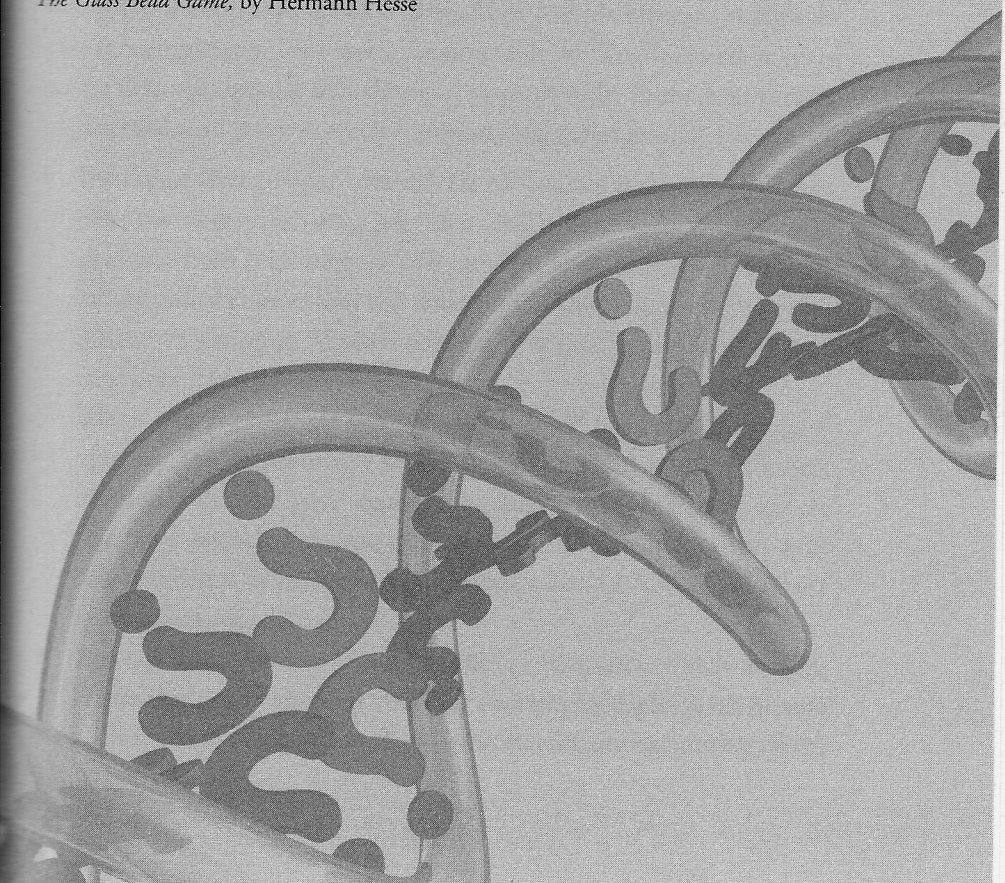
PART FIVE

Genetic Reengineering

If we accept a home of our own making,
Familiar habits make for indolence.
We must prepare for parting and leave-taking
Or else remain the slaves of permanence.[1]

From the poem "Stages"
The Glass Bead Game, by Hermann Hesse



Chapter 20

New Models

As we've seen in the stories of Harvard and BYU-Idaho—and as media reports make clearer every day—technological and social change threatens to undermine the traditional university's dominance. The delivery of higher education to students is set to change in ways that will make the innovations of Charles Eliot and his Harvard successors pale by comparison. Moreover, the timetable will be measured in years rather than the decades that they had to work with. In the near future, high school students will receive promotional messages like this one:

- Instead of taking hyper-competitive AP courses and not-so-valuable electives next year, why not earn real college credit before you graduate from high school? You can start your college degree now, taking online courses that will make you feel like you're on Facebook instead of sitting in a classroom listening to a lecture or reading a textbook.
- When you graduate from high school, you'll have a wide range of options. You can continue to live at home and take online courses, ultimately getting your degree that way; we have a study center near your home where you can go to get tutoring help, meet with other students, or just have a quiet place to study. You can also take face-to-face courses there.
- You can come to one of our traditional campuses, which have all of the features of the best colleges: on-campus dorms with private rooms, live tutors, and good food choices; off-campus housing where

you can cook your own meals and park your car; social clubs; athletic teams anyone can join; and great entertainment.

