CEO advisory

Leadership and strategy in the news

Craig Henry

Craig Henry, *Strategy & Leadership's* intrepid media explorer, collected these examples of novel strategic management concepts and practices and impending environmental discontinuity from various news media. A marketing and strategy consultant based in Carlisle, Pennsylvania, he welcomes your contributions and suggestions (craig_henry@centurylink.net).

Technology and disruption

Why Adobe embraced the cloud

With the advent of cloud computing, we {Adobe] faced disruption in the software market. For software companies, cloud computing represents a change in how products get developed and delivered to customers as well as a business model change – from a one-time sale to a subscription model. Even though we were not yet seeing major inroads from cloud competitors, we realized we needed to get ahead of this trend and overhauled our business model in a span of 18 months in 2012 and 2013.

. . . Today Adobe's offerings are cloud based, and the proportion of our revenue that is recurring has climbed from 19% in 2011 to more than 80%.

While it's important to react quickly, companies can't respond to every new market trend. Two key early indicators to watch are disruptions in adjacent markets and changes in the growth profile of your own company.

Adjacent markets being disrupted. At Adobe, as we looked across the software landscape in 2010 and 2011, we noted that nearly every software company that was founded in the last decade and reached scale did so with a cloud model.

In fact, when we decided to enter the adjacent market of digital marketing in 2009, we did so by acquiring a cloud computing company, Omniture Inc. While no cloud company had successfully challenged Adobe in creative software, our largest business area, we believed it was only a matter of time before that model would prevail in our market, too . . ..

Changes to growth profile. We had high customer satisfaction, but our research found that many of our customers were so satisfied with our current products that they weren't sure they would have a reason to upgrade in the future. We needed new innovation approaches to rekindle excitement among our existing customers, and we needed to bring in more customers.

In 2008, we began a small pilot in Australia and New Zealand, testing a subscription model that allowed customers to obtain our product with a relatively low monthly fee as an alternative to outright purchase of the software. We found that the new offering brought new customers into the market and encouraged existing customers to buy who would not have chosen to upgrade.

Daniel Cohen, "Warding Off the Threat of Disruption," *Sloan Management Review,* Winter 2017

New players transform the media landscape

FilmStruck [is] a new streaming-video service launched in November by Turner Classic Movies and Criterion. Aimed at cinephiles, FilmStruck hopes to capture an audience unhappy with

the experience on Netflix and Amazon Prime. In place of these platforms' "brute-force curation," the Criterion president Peter Becker said recently, FilmStruck offers guidance like that provided by film festivals and art-house theatres – a kind of thematic programming, based on a rotating selection of movies. "We think dropping people down in a world of choices in this time of media saturation is not necessarily the best experience," Becker said . . ..

While undoubtedly more niche than Netflix, FilmStruck may have a ripe opportunity. Not only are consumers switching from paid television to streaming video, but a growing number – sixteen percent of American viewers, up from ten per cent three years ago – now subscribe to multiple on-demand video services. Rather than pay for cable- and satellite-TV bundles, these viewers are "self-bundling," creating their own entertainment packages by combining Netflix with Amazon Prime, say, or Hulu with Netflix, or any of those with HBO Now. FilmStruck hopes to be added to the mix.

The question is just how many subscriptions people will buy. Even for self-bundlers, who are relatively affluent – they have a mean annual income of ninety thousand dollars, compared with seventy-six thousand dollars for average weekly viewers of streaming content – there is undoubtedly a breaking point.

Brian Patrick Eha, "A Self-bundling Service for Cinephiles," *New Yorker*, 30 November 2016

Turning viral content into an industrial product

Founded in 2009, Jukin is a market leader in a strange new industry that is organizing and monetizing the entropy of web video. A decade ago, when viral phenomena were still opaque and full of mystery,

we gazed awe-struck as "Charlie Bit My Finger" rose to fame. Jukin, since then, has systematized the riddle by acquiring clips that meet viral criteria and serving them to YouTube channels and other media outlets that might help induce a spread . . ..

In order to meet this demand for fresh content – a demand created by the process that supplies it – Jukin scales idle browsing to industrial proportions. A researcher, on average, watches 200 clips daily. That's a thousand videos each week, or 50,000 per year, give or take. The company's research is aided by proprietary software called Riff, which generates feeds based on niche viral keywords . . ..

