

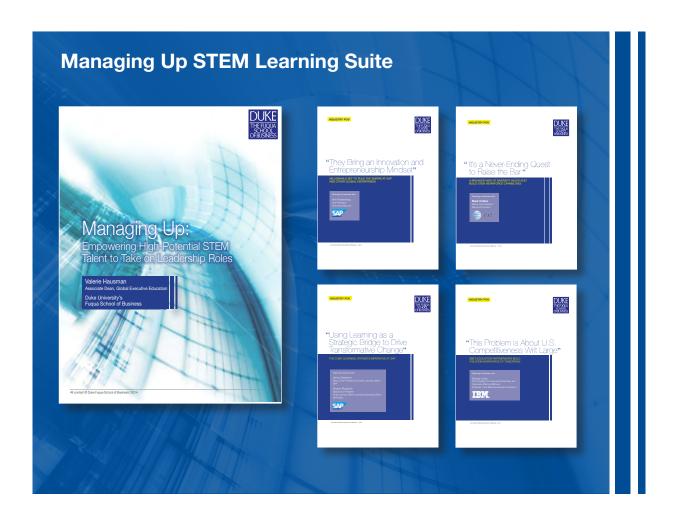


## **Executive Summary**

"Software is eating the world," said entrepreneur and venture capitalist Marc Andreessen famously in an op ed in *The Wall Street Journal* in 2011.<sup>1</sup> It's no wonder that leaders at all levels are unsettled about the potential and pitfalls of digital business.

The good news is that executives can use innovation to transform their companies and their careers. The bad news is that old strategies don't work anymore, and change needs to start within. If every company is a technology company, then every leader needs to become a technologist.

This white paper is part of a thought leadership series produced by Duke University's The Fuqua School of Business entitled *Managing Up*, which focuses on the emerging opportunities leaders face in today's dynamic global workplace. The prior series on empowering high-potential STEM talent to take on leadership roles can be accessed at www.fuqua.duke.edu.





## Disruption:

#### HOW INDUSTRY TRANSFORMATION IS RESHAPING EVERY COMPANY'S FUTURE

Media watchers and marketers have long described how technology enables the business. But now more are saying technology *is* the business. Satya Nadella, Chief Executive Officer (CEO) of Microsoft, says, "Every business will be a software business," an opinion that is seconded by media sources including Business.com, *Forbes*, *Fortune*, Gartner, and Recode.<sup>3</sup>

The old thinking was that traditional companies operated in established markets, competitive advantage was long-lasting, innovation required years of upfront investment, and operational excellence was a "game of inches" once Six Sigma goals had been realized. The new thinking is that anything is game with "digital business." Witness Snapchat's meteoric rise and startling advertising model of placing filters such as toast, tacos, and bees around or on users' heads.

"This is a time of digital Darwinism — an era where technology and society are evolving faster than businesses can naturally adapt. This sets the stage for a new era of leadership, a new generation of business models, charging behind a mantra of 'adapt or die," writes analyst Brian Solis of the Altimeter Group in *Wired* magazine.<sup>4</sup>

In his book *The Black Swan*, scholar and writer Nassim Nicholas Taleb describes "black swans," outlier events with an extreme impact that humans then seek to rationalize retrospectively. Taleb includes the development of the internet and personal computer in this category.<sup>5</sup>

What happens when precipitous change becomes routine due to digital dynamism and interconnectedness? From the Arab Spring and the Flash Crash to Brexit, Snowden, and social media takedowns, the new normal is — there is no normal. As companies face a bevy of black swans crowding the horizon, leadership has never been more important.

People look to leaders in times of fear, and many times leaders feel fear themselves. It can be tempting to double down on tried-and-true approaches: realigning organizations, digitizing within functions, and implementing new IT solutions and platforms.

In this paper, we advocate that these changes can prove to be red herrings, slowing momentum and subverting organizations from accomplishing their goal of becoming a digital business. "For digital transformation to be successful, the initiative must come from the top — from an executive who wields enough power to influence the entire enterprise," advises digital transformation guru Daniel Newman in *Forbes*. That leader must be able to embrace new ways of perceiving, sensemaking, and choreographing change and empower others with the strategy and resources to drive forward. Only then can the elephant — the large, traditional enterprise — dance.