- Your decision about when and where to study doesn't have to be all-or-nothing: every semester you can choose whether you want to study at home or "at college"; you can also take any semester off for an internship or a vacation.
- You can customize your courses to fit your preferred learning style: most of our courses come in three varieties: fully face to face, fully online, or a mix of the two, a "hybrid" that meets less often than the traditional face-to-face course.
- We'll also help you design a degree program that will ensure your employability whenever you choose to graduate. You can take job-specific courses first and later add the liberal arts and specialized courses required for a bachelor's degree and graduate school, if you want. Our technical certificates and associate's, bachelor's, and master's degrees fit together so that no one has to "drop out" before they're finished. Whenever you decide to finish your college education, you'll have a credential to show for it. You'll also have received help finding an internship that has the potential to lead to a full-time job.
- You don't need to worry about the problem that most college students have in graduating in just four years. Our degrees are modular, which means that you can change majors without having to "start over." We have special bachelor's degrees that take just three years to complete. With careful planning and consistent effort, you can graduate quickly, with a degree that will take you where you want to go.
- You can graduate without a mountain of debt. Our fully online courses cost about as much as a typical textbook, and our hybrid courses, where you work both online and in the classroom, are much less expensive than the traditional kind that require you to be in class two, three, or even four time each week. Depending on the mix of courses you take, your bachelor's degree could cost a fraction of what you would pay at most universities.

This promotional message may seem futuristic, but its essential elements are in place; innovative institutions in addition to BYU-Idaho provide many of them already. For example, Southern New Hampshire University's SNHU Advantage program, a "no-frills" associate's degree program, allows students to live at home while taking morning classes at one of SNHU's five satellite centers. Advantage students pay just 40 percent of the price of the university's regular associate's degree programs. They are also free in the afternoons and evenings to work part-time jobs. The combination of living at home and generating income while earning an SNHU degree brings its effective cost down to a small fraction of the traditional cost of going to college. Like students in BYU-Idaho's Pathway program, participants in SNHU Advantage take all of their credits with them as they proceed toward a bachelor's degree, which they can pursue either through online courses or at the main residential campus.

In addition, SNHU is making pioneering efforts to reduce the time required to earn a bachelor's degree from four years to three. Since 1996, it has operated what it calls a "3-Year Honors Program in Business Administration." Students take courses in interdisciplinary, semester-long modules that merge business, technology, and the liberal arts. Each of the six semesters includes a weeklong integrative project, and the third year includes a consulting project for organizations outside of the university.[1] A new field-based, experiential bachelor's degree program, College Unbound, also allows students to graduate in three calendar years.[2]

Transcending the Dichotomy

BYU-Idaho, SNHU, and others like them are pioneering new models of higher education, blending elements of Eliot's traditional university and the fully online model. The universities pursuing this blended approach lack the prestige of the great institutions and thus cannot fund that expensive model via gifts, grants, and high tuition rates. At the same time, their commitment to face-to-face instruction—manifested in expansive physical facilities and full-time faculty—prevents them

from competing cost effectively with the fully online specialists. Rather than feeling trapped, though, these institutions have recognized an opportunity between the genetically entrenched past and the online disruption that seems to be the inevitable future of higher education. They are challenging the either/or dichotomy and proving it to be false.

The key to doing so is to embrace the learning advantages to be found across the spectrum that runs from fully face to face to fully online instruction. Though the power of face-to-face learning is undeniably great, so is the disruptive potential of online education. It cannot be dismissed as inferior in quality to traditional classroom-based instruction. In addition to being much less costly than their face-to-face equivalents, well-designed and -managed online offerings tend to increase in quality more systematically.

The systematic improvement of online learning has many sources. One is the steady advance of computational and communication technology, which allows online courses to be made more interactive and engaging without increased expense; for example, students can now talk to and see one another via laptops at a level of quality possible only with expensive video-conferencing equipment just a few years ago. They can also engage in computer simulations of laboratories and hospitals and businesses. Thanks to learning software created with the aid of cognitive scientists and psychometricians, the sophisticated successors of the early developers of aptitude tests such as the SAT, computers themselves are getting "smarter," better able to judge a student's performance and respond with tailored tutorials.

Another source of online course improvement is market competition among instructors. Teaching performance in the online environment is easily monitored, and course-by-course contracting creates a Darwinian incentive to improve. A third source of improvement is the oversight role played by professional course designers. These specialists not only have training

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and experience in enhancing learning outcomes, they have that goal as their sole objective, without the mixed motives of the full-time professor who favors a particular teaching style or subject matter emphasis.

To make an automotive analogy, online courses are comparable to the cars rolling off the line of a Toyota factory. The online course equivalent of this factory continually upgrades its technology and its workforce. In addition, it operates under the direction of educational "engineers" who are scientific about learning outcomes. These engineers minimize the use of nonstandard processes, such as professor-specific sections of the same course, which create unnecessary costs (*muri*, in Japanese). They also reduce the likelihood of inconsistent performance, such as deviating from a syllabus (*mura*), and of wasted effort, such as inefficient grading procedures (*muda*). The result is a system that continuously improves, providing ever-higher quality at low cost.