Viral, in the Jukin sense, is less a result of an organic process than a replicable formula, defined only by tropes and a looming expiration date.

Jamie Lauren Keiles "How Jukin Media Built a Viral-Video Empire," *The New York Times* 27 December 2016

Technology is not enough

It's hard to imagine an industry more in need of disruption than the fossil fuel industry. There is no question that the burning of fossil fuels creates toxic byproducts that cause serious illnesses and death. There is compelling evidence that the burning of fossil fuels is contributing to what might turn out to be irreversible damage to the environmental stability of our planet.

Geopolitically, the economics of attaining fossil fuels has caused hundreds of billions of dollars to be transferred from Western countries to places bent on our destruction.

And individually, purchasing fossil fuels for automobiles is a major financial burden on many low income consumers.

It's hard to draw up a more compelling case for the need for disruption. Strangely, there is a very obvious technological solution to a substantial aspect of the problem – battery powered vehicles, or as we call them, electric cars. And yet, electric cars have not been anything near a disruptive technology.

In 2008 we had 12 car models in the US that were battery powered. Today we have 55. But they are languishing. Between 2008 and today the electric car's share of the automotive market has crawled from 2.3% to 2.8%. If it wasn't for production driven by government mandated emissions standards, I doubt the share would have grown at all. So what's gone wrong?

. . . So far, battery powered cars are very unappealing to consumers. They're too expensive, they have limited range, and except for a few, they look like crap . . ..

If you think your new technology is going to be disruptive you better first be sure it has consumer appeal.

Amazon, Uber and Airbnb aren't popular with consumers for technological reasons. They are disruptive because they are 1) cheaper and 2) produce a better user experience . . ..

Disruption is not a strategy. Improvement is a strategy.

When improvement is compelling enough, disruption is the outcome.

Bob Hoffman, "Disruption is not a strategy, it's an outcome", *Ad Contrarian*, 12 December 2016, http://adcontrarian.blogspot.com/2016/12/disruption-is-not-strategy-its-outcome.html

When disruption requires a sugar daddy

Uber will lose some $3 billion this year, after losing $2.2 billion last year. Even by the exuberant standards of the internet industry,

the company is a remarkably effective cash-burning machine.* By comparison, the largest annual loss posted by Amazon.com, no slouch when it comes to losing money, totaled $1.4 billion, back in 2000.

We're often told that companies like Uber and Amazon are masters of business innovation and industry disruption. But an argument could be made that what they're really masters of is getting investors, whether in public or private markets, to cover massive losses over long periods of time. The generosity of the capital markets is what allows Uber and its ilk to subsidize purchases by customers, again on a massive scale and over many years. It's worth asking whether these subsidies are the real engine behind much of the tech industry's vaunted wave of disruption. After all, the small businesses being disrupted – local taxi companies and book shops, for instance – don't have sugar daddies underwriting their existence . . ..

Nick Carr, "The Uber advantage", *Rough Type*, 21 December 2016, www.roughtype.com/?p=7523

Big Data's promise and perils

MGI's latest research with McKinsey Analytics on the state of the big data revolution measures the progress various industries have made toward capturing the revenue and efficiency gains we envisioned five years ago. Spurred on by digital-native competitors, the retail sector has captured about 30% to 40% of the margin improvements and productivity growth we identified in 2011. Manufacturing has captured some 20% to 30% of the potential, while the public sector and health care make the worst showings, realizing only 10% to 20% of the value.

Lurking behind these numbers are glaring disparities in performance

between a few firms at the cutting edge and the average company in any given industry. An examination of the telecom industry, for example, shows that the analytics leaders have posted three to five times higher returns on their big data investment than the typical telecom company . . ..

Many companies invested in analytics systems without fully appreciating that turning data into real value requires a profound reshaping of their day-to-day workflow. Others are still lagging behind in terms of fully digitizing transactions and processes to generate and collect all the data that could be useful . . ..

Data and analytics are already shaking up multiple industries. Companies at the leading edge are beginning to deploy machine learning and deep learning, which can do everything from providing customer service and managing logistics to analyzing medical records. We are experiencing the initial tremors of what will soon be a tectonic shift. Given the size of the opportunities at stake and the very real risk of creative destruction, organizations will have to push through the growing pains and adapt to a more data-driven way of doing business.

