New Business Models for Higher Education

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Collis assesses the new higher education marketplace, replete with distance learning courses offered online. He reviews the business models of dozens of for-profit Internet-based firms entering the higher education market, compares their strategies with those of traditional colleges and universities, and projects the effects of the new entrants on established institutions. Collis concludes that the new firms will move more quickly along a technology-enabled learning trajectory, which in the end will put them at a distinct advantage when they move from their most common point of entry — the corporate market — into the traditional higher education realm.

THE HIGHER EDUCATION INDUSTRY is likely to undergo substantial change over the next several years. Venture capitalists have been investing in entrepreneurial Internet educational content companies at the rate of $100 million every quarter.[1] UNext's Cardean University, visibly and vocally endorsed by three Nobel Laureates and run by former professors from the University of Chicago, started offering business courses last June after close to $80 million of investment. Kaplan now has the second largest private law school in the U.S. Hungry Minds has launched People's U, whose course catalogue proudly includes quilting. Of the traditional institutions, Harvard, Columbia, Chicago, Wharton, MIT, London School of Economics, Stanford, Duke, and UNC Chapel-Hill, among many others, have made at least some of their courses available to students who are not formally enrolled in their institution. Indeed, 62 percent of the 3,600 accredited institutions of higher education already offer distance learning courses, and it is suggested that by next year 84 percent will offer distance learning courses.[2]

If, therefore, we take as a given the likely occurrence and general thrust of the impending revolution in higher education, the interesting question to address becomes the specific and more immediate impact of the underlying changes. I think the best way to capture the most likely of these short-term effects is to consider in more detail the various business models (both of new entrants and incumbents) currently being deployed. Understanding the current strategies of the players in the new marketspace, why they have been selected, and how they will evolve over time, can shed light on how the revolution will unfold and what sequence of repercussions it may have on universities' and colleges' current business models.

BUSINESS MODELS OF NEW ENTRANTS

Many firms are now targeting the higher education market. These include startup enterprises as famous as Knowledge Universe and as unknown as AchieveGlobal.[3] They also include newly established subsidiaries of well-known multinationals like Thomson Learning and Pearson Knowledge. Aggregate data on their impact is now available, at least in the form of rough estimates by research firms.[4] I will draw on these results to describe the companies' strategies.

While it is hard to be precise about the business models and entry strategies pursued by new entrants (indeed, many seem not to know their own strategy, since they believe that "competing on Internet time" makes frequent strategic U-turns desirable), a rough sense of their overall direction can be gleaned from an analysis of 127 firms identified as content providers in research by four brokerages that have studied the higher education industry.[5] This definition excludes all the firms attempting to provide technological infrastructure or platforms for higher education, such as SCT and WebCT; those seeking to be student lifestyle or campus portals, such as Campus Pipeline or Student Advantage; those that are commerce-related ventures, such as Varsity Books; and those firms targeting markets outside higher education.[6] It does, however, intentionally include those firms that target corporate training. Indeed, if there is one overwhelming conclusion from this analysis, and one that offers good news for universities, it is that the primary audience for firms entering postsecondary education is the *corporate* market, not the individual student. While predictable, this entry strategy provides a temporary respite for universities.

There are many possible ways to categorize the entry strategies of the new players, from their financial backers to their technology platforms. The five elements I want to focus on are those that seem to have the most repercussions for universities: the courses entrants offer, their target customer group, the origin of their content, the pedagogy they employ, and their pricing. Data on these five dimensions are by no means available for all 127 firms, so the discussion below is based only on the accessible data.[7] While imprecise, it nevertheless effectively summarizes the overall positioning of entrants.

Courses

Some entrants are already well established in higher education with extensive course catalogues. Hungry Minds is perhaps the extreme, with a reputed 20,000 offerings, but other entrants (aside from the corporate training companies that offer thousands of courses by including their traditional classroom-based materials) already offer hundreds of courses. University Access, for example, has 450 different courses available. Companies that offer undergraduate degrees, currently or in the near future, are clearly building their portfolios more slowly in order to ensure the quality of their material.