In competition with such an educational production system, a tenure-track professor at a traditional university, whose professional advancement depends more upon research than instruction, faces a challenge in some ways like that of a weekend and evening enthusiast who builds custom cars. Of course, this is yet another inapt higher education analogy: the face-to-face instructional craftsperson can create experiences difficult and perhaps even impossible to replicate in the purely online environment. Still the typical instructor, even one without pressing scholarly duties, will find it hard to compete without the support of teams and technologies like those behind the best online courses.

Administrators and faculty members of traditional universities may understandably respond to this view of the future with a mix of incredulity and fear. Many BYU-Idaho faculty members felt some of both emotions. Like other experienced teachers, they had seen online courses consistently underdeliver on promises of revolutionizing the learning process. At the same time, they naturally feared the implications of one-for-one replacement of face-to-face instruction by online learning.

Time is revealing both the potential of online learning and the importance of hybridizing it with face-to-face experiences. Not only for-profit educators but also traditional institutions such as BYU-Idaho, SNHU, and Cornell, which we will encounter again shortly, are operating online production systems that apply the efficiency principles of the Toyota production system. Traditional universities have all of the assets needed to compete effectively in the online environment. The subject matter expertise of their full-time faculty members and their existing campus computer systems give them a potential quality and cost advantage in delivering online education.

The real advantage of the traditional universities, though, is their ability to meld online and face-to-face learning experiences. Face-to-face learning goes beyond formal classroom instruction; it includes the important informal learning that comes when students interact with one another in campus activities. The combination of online technology and the college campus has the potential to take traditional universities to new levels.

Online learning is proving to be a classic example of a disruptive technology. . . . New and powerful digital technologies with the potential to transform the online experience in ways that significantly reduce costs and enhance student learning are now driving online learning upmarket into some of the best institutions in the country.[3]

—Michael Bassis, Westminster College, Utah

Vital Jobs to Be Done

Visualizing the opportunity open to traditional universities requires recognizing an irony, which is that the very changes that threaten them also make them potentially more valuable than ever before—valuable enough to justify a price premium over today's online disruptors of the higher education status quo. The thing for members of university

communities to remember is that it is not only they who feel threatened. So do individuals, companies, and governments.

Three trends feel particularly intimidating. One is increasing economic competition, which requires perpetual reinvention; if quality does not increase even as costs are reduced, workers lose their employment and enterprises fail. At the same time, making good decisions is becoming more difficult: knowledge seems impossible to wring from a surging sea of data. Finally, social relationships are becoming more complex. The digital world is simultaneously more connected and more fragmented and impersonal.

These threats—obsolescence, disorientation, and depersonalization—imply three vital jobs to be done, jobs that traditional universities can do uniquely well. The jobs sound familiar to those who know universities at their best: (1) discovering and disseminating new knowledge, (2) remembering and recalling the achievements and failures of the past, and (3) mentoring the rising generation. Understanding these jobs is the first step for universities seeking to establish a sustainable competitive position in the new higher education environment.

The notion of an organization's doing a "job" has roots in the work of a Harvard Business School professor named Theodore "Ted" Levitt, who arrived there in 1959. Just one year later, he published a seminal article called "Marketing Myopia,"[4] in which he accused business managers of focusing more on the things they make than on the customers those things are ostensibly designed to serve. Throughout his twenty-five years in the classroom at HBS, Levitt preached the importance of distinguishing means from ends. The purpose of a business, he taught, is not to make products or services, but to "create and keep a customer." The key to doing so is to be "wedded constructively to the ideal of innovation."[5]

But innovating on behalf of a customer is difficult, Levitt warned, because of the tendency to think of improving the product or service that the customer buys, rather than addressing the job that it is bought to do. "People don't want a quarter-inch drill," he reminded his students, "they want a quarter-inch hole."

Drawing that means/ends distinction has never been more important in higher education. As in so many industries, the higher education bigger-and-better emphasis has been on product features: the range of courses offered, the prestige of the institution, the campus accommodations. Now, with a college education becoming simultaneously more expensive and a precondition to earning a living wage, there is a temptation for students and policymakers to focus on making the fundamental product—a degree—more affordable; in the face of today's wrenching economic and social pressures it is natural for not only marketers of higher education but also customers to become myopic.

Yet the job that students and policymakers need done is the bestowal of the insights and skills necessary not to just make a living but to make the most of life. A college degree creates its significant wage-earning advantage because it is designed with more than mere economic goals in mind. Among those extra-economic goals are the jobs of discovery, memory, and mentoring, jobs that traditional colleges and universities perform as few other institutions can.

