be a key vehicle by which we customize education to the individual student's needs.

Moreover, for an important segment of students, we would argue that the campus experience is a unique competitive advantage that cannot be equaled by the for-profit sector. In the dynamic of campus life, students learn self-discipline, civic responsibility, respect for differing opinions and to learn from others. The campus experience, another of our strengths, engages the student fully and provides a re-socializing and broadening experience that is difficult, if not impossible, to reproduce through technology and distance learning. Of course, for this to remain true, it will require active efforts by today's universities to ensure that the campus experience is real, not just apparent.

We would argue that universities ought to embrace technologies as sustaining technologies. They ought to find ways to take advantage of the power of new technologies to enhance and

add to the present pedagogies and student services capacities for our traditional students. Technology will be a key vehicle by which we customize education to the individual student's needs. [An example of mass customizing is the fact that each issue of the New England Journal of Medicine actually is produced in 175 different versions tailored to different reader needs.]

Each institution also will have to continuously monitor its future markets, rigorously assess and evaluate what it is doing, and be prepared to modify or eliminate those dimensions of its enterprise that do not add value to the core mission of the institution.

At the same time, the university should find ways to selectively invest in information technologies as "disruptive technology." In addition to using information technology to improve what we already do, we should find ways to invest in an entrepreneurial environment and provide resources to start off in new directions to address the new (future) marketplace. This means universities must not only find resources to invest but must respect and protect failure when appropriate because it will not immediately be obvious what the "next" demand (or market) for higher education will be. If we provide a place where faculty and students together can experiment, test and refine aspects of the learning process, we can satisfy the entrepreneurial desires of our teaching faculty, improve our own "products," and even export to other institutions—become a "for-profit" provider ourselves.

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its future markets, rigorously assess and evaluate what it is doing and be prepared to modify or eliminate those dimensions of its enterprise that do not add value to the core mission of the institution. And finally, with eyes wide open to the shifting market, very serious consideration must be given to the definition of our individual institutional missions and to the niche markets we are best positioned to address.

Conclusion

In order for public universities to continue to be as successful in the future as in the past in creating a society which is prosperous and also politically and socially responsible, it is imperative that we focus on quality, that we seek to increase our responsiveness to societal needs and that we share best practices and celebrate them by implementing them.

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The strategic cues we find in our look for parallels in the business world suggest that we should:

- seriously examine the comparative advantages a given college or university may have and build on these strengths;
- emphasize the fact that higher education is central to new economy and U.S. prosperity;
- recognize that higher education is a potentially profitable, and therefore competitive, market;
- embrace the notion that there will be growth in both traditional and new student markets;
- capitalize on the fact that we have "niches" with student

campus experiences and with the opportunity for students to study with leading scholars;

- entertain the idea that our success may rest on our effective use of both sustaining and disruptive technologies;
- provide a “safe space” and support for faculty to experiment with new technologies and ways of teaching and learning;
- maintain the mechanisms of academic freedom to ensure that the university is a place, which makes students “safe for ideas” rather than “ideas safe for students.”

Public higher education cannot afford to stay home. For the long-term health of the nation and the viability of public higher education, we must continuously go to market.

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