Examining the course offerings of entrants, the predominance of business-related material stands out. Only 25 percent of the companies focus on areas other than management, performance improvement, or specific corporate skills, such as IT certification. A large fraction of those offer other professional development courses, such as to doctors or lawyers.[8] As their names suggest, RehabMax and Healthstream, for example, focus on continuing education for healthcare professionals. Even when examining a smaller set of companies that are explicitly entering the university market, the percentage offering primarily nonbusiness courses rose only to 40 percent.

Concord University (Kaplan's entry into the law school market), Global Education Network's attempt to build a liberal arts program, Fathom's continuing education courses, and notHarvard's Barnes and Noble University are relatively rare. Far more typical is Jones International's business orientation for its first in-the-US-accredited online bachelors degree, or the MBA offered by Duke's Fuqua school (formerly in collaboration with Pensare).

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Indeed, at those firms for which it was possible to determine a direction, only 6 percent focus on liberal arts, 8 percent on personal interest, 3 percent on science, and 14 percent on professions other than management. Far more prevalent is the provision of IT certification courses that the traditional corporate training firms now offer online. The other striking observation is that just as many, if not more, firms offer postgraduate-level courses as offer undergraduate-level programs.

All of the above reflect a natural progression in an entrepreneurial entry strategy. The most lucrative and most receptive market to enter is corporate training. Liberal arts undergraduate degrees have substantially higher entry barriers, not the least of which is accreditation. One can, therefore, predict an evolution in course offerings as firms build brand names and establish their presence in the market. That evolution will progress from short management certificates and continuing education for any one of the professions, through more general and softer leadership skills and performance improvement, to an MBA or other professional degree, and finally into undergraduate liberal arts degrees.

The popularity of this entry trajectory does not mean that there will be no direct entry into the undergraduate arena. Some firms, like General Education Network, will attempt that approach. However, the majority of entrants will take the easy path and begin by offering "business" (defined in the broadest sense) or specific skills training courses.

Customers

Consistent with the majority orientation to the provision of business courses, the primary customer for new entrants is the corporation. About 60 percent of entrants have identified the corporate market as their first target. For many of these firms, the international market (for example, foreigners who want an American education) is listed as their secondary market. Individuals in the U.S. rank as the third target for these companies. Following behind corporations as the primary target are other institutions (such as universities, 6 percent, and the international market, 3 percent). Only about 38 percent of companies list individuals as their primary market.[9]

The reason for this inordinate amount of attention on corporations is obvious. First, the corporate training market is very large. At $66 billion, it is one quarter the size of the entire higher education market.[10] Second, it is growing rapidly at an estimated 11 percent annually,[11] with a high likelihood of continued growth as "knowledge" becomes ever more central to the economy and firms emphasize their employees' lifelong learning. Motorola, for example, estimates that every dollar spent on training yields 30 dollars in productivity gains within three years.[12] Third, directing marketing resources toward large corporations, where one sale can result in millions of dollars of revenue, is much easier and more cost effective than trying to establish a consumer brand name and selling directly to thousands of individuals.

In addition, corporate training is the market most amenable to application of new technology. IT training makes up about one third of corporate training and is material that can naturally be translated to the Web.[13] As a result, while about 72 percent of corporate training is done in the classroom today, it is expected that less than half will be taught that way by 2003.[14] Instead, online training, a $1.1 billion market and between 2 and 5 percent of all corporate training today,[15] will have become a $11.4 billion business, or 15 percent of all corporate training, by 2003.[16]

The attraction for companies to switch to online training is that this new technology can substantially reduce costs while potentially improving the quality of the learning experience. The indirect and opportunity costs of traditional classroom education are enormous. One estimate has the indirect costs (mostly travel) at twice the direct costs.[17] Factoring in the time employees spend training only adds to the expense. Exploiting technology that allows for asynchronous training can save a huge portion of these indirect costs (particularly if employees study while flying to "real" business meetings or on their own time). Cisco estimates that online training reduces costs to one tenth of those of an instructor-led class.[18] A more conservative estimate suggests savings of 50 to 70 percent.[19] In addition, some research suggests that self-driven learning has much higher rates of retention of material than does classroom education. One study claims that retention rates increase by 25 to 60 percent.[20] Ultimately, using asynchronous technology for education allows companies to shift from expensive "just in case" training to productive "just in time" training.