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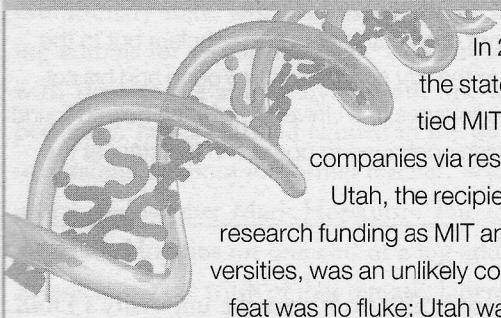
What Universities Do Best

The first job that universities do uniquely well—discovery—was a leading objective for Harvard's Charles Eliot when he placed graduate programs atop the college, strengthened the academic departments, and broadened the university curriculum. Discovery was also the primary reason for James Conant's up-or-out tenure system. Together, these systems have produced powerful results. University discoveries have helped shape the modern world, as detailed by Columbia's Jonathan Cole in *The Great American University*. Even with private industry spending much more on research, universities still play the leading role

in basic, or discovery, research: in 2008 universities performed roughly 60 percent of basic research in the U.S.[6]

Ironically, some of the university's discoveries now threaten its historical mode of operation. Online technologies such as computer chips and Internet search engines are the products of university professors and their students. So are the instructional and business strategies that allow for highly efficient delivery of a college degree. That fact bodes well for traditional universities. As seen in innovations such as BYU-Idaho's fishbone and report card, they can develop technologies and ideas that will take themselves and those they serve to new heights, just as they discovered the tools that are now causing disruption in the higher education industry. At many universities, students are playing an increasing role in that discovery process.

A HIGH RATE OF RETURN ON DISCOVERY RESEARCH



In 2008 the University of Utah, the state's largest public university, tied MIT in producing the most new companies via research discoveries—twenty. Utah, the recipient of only one-fifth as much research funding as MIT and seventieth among all universities, was an unlikely contender for this title. Yet the feat was no fluke: Utah was second on the list behind MIT in each of the preceding two years, ahead of such research giants as Cal Tech, Michigan, and Harvard.[7]

Utah's strategy for commercializing research holds hope for universities trying to do the job of discovery without the financial clout of the largest research institutions. In 2005 the university determined to build upon its existing advantages of an entrepreneurship-friendly state and a successful research park. It created a technology commercialization office that established working relationships with local angel investors and venture capital firms. The office also developed in-house capabilities such as a new business "accelerator," Venture Bench, that

sponsors an entrepreneur-in-residence program and assists with market analysis, website development, and accounting and legal services. To bridge the gap between company inception and funding by external investors, the university created a Virtual Incubator Program, which gives a potential spin-off company up to $50,000 (free of overhead charges) for continued research and development.[9]

Though these supportive systems are important, according to university president Michael Young, Utah's greatest competitive asset in commercializing research is its students. "Our advantage," Young says, "comes from connecting our research scientists to students from disciplines ranging from business and law to engineering and medicine who can help these scholars realize the full potential of their discoveries." In 2010, more than 900 students and 88 percent of the university's academic units participated in this commercialization work. In addition to involving students in Venture Bench and related activities, the university operates an $18 million student-raised and managed venture capital fund, which prepares students for careers in venture investing. The benefits accrue not only to students and scholars but to the surrounding community: in the first six years after Young and his colleagues established these linkages, the University of Utah helped found 109 companies, 90 of which continued to operate in the state at the end of that period.[10]

Like discovery, memory is also built into the university's DNA. Beginning with his or her freshman year of college, the future university scholar moves to the cutting edge of knowledge only after thoroughly probing its foundations. A college general education program exposes young students to a broad range of disciplines, with emphasis on the historical development of those disciplines. A major course of study then brings students from past to present, fundamental to advanced, before they win the right, in graduate school, to assume the scholar's role of adding to the body of knowledge in their field.

This intellectual grounding, or memory, allows university scholars to perform a critical memory-related function today. They can help

learners gain their footing in the flood of information that might otherwise overwhelm them. Thanks largely to universities, the sum of knowledge has exploded. Via tools such as Stanford-spawned Google,[11] learners now have this knowledge at their fingertips. Yet they lack an understanding of what to search for and what to make of it when they find it. Traditional institutions of higher education are uniquely qualified to help learners do what they might otherwise struggle to do on their own. These scholarly communities have the collective insight and experience to answer a learner's most vital questions: How can I achieve proper breadth and depth in my formal education? What books should I read? What sources of information can I trust? What new information matters? What principles don't change? What works and what doesn't?

