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COLUMN: LIFE IN THE C-SUITE

Wake-Up Calls for Reluctant C-Suite Executives

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FOREST FOR THE TREES

It is easy to get caught up in the day to day, even the month to month. CFOs live and die by the quarter. But there are major business technology trends that C-Suite executives—regardless of their day-to-day function—need to understand and respect. Why? Because these trends will inevitably and profoundly impact their companies and likely forever change the industries they occupy. In fact, their business processes and entire business models will be turned upside down by the trends. How inevitably? When? There is no question about the inevitability of the trends, though there are legitimate debates about timing. The strategic dilemma of course is "flatfootedness." If a company's timing is off it will lose competitive positioning. If it is way off, it may not survive. Hyperbole? Clayton Christensen's epic *The Innovator's Dilemma*[2] makes the point. (Note the book's subtitle: *"When New Technologies Cause Great Firms to Fail."*)

C-Suite executives must see the forest for the trees, even if the forest is inhabited by many unpleasantries—which it is. Why unpleasant? Because the trends will challenge many of the strategic assumptions executives routinely make about their futures. For example, companies generally assume incremental (and therefore manageable)—not disruptive—changes in their markets, in spite of public statements about their commitments to innovation. Executives are also usually influenced by the same company strategists who assume incrementalism, not by objective observers of industry and technology trends (with no vested interests in the impact their analyses might create). Real disruption can also be risky. There is a timing issue as well. So what should executives actually do, and when should they do whatever it is they decide to do? Many executives simply do not know. Worse, these kinds of decisions are often ignored by executives whose compensation is based primarily on short-term results.

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SCARY, INEVITABLE TRENDS

So what are these trends? Here are just five. Note that technologies will disrupt some of the most important industries on the planet. Note also that there are many more we could have examined with more arriving all the time.

AUTOMATION—POWERED BY ARTIFICIAL INTELLIGENCE (AI) AND MACHINE LEARNING (ML)—WILL REPLACE EMPLOYEES, SUPPLIERS, CUSTOMERS, AND MUCH MORE

For whatever reasons, and in spite of almost weekly reports of another manual process that has been replaced by an automated application, some companies—and executives—still believe that the adoption of AI and ML will be slow.[3,4] They are wrong, because AI/ML is the perfect solution: it is tireless, cheap, and faster to develop than ever before. But if employees believe they might be replaced, they will slow or overtly derail the adoption process. Remember that bureaucratic empires consist of people and budgets. Efforts to reduce either source of power challenge the very definition of corporate survival. Most companies also lack AI/ML expertise or even the ability to mine the processes ripest for automation, and it does not help that most executives have only a rudimentary understanding of AI/ML.

Supervised and unsupervised learning algorithms will power all flavors of automation. Robotic process automation itself will become automated, where smart applications will mine processes and develop applications to improve or eliminate inefficient processes—without development intervention. We will interact with applications simply by talking with them exactly the same way we talk to the smartest people

in the room. But unlike today, where "experts" are challenged every step of the way, tomorrow's applications will be empowered to make faster, better, and more explainable decisions on our behalf. All of this—and much more—is coming.

Executives should reimagine and reinvent their business processes and whole business models assuming these and other capabilities. Underestimating this trend will reward early adopters and punish late ones. Task forces and advisory boards should be established to explore all the possibilities here. They should develop relationships with universities piloting AI/ML. They should explore start-up funding perhaps initially with their own corporate venture capital. Prototyping teams should be formed and funded. Competitive intelligence should be increased. Juicy incentives should be developed. Should this happen tomorrow? Yes, all of it. Even though some executives believe they "have plenty of time" to ramp up their AI/ML investments, there is every likelihood they do not, and may be caught flatfooted by their competition or an industry disruptor—like how Amazon is disrupting healthcare.

BUYING JUST ABOUT EVERYTHING WILL CHANGE

Why are there insurance agents, tax preparers, bankers, real estate agents, or car salespersons? Why do we "pay" for things almost exclusively with government-backed, bank-sanctioned currency? Why does "cash" even exist? As most professionals understand, they are replaceable transaction layers that rob consumers of time, money, convenience, and patience. All of these processes can—and will—be automated. Already we are seeing disintermediation in these industries though by and large consumers are still fighting with insurance agents, tax preparers, bankers, real estate agents, and car salespersons every day.

C-Suite executives must anticipate these changes. Those in the affected industries should be disintermediating themselves, though that is a huge ask given the revenue generated by these transactions. The tax preparation business is a case in point. According to IBISWorld, the industry generates $11 billion annually, has over 125,000 businesses and employs more than 250,000 professionals. What would happen if this business was fully automated? Resistance to this inevitable trend is fierce. The same is true of other industries. Nevertheless, change will happen.

Given that the timing of full disruption is debatable, early strategic steps should include at least the exploration of alternative business models and the formation of partnerships with, for example, the automobile industry vendors who provide contact-free car buying experiences. They should be exploring hybrid buying and delivery models beyond what the pandemic required them to adopt. The same strategy should be pursued with the full-service real estate companies that offer lower commissions than traditional brokerages, and insurance companies that enable search and selection of insurance policies without interacting with human agents. Companies should also pilot the technologies driving all this change, including of course AI/ML, blockchain, natural language processing (*"just show me the best deals you have for new Chevies . . . arrange financing . . . and schedule delivery"*), cybersecurity, virtual, and augmented reality and analytics, among other enabling technologies. They should especially pilot proactive technologies capable of shopping on behalf of consumers based on what they already know about each and every buyer—which is a ton. As always, timing is challenging. *When* should companies begin to disintermediate themselves? Recognizing that tried and true revenue streams are on the line, disintermediation may be slow. The partnerships mentioned above may provide the predictive key. Executives should track new entrants into their industries since—as presented by Christensen[2]—it is often the new entrants who disrupt old, established industries. There are risks here for sure.

