

RIDING THE TIDE OF DISRUPTION IN HIGHER EDUCATION



In the face of technological change and cost pressures, universities, and non-elite institutions in particular, must develop a value proposition that resonates with stakeholders and clearly articulates what makes them relevant to the market, write **John Davis** and **Mark Farrell**

ILLUSTRATION: ANDY BRIDGE

It's time to get comfortable being perpetually uncomfortable. The known, mostly predictable, rhythms associated with universities of the past 100 years have given way to syncopation caused by two off-beat trouble-makers: technological change and cost pressure.

Taken individually, these twin dynamos of disruption are not unfamiliar. Indeed, both have been found residing side-by-side within the business world, upsetting the status quo, frustrating otherwise well-intentioned people, and forcing less nimble competitors out of existence or into extreme makeovers just to survive. We've seen the cycles of disruption in industry, from the invention of the horseless carriage to the veritable dissolution of the newspaper industry. Transitions like these rarely occur easily, and many unprepared organizations have quickly found themselves in the ashbin of history.

For the "glass half empty" crowd, such change is fraught with danger, pain and loss. But for "glass half full" believers, the changes represent opportunity and the chance to revive and revitalize one's future. The challenge lies not in deciding which half of the glass represents your perspective, but in how you plan to thrive in this decidedly uncomfortable new world.

This dilemma confronts universities around the world today, especially those we describe as "non-elite". We are quite familiar with the elite: Duke, Stanford, Oxford, MIT, the Ivy League, University of Tokyo, and more; the names are familiar to all.

These universities have attained an extraordinary level of prestige, with international reputations for excellence across multiple domains.

Non-elite institutions may be perfectly competent and known in their local markets, but they increasingly struggle for relevance and visibility in a global higher education world competing for the best talent (students, faculty, staff, partners). With technological change bringing new

the discomfort wrought by technological change and cost pressures. After all, your institution has weathered the storms of change for decades, if not centuries. Elite institutions are in a unique position of marketing a product with relatively inelastic demand. College tuition fees rise every year, typically faster than inflation.

According to *Bloomberg*, US universities, for example, have experienced tuition increases outpacing inflation for decades, yet demand remains stronger than ever. According to *US News & World Report*, Stanford University had the lowest acceptance rate in the US in the autumn of 2013 at 5.7%, and the first 10 schools on the list had acceptance rates under 9%, with acceptance rates for the top 25 institutions under 15%, including seven of the eight Ivy League universities, according to *US News*.

Of course, most institutions are not among the elite, nor even recognized beyond local markets. The main ranking bodies review only the top 500 institutions, out of more than 17,000 universities worldwide, yet we suspect they operate in highly competitive markets and compete for many of the same talented students as the better known schools.

While we don't believe that all of these universities are under threat, we do believe that a good number of them will struggle unless they develop a value proposition that not only resonates with their stakeholders (students, faculty, employers, the professions, government), but clearly articulates what makes them different and why that distinction is relevant to



content delivery platforms and, along with them, radical new cost models (i.e. free), the need for non-elite institutions to redefine who they are, what they do, and how they do it, is essential if they are to survive, let alone thrive, against the superior funding and resources of elite institutions and the elegant simplicity of technologies offering free content. In effect, technological changes and cost pressures mean universities must do more than just deliver content. They must take clear advantage of the contexts in which they operate to have a differentiated position that resonates with target stakeholder audiences.

If you are a faculty member from an elite research university, then you may well be quite comfortable with

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the market. Even with a clear value proposition, departments within universities may not all be protected, despite the valiant efforts of the faculty within to maintain viability, forcing some to close down entirely, or merge with others. Of course, for the least prepared institutions in extreme situations, merger or even demise may be their only options.

Clayton Christensen's work in innovation and growth provides useful insights into the challenges posed by organizations that fail to innovate, and the opportunities for those that do. In 2002, Christensen and colleagues contended that disruptive innovation represented a growing threat to education in the US. More than 500 institutions had closed down the previous decade, and more than 2,000 corporate universities and online/distance learning institutions had grown rapidly. Disruptive innovation appeared to be a key driver of these changes.

Christensen argues that disruptive innovation explains why corporate training constitutes a threat to traditional approaches to business education. Why? Simply put, corporate training offers a more accessible, often uncomplicated and tailored product well-suited to problem solving at work, at a price point that competes favourably with the high cost of a top tier MBA programme.

In addition, Christensen cites the University of Phoenix (enrolment 200,000 plus) as another example of an education disruptor because it targets non-traditional education consumers, and emphasizes a student-centric philosophy

through its online course offerings designed for the busy lives of adult learners. In a similar vein, Lindsay Tanner, the former finance minister in the Labour government in Australia, gave a speech which warned that universities that do not embrace new technology will lose students and ultimately face closure.

Technological innovation

Of course, the technological advances in the 2000s have impacted businesses and industries around the world, so we should not be surprised that higher education is also being affected. Companies everywhere are using new technologies to contain costs by streamlining back office, operations and supply chain activities, and universities are facing their own cost pressures for which these technologies offer practical solutions.

Beyond operations, new technologies are impacting one of higher education's most hallowed traditions: knowledge dissemination. The advent of MOOCs (massively open online courses) have made course knowledge accessible to anyone with a computer, tablet or mobile device far less expensively, or even free, dramatically increasing the reach to hundreds of thousands of students for the most popular MOOCs.