Along with discovery and memory, mentorship is another traditional strength of the university, one that goes back to its earliest evolutionary state, when colonial colleges were little more than boarding schools for teenagers. These students learned as much from living with their tutors and studying with one another as from the formal pedagogy. James Garfield alluded to the power of academic mentoring in a statement about his former teacher, Williams College president and moral philosopher Mark Hopkins: "The ideal college," Garfield said, "is Mark Hopkins on one end of a log and a student on the other."[12] Appreciating the truth of that remark, Lawrence Lowell invested heavily in a residential housing system to allow more students to sit on the collegiate "log" with their own Mark Hopkinses. Though few universities could replicate Harvard's house system, most built dormitories and created campus activity centers. Thanks to the postwar expansion of traditional university campuses, several generations of young people have literally grown up at college.

Given the importance of the jobs of discovery, memory, and mentoring, the vulnerability of traditional universities lies not so much in their growing costs but in their relative performance of these jobs. Even in an increasingly competitive world, the traditional university has a unique, vital role to play. That is recognized by its external

supporters. Government agencies and corporations are still willing to fund productive university research. Taxpayers and legislators appreciate, at a reasonable cost, the social benefits of the university's memory. Many students and their parents are willing to pay a premium price for a university experience with face-to-face instruction and personal mentoring. There are complementary roles for community colleges, technical institutes, and for-profit institutions to play; these institutions are especially critical in serving students who would otherwise be nonconsumers of postsecondary education. But universities of the kind that Harvard's Eliot, Lowell, and Conant envisioned are vital to the cause of higher learning.

Unique Assets

The traditional university has two unique assets for performing the jobs of discovery, memory, and mentoring. Each must be recognized as an asset of both great potential value but also great cost.

The first of these unique assets is the university's physical campus. Paradoxically, the trend toward technology-based learning and communication that threatens to undermine the university's traditional approach to instruction is also one reason that its campus is so valuable. Now more than ever, parents want to send their texting and video game-dependent children to settings where face-to-face interaction is unavoidable. Many relish the thought of their children facing professors who demand preparedness for class. They also see value in their children's living with roommates, the most worthy of whom may serve as role models and the worst of whom at least provoke self-introspection. Even in the days of cohesive high schools and family farms and businesses, the traditional university was valued as a place for young people to mature into adulthood. Today it may be one of the few places where that can happen systematically.

> *Ironically, and thankfully, the glorious abundance of the virtual has created an even greater longing for the real.*[13]
>
> —Mary Sue Coleman, president of the University of Michigan

The other unique asset of the university is its professoriate. The Ph.D.-trained professor who has survived the tenure process is a rigorous thinker with a deep memory. That professor also has the potential, thanks to long teaching experience and the campus setting, to be not only a discoverer of new knowledge but also a life-changing mentor. The traditional higher education setting provides a still unmatched opportunity to "take professors, not courses." Though online pedagogies continue to improve and are likely to produce cognitive learning outcomes superior to those of the traditional classroom lecture, the most lasting, transformative learning is personal, the result of an intimate, lasting connection with a great teacher. What James Garfield said of Mark Hopkins and his log, Eliot would undoubtedly have said of Josiah Cooke and his makeshift basement laboratory. So would Lowell of Benjamin Peirce's help in publishing a math paper and Conant of Charles Jackson's mentoring and his personal introductions to the great German chemists.

A measure of personal intimacy can be achieved at a distance. Caring instructors can reveal their personalities online, offering collective and individual encouragement and inviting introspection that transcends the formal curriculum. Likewise, online mentors can form lasting bonds with students. That is true, for instance, of Western Governors University's mentors, who talk by phone with their assigned students for at least thirty minutes each week throughout the degree program. WGU students and mentors are unlikely to meet face to face until graduation, but by that time they may have become fast friends.

Still, the life-changing professor puts the traditional university on a different plane than its low-cost competitors. Things happen face to face, especially outside of the classroom, that are unique. To enter a professor's office and discuss matters unrelated to a particular course is to join a special scholarly community. The value of the transcendent, personal learning experiences possible in such communities is great enough that students who have the financial means will pay the price not only of the professor's salary, but of the campus setting, today's "log."

Not coincidentally, the university's most unique assets relative to the jobs of discovery, memory, and mentoring are also among its most expensive assets. Efficiency-minded educators generally eschew the costs of large brick-and-mortar campuses and of full-time faculty who engage in student mentoring, curriculum development, and discovery research. These assets are valuable because they are unique. But because they are so expensive, the university must deploy them parsimoniously and strategically.

The Efficiency Imperative

The typical university must decrease the cost of each degree it grants. As pointed out by McKinsey in *Winning by Degrees*, there are two main ways of doing that. One is to increase the percentage of students who graduate, and who do so in a timely manner. Modularizing the curriculum so that students are more likely to finish with the minimum number of required credit hours is key. So is the academic advising and personal tutoring needed to sustain students who would otherwise drop out.