Finally, the corporate market is a natural first target for entrants, since it is already served by for-profit companies. Indeed, a slew of companies now providing corporate training are extending their scope of activities from more limited classroom-based training.

This begs the question, "Why should universities be concerned with these new firms, since they are serving an established and different market?" The answer is, of course, that the technology they are now adopting removes constraints under which universities traditionally operated. Freed from the classroom and with a marginal cost of serving another customer of essentially zero, entrants will be looking to leverage their courses into more than just the corporate market, just as they will gradually extend their course offerings from business to liberal arts. Perhaps more importantly, this market is large, fast growing, profitable, and demanding. These characteristics mean that successful competitors in this space will be building valuable resources (financial, brand, and expertise with the new pedagogies) that they can later translate to the traditional higher education market.

In many ways, these firms will be exploiting a "disruptive" technology[21] by using online education to target a peripheral market that universities don't currently address. In doing so, they will build the skills necessary to compete later in the incumbents' core market. This type of market entry will ensure a delayed but powerful impact on universities.

Content

A vital question from a university's perspective is from where the entrants acquire their content. In principle, entrants can generate course materials in three different ways:[22]

1. They can hire their own staff, who develop new material and texts, as has the Open University.
2. They can license existing courses from universities or colleges and either rebrand them or keep the proprietary institution's brand, as does Pensare.

3. They can contract directly with individual faculty or other experts for material and courses that either have already been developed or will be developed, similar to a traditional book publishing arrangement. University Access, Ninth House, and Corpedia have been actively pursuing this approach.

The university's interest is to keep entrants' usage of existing content to a minimum. Indeed, many institutions are now wrestling with faculty over the contentious issue of the intellectual copyright for course materials. At Harvard, President Neil Rudenstine has been vehement in his protection of the university's copyright.[23] Other institutions seem more flexible.[24] At stake are the potentially very large revenues that courses can now generate, which were not available in the past.

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Data suggest that entrants are keeping their options open on sourcing. Several major players appear to be pursuing all three sources of content. Pensare and University Access, for example, are both doing deals with institutions and soliciting material directly from faculty,[25] while each also has its own staff who convert existing materials to the new pedagogies.[26] Such in-house staff are also necessary to customize material for corporate customers. Unlike individual students, corporations have the power to demand that course material is adapted to meet their specific needs. As a result, at least 40 percent of training is customized. The continuing requirement for such customization will mean that entrants focusing on the corporate market cannot rely on licensed material alone.

While I suspect that entrants would rather deal with individual faculty members because that gives them greater bargaining power, the attraction of a university deal is the access to a broad range of courses and the credibility of the university's name. However, such deals are not cheap (as the commitment of Cardean to pay Columbia University $20 million illustrates), and the long-term trend will probably be for entrants to acquire more material directly from individual faculty members. The probability that the most prestigious universities will already be involved in deals only reinforces the need for latecomers to deal individually with faculty members who have great reputations or terrific courses — perhaps even better than those provided by prestigious institutions.

Pedagogy

As with the source of content, the pedagogical approach of new entrants appears to be broad and eclectic. They are all introducing Internet-based online education, but few rely exclusively on that technology for their pedagogy. While Gary Becker can argue, "The Internet has potential to be the first major change in the [educational] process since Socrates,"[27] it is clear that current technology is not yet ideal for education, nor has the educational "killer app" been discovered. Many observers suggest that widespread adoption of broadband networks might be necessary for the breakthrough. When that happens, perhaps in the year 2005, sufficient bandwidth will exist for streaming two-way video. Yet even then, asynchronous technologies may still require support from more traditional pedagogies. One study found that completion rates for an online course increased from 25 percent without a tutor to 75 percent with the addition of a tutor.[28] While research on the relative effectiveness of online education is underway, a convincing case that such pedagogy is universally better and is optimally delivered without support from other pedagogies has not yet been made.