Nicolaus Henke, Jacques Bughin, Michael Chui, "Most industries are nowhere close to realizing the potential of analytics", McKinsey Global Institute, December 2016, http://www.mckinsey.com/mgi/overview/in-the-news/most-industries-are-nowhere-close-to-realizing-the-potential-of-analytics

Better strategists

Strategy: thinking and acting

Your organization's biggest strategic challenge isn't strategic thinking – it's strategic acting . . ..

Most organizations rely on communication plans to make that shift. Unfortunately, strategy communication, even if you do it daily, is not the same as – and is not enough to drive – strategy execution.

Because while strategy development and communication are about knowing something, strategy execution is about doing something. And the gap between what you know and what you do is often huge. Add in the necessity of having everyone acting in alignment with each other, and it gets even huger . . .. primarily it's not a strategy challenge. It's a human behavior one.

To deliver stellar results, people need to be hyperaligned and laser-focused on the highest-impact actions that will drive the organization's most important outcomes.

This isn't critical only for a changing company in a changing industry . . .. It's also true for fast-growing startups. And companies in turn-around situations. And those with new leadership . . . the most important strategy question you need to answer is: How can we align everyone's efforts and help them accomplish the organization's most important work?

Peter Bregman, "Execution is a people problem, not a strategy problem", *Harvard Business Review Blogs*, 4 January 2017, https://hbr.org/2017/01/execution-is-a-people-problem-not-a-strategy-problem

Staffing for the digital age

There is a sense that the growth of technical work may actually be amplifying the importance of the "soft" skills – such as effective communication and collaboration – and those sentiments are increasingly echoed by employers . . . successful technical workers

also need to understand organizations and teams well enough to move forward once they have a data solution in place. If these skills are not all possessed by the same person, then people with these different skills need to be able to communicate with each other effectively . . ..

It's not only unclear what blend of skills are necessary for working effectively in a digital workplace – how best to obtain these skills is also somewhat nebulous . . . skill development goes beyond training, simply because the pace of technological change makes setting up formal training programs difficult. Instead, much of it takes place on the job . . . many companies also encourage a more open learning environment, where employees can actually gain skills from participating in technical communities outside the company. For example, companies may encourage their employees go to meetups with employees of other organizations. They may also encourage them to contribute to open-source technologies as a part of their work for their organization.

Gerald C. Kane, "Your digital talent needs may not be what you think they are", *Improvisations*, 6 December 2016, http://sloanreview.mit.edu/article/your-digital-talent-needs-may-not-be-what-you-think-they-are/

Innovation begins with noticing

I once asked Fred Smith, the founder of FedEx, what led him to start the company back in 1971. He explained that, at the time, he was running a company at the Little Rock, Arkansas airport, refurbishing executive aircraft. It was there he began to notice that with increasing frequency, business people were showing up at his company to see if they could charter one of his planes to get some "time sensitive" shipment someplace in a hurry. "The

existing freight forwarders hadn't noticed this unmet need," he told me. "To us it seemed like a huge opportunity."

. . . The Opportunity Mindset he embodies is becoming a touchstone of success in the Digital Age.

1. Observe trends in your daily life. Innovators are noticers above all. . . . They ask questions. They question assumptions. So step one is to start noticing more wherever you are, wherever you go. Track consumer trends, technology trends, social trends, global trends, economic trends and political trends.

2. Project out ahead. Ask yourself: where will this trend will be three, five and ten years out? For example, take the artificial intelligence industry. Today, A.I. is said to be at the same stage of development as the Internet in the mid-1990's . . . The industry is expected to balloon from $8 billion in revenue today to $47 billion in 2020. Huge opportunities will accrue to those who are willing to project out ahead, then make their move.

3. Consider the larger impacts of the trend, technology or disruption. In other words, who's going to be affected? Who will benefit from this development and who might lose out?

Robert B Tucker, "Tracking trends – six essential steps for spotting your next opportunity", *Innovation Excellence*, 4 December 2016, http://innovationexcellence.com/blog/2016/12/04/tracking-trends-six-essential-steps-for-spotting-your-next-opportunity/

Sustaining superior performance

Most analysts have implicitly assumed that the capabilities required to attain high-quality

performance are the same as those needed to sustain it.

A new study aims to shed light on the issue by analyzing which capabilities enable companies to sustain a consistent and high level of performance . . . for the study, the quality level and consistency of performance are two distinct concepts . . ..