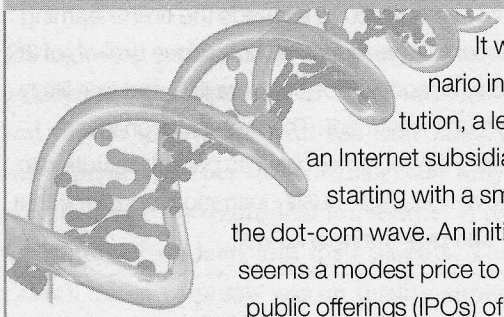
The other way to reduce the cost of obtaining a college degree is to decrease the costs of the institutional resources that go into it, especially the costs of facilities and instruction. Year-round operation and efficient classroom scheduling have the potential to increase the utilization of physical facilities, for many institutions their second-largest cost after faculty salaries and benefits. The concept of year-round instruction is as foreign in traditional universities as it is taken for granted by for-profit organizations. Though a BYU-Idaho-style three-track system may be a bridge too far for many traditional institutions of higher education, the successful ones will find incentives for both faculty and students to make better use of campus resources during the summer.

The most powerful mechanism of cost reduction is online learning. All but the most prestigious institutions will effectively have to create a second, virtual university within the traditional university, as BYU-Idaho and SNHU have done. The online courses, as well as the

adjunct faculty who teach them, should be tightly integrated with their on-campus counterparts; this is an important point of potential differentiation from fully online degree programs. To ensure quality, universities may also decide to limit online class sizes or pay instructors more than the market rate. Even with such quality enhancements, online courses will allow traditional universities not only to save instructional costs but also to admit more students without increasing their investment in physical facilities and full-time faculty.

The most powerful mechanism of cost reduction is online learning.

AN ELITE UNIVERSITY'S ONLINE SUBSIDIARY



It was an all too common scenario in 2000. An established institution, a leader in its industry, creates an Internet subsidiary—complete with a name starting with a small *e*—in hopes of catching the dot-com wave. An initial investment of $30 million seems a modest price to pay, with $100 million initial public offerings (IPOs) of newly started companies a common occurrence.

In hindsight, this story reads like the script of an investment tragedy, particularly with the added detail that the would-be Internet entrepreneur was a university. But eCornell has been making a profit for its parent, Cornell University, since 2005. Though the profits are great enough that a dividend could be paid to the Cornell endowment, which staked the $30 million investment, the university's trustees have opted to allow eCornell to reinvest those profits into new programs and infrastructure for continued growth.[14]

Cornell created eCornell as a for-profit subsidiary, not for the purpose of maximizing financial returns but to facilitate flexibility in governance and ensure attention to marketplace performance. The

connection to eCornell's not-for-profit parent is strong. Full-time faculty members author eCornell's courses, with the support of professional online curriculum developers. Faculty members may also participate in web conferences with students and contribute face-to-face instruction to hybrid offerings.[15]

By 2010, the online eCornell within the traditional Cornell University annually enrolled more than 10,000 students in twenty-six certificate programs. Nearly all students are working adults retooling for new or enhanced careers, in fields such as business, health care, and hospitality and food service management. The combination of high-quality online curriculum, independence in time and place of study, and the Cornell name have produced sustainable growth achieved only by the most successful few of the dot-com companies that survived the bursting of the Internet bubble early in the twenty-first century. eCornell's 24 percent growth in students served in 2010 exceeds the online learning industry average of 21 percent. Its year-over-year revenue growth of 25 percent would make for only a modest dot-com-era IPO, but one likely to yield a handsome return on investment. The real return on investment, though, is the capacity that eCornell gives its parent institution to serve new students with low-cost, high-quality learning technology that potentially benefits its on-campus students as well.

Most traditional universities already manage their instruction costs by employing lower-cost adjunct faculty and graduate students; more than half of the instructors at the typical not-for-profit institution fall into one of these two categories.[16] But this faculty pool is geographically limited, just as the classroom is limited by space and time. Moreover, few of these adjunct instructors work within quality assurance systems like those of the best online educators. To be cost competitive, a university must develop high-quality online courses that can be taught by qualified instructors from around the world.

Before long, even the best-taught face-to-face courses will be hybridized, suffused with online components.[17] Lectures and other non-interactive activities such as in-class quizzes are being put online, allowing full-time faculty instructors to focus on high-value pedagogies

such as case discussions. Customized online tutorials and simulations of real-world environments will increasingly be added to the curriculum. The number of face-to-face sessions per course will diminish as more is done online; specially trained teaching assistants and mentors will facilitate online discussions and grading. Full-time faculty instructors will thus be able to teach more students without an increased workload, in a way analogous to the large-section model devised at Harvard in Eliot's day. Those instructors will have the ability to stay connected to what is happening under the direction of others by following the online conversations and participating at their discretion.