Prices

Lastly, I want to examine the pricing strategy of the new entrants. It is here that entrants have the greatest potential to disturb the current environment of higher education. One of the great advantages of the new technology is that it allows for very low-priced courses, since the marginal cost (once the substantial initial investment in developing the material has been invested) of delivering a course is negligible. In principle, entrants could destroy the price structure to which traditional institutions have become accustomed.

Great news — this is not happening! The evidence suggests that for comparable courses, new entrants sell them at no more than 30 percent below a state school's price. The going rate appears to be between $300 and $600 per course, with most effectively charging about $500. One entrant, Pensare, is even raising prices, charging $90,000 for its global MBA. Of course, there are $40 quilting courses available, and the much maligned correspondence schools will continue to offer degrees for a few thousand dollars, but for academic material provided by credible entrants, pricing is not dramatically below the current rate.

There are a number of reasons why entrants do not rely on price competition to get a foothold in the higher education business. In the first place they do not want to kill the "goose that lays the golden egg." Higher education is an attractive business; entrants want to benefit from the price umbrella, not destroy it. Second, entry is expensive, and after the collapse of the "Internet bubble," even dotcom startups need to demonstrate profitability. While none have given up investing, all are striving to demonstrate that their business model can be cash positive sooner rather than later. Third, in the corporate market that most entrants target, the indirect cost savings of asynchronous technology are so substantial that cutting prices for the course itself is not necessary to make the financial case for switching to the entrants. Merely avoiding classroom attendance saves sufficient travel time and expense to effectively offer a 50 percent discount over traditional programs.

Finally, and perhaps most relevant for the liberal arts colleges, education is an "experience item." Consumers do not know the quality of the education they will receive until after they have received it. Thus, the purchase decision involves perceptions and interpretations of signals about quality. One of the most visible signals is price, where the assumption is that the higher the price, the better the education. For an entrant lacking brand awareness and graduates who can be evaluated or surveyed, price becomes the major indicator of quality. While entrants could support a low price strategy, such a strategy would be tarnished with a negative association: "If it's as cheap as a correspondence school, it must be bad!"

The powerful implication for universities is that extensive price competition is unlikely to occur immediately. This is not to say that peripheral or struggling players won't resort to aggressive pricing, that low-cost courses for subjects like quilting won't be available, or that prices won't gradually come down as competition forces prices closer to costs. But it does suggest that there will be no sudden collapse of prices as entrants seek to gain market share.

BUSINESS MODELS OF TRADITIONAL COLLEGES AND UNIVERSITIES

Strategies of traditional colleges and universities can be classified into four categories.[29] In ascending order of innovation they are

- Incremental: Technology is applied on campus as a complement to the existing classroom experience, such as course Web pages.
- Distance education: Community colleges are widely adopting this approach in accordance with their mission to make education more convenient for individual students. This approach increases the overall market size, but does not yet threaten an outbreak of real market competition, since most are marketing to students within their traditional geographic markets.
- Alliances: This strategy allows a third party to resell an institution's courses more aggressively and into new markets. It most effectively and quickly leverages a university's name and course content with the least risk in terms of time and money, and often with minimal objection from the faculty.
- Market entry: The final step is for institutions to enter the new markets themselves, without the benefit of a partner. So far, there have been few of these ventures; Harvard and Columbia took the forefront, with their initiatives HBSi and Morningside Ventures, respectively.

Most institutions are experimenting with some, if not all, of the above strategies. Just as we can predict a natural progression in the activities of new entrants, we can expect to observe a sequence in the response of incumbents as they initially adapt technology internally, use it to serve current customers better, then seek the help of others to enter new markets before finally taking the risk of committing themselves to a new business opportunity.

Premier colleges and universities can leverage their name and intellectual capital to establish a presence in the new markets with willing and aggressive partners, or venture out on their own.