The authors analyzed data on 147 business units within large companies in the manufacturing sector that were based in either the U.S. or Taiwan. . . .

After controlling for firm size, competitive intensity of a given industry, and level of uncertainty faced – in the form of rapid technological developments or changing market conditions – the authors found that four particular capabilities emerged as integral to sustaining high-quality performance:

Improvement . . . a firm's ability to make incremental product or service upgrades, or to reduce production costs.

Innovation . . . how strong a company was at developing new products and entering new markets?

Sensing of weak signals . . . how well a company can focus on potential banana peels in order to improve overall performance, including analyzing mistakes, actively searching out production anomalies, and being aware of potential problems in the surrounding business environment.

Responsivenes . . . a business's ability to solve problems that crop up unexpectedly and to use specialized expertise to counter those complications . . ..

Intriguingly, the capabilities that increase consistency (improvement and sensing of weaknesses) are unaffected by the level of competitive intensity or uncertainty

surrounding a firm, whereas those that affect the level of performance (innovation and responsiveness) depend heavily on the external context, the authors found.

Matt Palmquist, "What It Takes to Stay Ahead of the Competition," *Strategy+Business*, January 2017

Bugs in the system

Credentialism and new opportunities for fraud

Academics need to publish in order to advance professionally, get better jobs or secure tenure. Even within the halls of respectable academia, the difference between legitimate and fake publications and conferences is far blurrier than scholars would like to admit.

OMICS is on the far end of the "definitely fake" spectrum. Real academic conferences evaluate potential participants by subjecting proposed papers and presentations to a rigorous peer-review process. Some 15,000 people attend the American Educational Research Association's annual conference, for example, and only about a third of submitted proposals are accepted.

In October, a New Zealand college professor submitted a paper to the OMICS-sponsored "International Conference on Atomic and Nuclear Physics," which was held last month at the Hilton Atlanta Airport. It was written using the autocomplete feature on his iPhone, which produced an abstract that begins as follows: "Atomic Physics and I shall not have the same problem with a separate section for a very long long way. Nuclear weapons will not have to come out the same day after a long time of the year he added the two sides will have the two leaders to take the same way to bring up to

their long ways of the same as they will have been a good place for a good time at home the united front and she is a great place for a good time." The paper was accepted within three hours . . ..

There are real, prestigious journals and conferences in higher education that enforce and defend the highest standards of scholarship. But there are also many more Ph.D.-holders than there is space in those publications, and those people are all in different ways subject to the "publish or perish" system of professional advancement. The academic journal-and-conference system is subject to no real outside oversight. Standards are whatever the scholars involved say they are.

Kevin Carey "A Peek Inside the Strange World of Fake Academia," *The New York Times*, 29 December 2016

Predictive modeling and HR decisions

Ironically, one of the places where predictive analytics hasn't yet made substantial inroads is in the place of its birth: the halls of academia. Tenure decisions for the scholars of computer science, economics, and statistics – the very pioneers of quantitative metrics and predictive analytics – are often insulated from these tools . . ..

Tenure decisions have impacts that ripple far outside of university campuses. . . . These decisions impact not just the scholars' careers but the funding of universities and the overall strength of scientific research in private and public organizations as well . . .

Despite these factors, academic decision-making processes rely

mainly on subjective assessments of candidates. We believe, though, that if analytics is given the opportunity to complement the tenure decision-making process by offering improved predictions about candidates' future performance and scholarly research, businesses and the public will be better served by the academic community. Given the stakes, we think it is time for a "Moneyball moment" in academia . . ..

Our models use a concept called "network centrality." This measures how connected a given scholar is in the networks that help define how successful their research is: the citation network, the co-authorship network, and a dual network combining the first two. (See "The Academic Dual Network.") By building models using data from more than 130,000 scholars who had published papers in the field of operations research, we found that this approach significantly outperformed simple predictive models based on citation counts alone, which is the more commonly used approach . . ..

. . . Specifically, these new criteria yielded a set of scholars who, in the future, produced more papers published in the top journals and research that was cited more often than the scholars who were actually selected by tenure committees.

Erik Brynjolfsson and John Silberholz, "Moneyball for professors?", *Frontiers Blog,* 14 December 2016, http://sloanreview. mit.edu/article/moneyball-for-professors/

Corresponding author

Craig Henry can be contacted at: craig_henry@centurylink.net