"Work That the World Wants Done"

Though cost reduction is necessary for the typical university, it will not be enough. Operational efficiencies notwithstanding, BYU-Idaho and similar innovators with full-time faculty and expansive campuses still expend more per student than their fully online counterparts. The real challenge for traditional universities is to justify the greater cost in the minds of students and their parents. That is one reason why Kim Clark's initial emphasis was on quality rather than cost; before seeking cost competitiveness, he wanted to ensure a clear quality advantage via innovations such as the Learning Model and Foundations.

Lawrence Lowell likewise emphasized quality as he assumed Harvard's presidency. It was 1909, and his university was struggling under the weight of Eliot's vision of having everything at its best. Then as now, costs ran ahead of revenues, and critics questioned the relative value of a college education. Some wanted to see it reduced from four years to three. Lowell, however, raised their sights. In rallying his Harvard colleagues, he asked a rhetorical question appropriate to our day:

> May we not feel that the most vital measure for saving the college is not to shorten its duration, but to ensure that it shall be worth saving? Institutions are rarely murdered; they meet their

> end by suicide. They are not strangled by their natural environment while vigorous; they die because they have outlived their usefulness, or fail to do the work that the world wants done; and we are justified in believing that the college of the future has a great work to do for the American people.[18]

In his balanced, golden-mean way, Lowell would sense both opportunity and vulnerability on today's higher education landscape. He would see the traditional university's opportunity to excel in the jobs of discovery, memory, and mentorship—"work that the world wants done." At the same time, though, he would recognize the need to change the traditional university's DNA. By studying the history of higher education since his day, Lowell would see that most of today's universities are congenitally predisposed to committing "suicide."

Suicide by Imitation

For all the nimbleness and cost advantages of for-profit competitors, most universities' fundamental problems are of their own making. They are engaged in genetically driven, destructive rivalry with their own kind—other institutions trying to be the world's best according a single, narrow definition of excellence. Much of the trouble is rooted in Conant's push to make Harvard excellent. His tools for finding the best students and scholars, the SAT and up-or-out tenure, presumed that Harvard and its peers would educate only a tiny fraction of the U.S. populace. In Conant's time, only 1 out of 20 Americans earned a college degree.[19] He wanted to find the few of these college-bound students who would benefit most from a Harvard education. He also felt driven to return the institution to academic preeminence. Focusing on only "the best" served both purposes.

The strategy worked fantastically well, partly because Conant underestimated the future demand for college education. As the typical

high school graduate became more likely than not to enroll in college,[20] Harvard went from accepting 2 out of 3 applicants to denying 9 out of 10. The supply of candidates for faculty positions likewise mushroomed. Excellence-assuring mechanisms that in the 1930s helped Harvard become less clubby and mediocre made it, seventy years later, unforeseeably elite.

At the same time, the excellence-driven Harvard became more expensive and less capable of serving its share of college-bound students. As its prestige and costs soared, its relative capacity to educate the masses plummeted. Because many students could afford to pay only a fraction of the full cost of their education, the university had to make up the difference; even with its unusually large endowment, there was a limit on the financial aid Harvard could supply and thus the number of students it could admit. The universities that followed Harvard's lead likewise became more expensive and less accessible. In institutions unable to generate sufficient new revenues, through sources such as fundraising and sponsored research, the quality of undergraduate education also suffered, as they were unable to finance both their new scholarly activities and historical levels of faculty–student interaction.

Across higher education generally, the result has been a decrease in the value of a diploma relative to its cost and the closing of doors to would-be students.[21] But it is not only students who have suffered by the broad adoption of the elite university model. So have scholars. The current system of academic meritocracy, in which tenure depends on publishing via elite journals and academic presses, limits the activities and potential contributions of junior faculty members. Learning innovation is undervalued, as are other forms of scholarship that do not result in traditional publication. Many individual faculty members and even whole departments fail to win due recognition for their contributions to the university and its students.[22] The genetic tendencies that drive universities up the Carnegie ladder underserve the majority of both students and faculty.

Making Choices

Fortunately, the number of students worldwide seeking education is growing, as is the potential for knowledge discovery and the need for cultural memory. The world needs more university education, not less. However, there are too many universities trying to be like Harvard without fully understanding the costs of what Harvard does. To perform the jobs of discovery, memory, and mentoring at a competitively sustainable cost, the strategy of the university must reflect firm choices about what it will and will not attempt to do.