Unquestionably, premier colleges and universities can leverage their name and intellectual capital to establish a presence in the new markets with willing and aggressive partners, or venture out on their own. The question is, "Where does that leave most institutions that lack both the brand to appeal to entrants looking for credible partners and the expertise or resources to penetrate the new markets, particularly when their best (course development) faculty are claiming copyright ownership and cutting independent deals with entrants?" What these colleges and universities could do is push into the distance education market for individuals in the U.S., most often in their home state. This extends their market with little concern about the exclusivity of the degree.

While appropriate, these strategic moves raise the question of who will win in the long term — entrants exploiting the corporate market and then moving into the traditional university market, or institutions that have begun to go after the individual distance learning market?

The answer might depend on the relative attractiveness of the two markets on a number of dimensions. First, how big and fast growing are the markets? This dimension favors the entrants, since projections for online corporate training (broadly defined) are higher than for traditional online education. As argued previously, this is because the benefits of online learning to corporations are bigger and more obvious than to individuals, so that corporate adoption will be rapid. Second, what is the profitability of the two markets? Here again, the corporate market is more attractive. Corporations recognize the indirect cost savings of the new pedagogies and are not expecting a huge reduction in tuition prices. Individuals choosing between distance and campus learning are more price sensitive.[30] The third, and perhaps most important dimension, is the technological trajectory that each market will drive. The corporate market is more demanding and so will produce more rapid innovation and developments. While universities expect individual faculty members to use their own initiative and funding to exploit new technologies and develop new pedagogies, the entrants are being pushed by demanding and powerful clients to truly exploit the new media. With course development budgets of up to $1 million for adapting high-quality intellectual content to new technological tools, it seems that entrants will be the ones pushing the envelope and learning at a faster rate. As a result, they will be building the capabilities needed to succeed when they enter the traditional university market.

To be blunt, the market that the majority of institutions can pursue (individuals through distance learning) is, in the short term, not the easiest to grow, not the most profitable, nor necessarily the best place to acquire the skills necessary to compete with the new pedagogies. For a limited number of top institutions this state of affairs is fine. They can get the best of both worlds, remaining in their own sphere, while sharing in the benefits of the new markets. For the majority, however, while not an issue in the short term, since competition will be limited and their market will in fact be expanding, in the long term institutions could be badly hurt by the entrants and prestigious universities as their strategies evolve to the point where they do compete more directly.

IMPLICATIONS

We can draw two sets of conclusions from these analyses. First, the direct competitive threat to most of the traditional core offerings of colleges and universities will be delayed. Entrants are coming into the corporate market offering business courses and specific skills training at a graduate level and at only slightly lower prices. That is the good news. Institutions have more time to prepare for the coming onslaught. On the other hand, well-funded competitors often backed by alliances with prestigious institutions will be hard to beat once established. First-mover advantages that they can exploit, particularly the rapid accumulation of the skills needed to harness the new technology and develop new pedagogies, will put them in good stead as they gradually transition their strategies to compete more directly in the traditional higher education market.

Thus, even if the overall conclusion is that a less immediate threat exists than we might have imagined from new entrants and new technologies, that threat is potentially more insidious — when it becomes obvious, the game may already be over. Universities cannot argue that current plans for holding back the sea change are adequate because the tide is not yet full. By the time the tide arrives, the opportunity to halt it could have already passed.

NOTES

1. A. Newman, "Venture Dollars Get Smarter" (Boston, Mass.: Eduventures.com, Sept. 2000).

2. International Data Corporation, 1999a, *Online Distance Learning in Higher Education 1998–2002* (Boston, Mass.: International Data Corporation, 1999).

3. Many of the new startups appear to have randomly selected two or three words from a list of only about six words – global, network, learning, education, net, mind. Consider Global Learning Net.

4. The very fact that research firms, as well as many brokerages, now cover the higher education arena indicates the degree of interest by the private sector in the field.