MARKETING GOES TOTALLY DIGITAL

The concepts of "marketing" and "branding" are changing—permanently. They will be mobile, proactive, reactive, personalized, segmented, experiential, and immersive, among other features. It is important to note that all this change is enabled by location-based technologies, interaction technologies (like augmented and virtual reality), and real-time analytics. Does next generation marketing cross the privacy line? Obviously, but Americans are not—with the exception of Californians and citizens of a few other states—all that interested in protecting their privacy. This is, depending on your perspective, sad for consumers but a boon to advertisers, marketers and branding experts.

Tracking customers' locations, knowing their buying histories, and integrating their needs proactively—they know you just bought a house . . . where you live . . . where you work—makes marketing relatively easy. Personalized marketing is the future—and let us not forget the Internet of Things (IoT), which will connect everything, all the time to generate even more data about consumers. As the number of connected devices and targets increases, so too do the prospects for

location-based marketing. Add emotionally charged experiential marketing and they have a winning combination of digital strategy and tactics. Who can resist?

Companies must invest in the technologies that enable all this, specifically location-based, IoT, and analytics technologies. Since automation will be ubiquitous, AI/ML should also be on the short list. Smart companies understand that spending more here, yields higher returns. Data scientists, ML experts, algorithm aficionados, and many other professionals with weird titles should be pursued—today.

What about branding? This one is trickier since branding lives in a digital social world that is highly competitive and increasingly vindictive. Since the web may be a prospective customer's first contact with a company, the branding and associated messaging around that brand must be carefully vigilant, managed and controlled. What if a consumer claims that your product contained a worm? What if consumers claimed your hotel has roaches? True or not, these "opinions"—so easily expressed online—must be found and addressed, ideally as quickly and automatically as possible. Investments in brand segmentation, image and language testing, and alternative medium brand messaging (TV, Facebook, Instagram, Twitter, YouTube, influencers, AdWords, print media, etc.) are now branding prerequisites. Yes, this is nearly all digital. Unless you are branding cemetery plots, its time to make the shift.

HEALTHCARE WILL BE DIGITIZED, AUTOMATED, AND PERSONALIZED

The healthcare industry is a mess. The Covid-19 pandemic exposed even more cracks in the system across the globe. The Delta variant—with more variants to come—has overwhelmed the "system" for the second time in a year.

Going forward, records will finally be integrated and accessible to individuals and caregivers from distributed clouds. Treatment programs and specific therapies will follow remote, automated diagnoses which will also be accessible to everyone. Pharmacies will be automated. These are just a few of the changes to the healthcare industry we can predict. Companies in the industry should prepare now. Look at the new entrants such as Amazon, Apple, and Google. What do they know that CEOs do not?

EDUCATION AND TRAINING WILL NEVER BE THE SAME

The entire education industry will change over the next ten years. Do those at all levels in the education business fully understand the kinds of changes happening? Are they planning for the changes that the pandemic accelerated? Are they thinking about how to exploit the changes underway? Are they thinking about disrupting their current revenue streams? Mobile, virtual, on-demand, experiential, immersive, and entertaining content will rule. Do they see it? Do they *want* to see it? Many of the same technologies that will automate the world and revolutionize healthcare—AI/ML, augmented and virtual reality, IoT and blockchain—will impact education. Why *listen* when you can *do*? How long does the "sage on the stage" have to live?

So what should education executives do? Pilot, pilot, and pilot some more. Faculty and administrators should be rewarded to think outside the traditional pedagogical box. This is not a major challenge for most universities, especially the ones without day-to-day financial constraints (where faculty are expected to teach, teach, and teach some more). Test markets are sitting right in front of faculty. Students will accept or reject alternative content delivery models with thoughtful comments. Educators should also partner with the renegades. There are well-funded aggressive challengers to the education market emboldened by their success during the pandemic.

RISKY BUSINESS

There are other trends that should scare executives, such as how the entire entertainment world is changing and how manufacturing will be impacted by automated supply chains and 3-D manufacturing. These trends, and the trends discussed here—are inevitable, though their precise arrival time is still debatable. So what is a C-Suite to do? Change is always a challenge, especially when financial vested interests are threatened. Much of the "encouragement" to change should come from Boards of Directors. In public companies, some will come from the analysts who cover a company's stock, especially in industries—like technology—where growth is rewarded more than quarterly performance. Some will come from disruptive leaders, which are often the product of failed prior C-Suites. Look, for example, at the recent changes that occurred at Microsoft and IBM after new executives arrived. Hyperbole again? CBInsights[1] lists 14 CEOs who were fired after failing to navigate disruption.

- John Akers (1993, IBM).
- Robert Nakasone (1999, Toys R Us).
- Gary DiCamillo (2001, Polaroid).
- John Antioco (2007, Blockbuster).
- Mike Lazaridis & Jim Balsillie (2012, BlackBerry).

- William Lynch (2013, Barnes & Noble).
- Ronald Boire (2016, Barnes & Noble).
- Mark Fields (2017, Ford).
- Jeff Immelt (2017, GE).
- Mickey Drexler (2017, J. Crew).
- Jan Singer (2018, Victoria's Secret).
- Steve Stagner (2018, Mattress Firm).
- Margo Georgiadis (2018, Mattel).
- Camillo Pane (Coty, 2018).

While the timing around business technology disruption can be tricky, if executives miss or mismanage these trends, they may themselves be disrupted.

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