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The concept of making tradeoffs is easy to articulate, but hard even for for-profit enterprises to consistently apply. The bigger-and-better tendency tempts successful organizations to want to do everything for everyone. Two decades after Ted Levitt argued the importance of remembering the job for which a product or service is created, one of his junior colleagues at the Harvard Business School, Michael Porter, showed by rigorous research that long-term success requires not just satisfying customers' needs but doing so consistently better than one's competitors. Though Porter's analysis was complex, the guiding principles that flow from it are straightforward. They

We decided this year to buck a trend and not pursue AACSB accreditation for our School of Business . . . . Our analysis revealed that it would redirect more than $2 million per year to activities and priorities that showed no demonstrable improvement in the experience of students.[23]

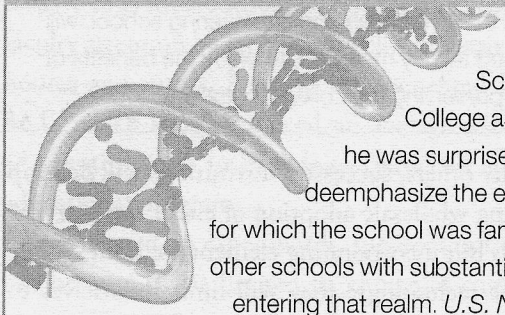
—Paul LeBlanc, Southern New Hampshire University

include the ideas that competitive success requires being different, making unique choices about what an organization will and will not do.[24]

Porter's challenge to make tradeoffs and be different indicts the traditional higher education strategy, as it does the bigger-and-better strategies of many successful businesses. It strikes at the heart of Eliot's vision of everything at its best and at a century of bigger-and-better Carnegie climbing by American colleges and universities as well as Harvard imitation by many international universities. Yet it also offers hope of success through unique strategic choices. Rather than climbing the same ladder as all other institutions, a university can succeed by being selectively different.

To succeed in an increasingly competitive world, even the best universities must find a strategy that transcends Harvard imitation. It isn't necessary to entirely forego graduate programs and discovery research, as Gordon Hinckley and David Bednar did at BYU-Idaho. But universities must step off of the traditional ladder in defining themselves. That means thinking about what they do, not solely in terms of the course taken by Harvard and the other elite research universities that pursue excellence across the full academic spectrum.

AN INNOVATIVE COLLEGE AT THE TOP OF ITS NICHE



When Leonard "Len" Schlesinger arrived at Babson College as its new president in 2008, he was surprised to encounter thoughts to deemphasize the entrepreneurship curriculum for which the school was famous; the concern was that other schools with substantially greater resources were entering that realm. *U.S. News* had ranked Babson's MBA program number 1 for entrepreneurship for fifteen consecutive years, and its undergraduate business program was similarly renowned. Yet some of Schlesinger's new colleagues suggested that this entrepreneurship-focused strategy pigeon-holed Babson and

made it vulnerable to competitors. Better, they argued, to push for a rise in the school's general ranking relative to the most elite schools.

Schlesinger, a former faculty member and administrator at both Harvard and Brown as well as a senior executive with Limited Brands, owner of such distinctive marks as Victoria's Secret and Bath and Body Works, disagreed strongly with this idea. He knew from personal experience in both higher education and retail marketing how difficult and expensive it is to create a unique brand. He also knew the value of having one, as Babson did.

Rather than agreeing to step from the top of a small but important academic niche onto the Carnegie ladder, Schlesinger held a series of strategic discussions among the community that helped focus his colleagues on deepening and broadening Babson's entrepreneurship capabilities and reputation. The members of the Babson community agreed on three goals: (1) being known as *the* educator for entrepreneurship of all kinds; (2) extending Babson's capabilities to the world, via initiatives such as expanding programs for working professionals, developing curriculum for small business owners, and helping to create a school of management and entrepreneurship in Abu Dhabi, and (3) ensuring a sustainable financial model for the college.[25]

The Babson strategy also includes plans for expanding its use of blended face-to-face and online instruction, which will both extend Babson's reach and reduce its costs of instruction. A collaborative agreement with nearby Wellesley and Olin colleges, the one a premier liberal arts institution and the other a leading engineering school, will allow Babson students and faculty members to enjoy the benefits of academic diversity while preserving the college's strategic focus.[26]

Like Babson and many others, successful institutions will develop their own models, eschewing wholesale adoption of either the Harvard or the purely online models but incorporating elements of both. While making the most of online technology, they will limit themselves to particular aspects of the work the world wants done by universities; that will allow them to do what they do at competitive levels of quality and cost. They will choose based on what jobs they can do uniquely well. The critical choices relate to students, subject matter, and the definition of scholarship.