5. The four firms are Merrill Lynch (*The Knowledge Web,* San Francisco: Merrill Lynch, 2000); Piper Jaffray (*Helping Investors Climb the eLearning Curve*, Minneapolis: Piper Jaffray, Nov. 1999); Hambrecht & Co., (*Corporate eLearning: Exploring a New Frontier,* San Francisco: Hambrecht & Co., March 2000); and First Union Securities (*E-Education Industry*, Richmond, Va.: First Union Securities, May 26, 2000). Each firm has its own scheme for classifying companies, and I have taken a stricter definition of content than they applied. As a result, the actual number of companies entering higher education exceeds the 127 mentioned above.

6. Hambrecht & Co. (2000) suggests that there are 5,000 e-training companies.

7. Generally speaking, data were available for over half the firms on any particular dimension. Pricing was the exception, and here the data are somewhat more arbitrary.

8. Percentages are calculated as a share of the total number of institutions. Since no revenue numbers are available, it is impossible to calculate a sales-weighted distribution. However, 63 percent of the best-known and best-financed startups, like Cardean, Jones International, Pensare, and Sylvan have begun with a business content focus.

9. Percentages add to more than 100 because some companies state that they are targeting two primary markets.

10. International Data Corporation, *The US Corporate eLearning*

Market Forecast 1998–2003 (Boston, Mass.: International Data Corporation, Jan. 2000).

11. W.C. Symonds, “Education Industry Outlook 2000,” *Business Week*, Jan. 10, 2000, 101.

12. Merrill Lynch (2000).

13. Merrill Lynch, *The Book of Knowledge* (San Francisco: Merrill Lynch, April 9, 1999).

14. International Data Corporation (2000).

15. Credit Suisse First Boston, *e-Learning: Power for the Knowledge Economy* (New York: Credit Suisse First Boston, March 10, 2000).

16. International Data Corporation (2000).

17. *Training Magazine*, 36 (10) (Oct. 1999), 26.

18. Merrill Lynch (1999).

19. *Training Magazine*, Oct. 1999.

20. T. Russell, *The No Significant Difference Phenomenon* (Raleigh, N.C.: North Carolina State University, Office of Instructional Telecommunications, 1999).

21. C. M. Christensen, *The Innovator’s Dilemma* (Boston, Mass.: Harvard Business School Press, 1997).

22. A fourth source of content is to have no content at all, but merely to be a Yellow Pages directory that lists all the content provided by others. Petersons, for example, follows this strategy.

23. *Distance Learning @Harvard.edu.*, *Harvard Magazine* (July-August, 2000), 77.

24. UCLA, for example, asks permission of its faculty before putting courses online. See M. Anderson, “Grok: Special Reports on the Internet Economy,” *Industry Standard* (San Francisco: Standard Media International, Oct. 2000), 86–91.

25. While UNext is signing up Chicago University, University Access is making deals with individual Chicago faculty!

26. Entrants spend substantial sums on courses, even those adapting existing course material. Many spend at least six figures on each course, and Cardean estimates its course development costs at up to $1 million per semester-length course.

27. A statement that appears to denigrate the importance of the discovery of the printing press.

28. T. Russell (1999).

29. These categories are not based on data analysis, but represent my interpretation of strategies that I have observed.

30. Based on confidential market research for WebCT.

SELECTED BIBLIOGRAPHY

Collis, D. J., "When Industries Change: Scenarios for Higher Education," *Forum Futures, 1999: Forum Strategy Series,* Volume 2, J. W. Meyerson and M. Devlin, eds. (New Haven, Conn.: Forum for the Future of Higher Education, 1999).

Collis, D. J., "When Industries Change Revisited: New Scenarios for Higher Education," *Forum Futures, Exploring the Future of Higher Education, 2000,* M. E. Devlin and J. W. Meyerson, eds. (San Francisco, Calif.: Jossey-Bass, 2001).

Collis, D. J., and M. Rukstad, "UNext.com: Business Education and eLearning," Harvard Business School case #701–014 (Boston, Mass.: HBS Publishing, 2001.

Hamm, S., "The Wired Campus," *Business Week* (Dec. 11, 2000), (eb)105.

Snoody, R., "Nobel Laureates and Junk Bond King Are Backers of the Cardean Philosophy," *Ebusiness* (July 1, 2000), (eb)101.

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