A study from Wharton University revealed Coursera, a leading MOOC (along with edX and Udacity) has more than 10 million users. The early media buzz for MOOCs in 2012 mirrored the excitement that ushered in the dot.com era in the late 1990s, with many reports suggesting that traditional brick and mortar universities would

go out of business. As we now know, traditional retailers didn't disappear and, indeed, are thriving while online retail has also thrived. By the same token MOOCs have not replaced universities. Instead, they may well be serving a more complementary function, even inspiring faculty to deliver content in innovative ways.

Adaptive learning platforms are yet another example. According to an article in Forbes published in 2014, offering students a range of new media and related instructional tools designed to adapt to their learning needs, including dynamic ebooks, video tutorials, animated case studies, games and simulations, adaptive learning technologies are a potentially powerful complement to existing in-class instruction. The software identifies a student's knowledge weaknesses, redirecting them to the content requiring additional study. Periodic assessments can be designed to measure progress at intervention points designated by faculty. Data captured by the system helps it adjust to each student's unique learning needs.

However, even with the potential represented by new technologies to enhance and complement higher education delivery and student learning, legacy structures within most universities will increasingly hinder their ability to successfully adapt and, thereby, avoid being





In the US, full-time academic salaries range widely, from \$99,000 at private non-profit doctoral institutions, to

\$85,400 at private non-profit institutions, to \$73,900 at public institutions, and \$45,700 at private for-profit institutions (US National Center for Education Statistics, 2014). As one study by A Astin in 1993 showed, the ROI expectations are further complicated because a faculty's research-centric orientation was inversely related to its student-centric orientation which was also negatively related to salary compensation.

More simply, being a productive research scholar was counter-productive for teaching excellence. As the studies show, faculties that

disrupted. For example, academic promotion, tenure and salary increases are primarily dependent on research productivity and quality.

While teaching is an expected responsibility, it is a far less influential factor in tenure decisions. The challenges are clear: there are not enough incentives for faculties to practise innovative teaching approaches since rewards are skewed towards research productivity; and many academics perceive teaching as a distraction from their research initiatives, reinforcing the view that the emphasis on research productivity negatively incentivizes academics to satisfy only the minimum requirements in their teaching (Massy, 2003).

Despite the research emphasis of most universities, actual research productivity and quality is not evenly distributed among academic staff. According to one study, research output per academic was a median of three journal papers over a five-year period (West, Hore and Boon, 1980). Another study of 18 economics departments in Australia, by GT Harris for the Australian Economic Papers in 1990, revealed that the average economist published less than one refereed journal paper every two

years, and 25% had no publications over a five-year period.

Yet another research productivity study of 22,271 economists from 600 European institutions in 18 countries, carried out by PP Combes and L Linnemer for the *Journal of the European Economic Association* in 2003, revealed the following: a) economists published 2.7 articles each between 1971 and 2,000 on average (journal quality was not factored into this figure); b) even more interestingly, nearly two-thirds (60%) of the sample published nothing. When research outputs were divided by length of career, the top 1% of top producing economists published an average of two papers per year and, across the entire sample, the average economist published one paper every five years. Based on these findings, the evidence suggests that, even with a promotion and tenure model structured to reward research activities, universities are not always getting the proverbial bang for their buck.

Examining academic salaries leads one to wonder how long institutions can continue to invest in research using the current model when the returns are uneven at best.



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emphasized teaching excellence were more likely to have lower salaries, reinforcing a dilemma many universities face as they confront a future in which they must increasingly justify how they will survive, let alone thrive alongside better funded, better-known elite institutions.

At the risk of sounding heretical, bold thinking is in short supply at many, if not most, universities. Rather than chart a new direction and work towards conceiving ways of innovating their education model (a variation of the old maxim “necessity is the mother of invention”), most universities and their leadership continue to imitate the legacy standard represented by the top tier institutions, yet the deck is stacked decidedly against them (Christensen and Eyring, 2011).

In one sense, this is understandable since most university leaders are products of the system in which they gained their expertise. Few are therefore brave enough to be disruptors or have the perspective born of pushing boundaries from working in other organizational contexts. One can almost hear them collectively rationalizing “imitation is flattery (i.e. cost effective), and, according to Christensen and Eyring, innovation is foolhardy (i.e. expensive).”

But we wonder if the real cost comes from a misguided belief that maintaining the status quo, or making tiny incremental changes, will allow non-elite institutions to survive. Most universities as we know them today continue to operate a very costly business model, saddled with brick and mortar facilities requiring constant upkeep (and, in the case of the US, a plethora of collegiate sports-related investments), a proliferation of expensive graduate programmes, and an expensive reward/incentive model that disproportionately favours research productivity over teaching excellence, yet too often with underwhelming results in both areas.

We are steadfast advocates of higher education as a means of bettering oneself, gaining vital critical thinking skills, and preparing for

a lifetime of valuable contribution, but is the current university model up to the demands of 21st century society, including its accompanying expectations that graduates are equipped to solve this century’s most vexing problems?

We believe universities must address these challenges head-on. The vast majority of students will not study at the world’s elite institutions, enrolling instead in programmes that offer a compelling education and prepare them for life post-graduation. With the rapid advances in technology providing affordable access to higher education almost anywhere in the world, along with the promise of lower costs, we believe the time is ripe for university leadership everywhere to disavow imitation and instead exhibit bold thinking designed to unleash the tremendous intellectual capital that is otherwise constrained by a static education model designed for a bygone era.



As Christensen and Eyring state, “For the vast majority of universities, change is inevitable. The main questions are when it will occur and what forces it will bring about.”

Those institutions that bravely embrace this imperative, place students at the centre of learning, and pursue imaginative new initiatives will find themselves thriving, even with continued cost pressures and technological advances.

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FURTHER READING

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