## Portents and Promises: A BUSINESS CASE FOR DIGITAL BUSINESS

So just what is digital business? While we can learn important lessons from technology-first companies such as Amazon, Facebook, and Google, much of the transformation work will be done by traditional enterprises. Their job is not to transform themselves into SaaS companies, shedding all physical products and infrastructures, but to rethink their businesses for the digital era. According to Jorge Lopez, VP and Distinguished Analyst of Gartner, digital business is the "new business designs," or models, products, and services that can be developed by "blurring the digital and physical worlds." <sup>7</sup>

Digital business is attractive to companies today because it provides the tools, scale, cost levers, and data insights companies need to test and deploy new offerings and transform slow-growing traditional markets. Digital revenues are expected to grow from 16% to 37% by 2021, says Gartner.<sup>8</sup> Digital mastery also keeps companies competitive in a world where enterprise life spans are shortening — from an average of 61 years in 1958 to 18 years in 2011.<sup>9</sup> And despite the media hype — and leaders' widespread fear — digital business is not a winner-take-all proposition.

Says Mark Raskino, Vice President and Fellow, Gartner:

"It would be naïve to believe that every company can disintermediate every other as digital methods simultaneously redefine how markets and ecosystems operate.... Digital business does not have to be a zero-sum game. When we take digital to the core of every product and service, there is the possibility of moving many more industries toward Moore's Law pace of advancement and increasing the total of value created. Simply put, the pie should get bigger." <sup>10</sup>

Many companies are pushing to develop digital businesses faster, knowing that seamless processes and an exceptional customer experience are fast becoming table stakes in today's marketplace. Zappos didn't build a retail business; it became a customer service legend — and sales followed. Companies also cite the desire to grow in new markets, increase their competitiveness, and meet regulatory and compliance standards as key drivers of their digital transformation initiatives.<sup>11</sup>

Traditional companies, or those not "born on the cloud," are creating new platforms: what Accenture and others call SMAC — social, mobile, analytics, and cloud — and what IDC calls the 3<sup>rd</sup> platform to transform business.<sup>12</sup> The Internet of Things is accelerating this process, connecting businesses and their customers in a dynamic, everchanging relationship.

Current and emerging business leaders have the opportunity to lead digital transformation at their companies. Here's what won't work.

# Old Strategies Won't Work in an Era of Constant Change

SaaS companies have put the lie to traditional business thinking — that changing processes, structures, and technology alone will ensure long-lasting competitive advantage. So why is it that many companies are looking internally first to drive business transformation?



At many companies, the C-Suite is expanding, as new officers such as the Chief Digital Officer, Chief User Experience Officer, and Chief Data Officer gain a seat at the table. New strategies are rendering organizational structures, strategies, and talent pools obsolete. Company executives realize that they lack the digital skills they need to compete in the marketplace — and are hiring, firing, developing, and outsourcing their workforce. And digital imperatives are requiring continual crossfunctional collaboration, straining traditional collaboration processes.

At times like this, it can be tempting to pull out an old corporate playbook — restructuring organizations to align talent and capabilities to deliver the business strategy.

This is a red herring: Reorganizing is safe, but it always lags the marketplace. Incumbents have built up rigidity that creates a drag coefficient to forward movement. In addition, companies are moving away from command-and-control structures to decentralized businesses that empower leaders at all levels to make decisions, take risks, and share learnings with others.



Digital transformation requires significant changes in company functions. Some of the busiest will be: HR, which will help transform the organization; lines of business, which have their own IT budgets and digital imperatives; marketing, which is responsible for supporting the customer journey; sales, which nurtures and grows customer relationships; and IT, which has the responsibility for transforming people, processes, and systems to achieve the digital vision.

It will be tempting for many companies to try to block and tackle digital transformation: helping functions create end-to-end processes and embrace digital tools or running digital pilots within functions and then scaling them enterprise-wide.

Tackling change at a function-by-function level is a red herring, because change will be sub-optimized. It also assumes that your functional structure is correct. The real change is horizontal, not vertical.





Certainly, IT is driving digital transformation. Companies are migrating legacy infrastructures to the cloud to gain new capabilities and increase agility. They are using open-source tools and APIs to reduce development time and cost and integrate with partners. And they are embracing a startup mentality to technology: adopting a DevOps style of continuous innovation and using Agile and Scrum methodologies to ensure IT solutions deliver bite-sized customer value with each micro-release.

Technology alone won't be enough. "Less digitally mature organizations tend to focus on individual technologies and have strategies that are decidedly operational in focus," <sup>13</sup> say researchers in the aptly named report *Strategy, not Technology, Drives Digital Transformation*. Companies need a strong digital strategy that leverages tools, not the other way around. In addition, the digital strategy is increasingly integrated with the business strategy.

GE has reinvented its company around the industrial internet. Caterpillar has teamed with a data analytics startup to provide predictive diagnostics on its heavy equipment.<sup>14</sup> And Sapient's early adoption of digital turned the company into a marketing powerhouse.

In all of these instances, technology fueled transformation, but was part of a much broader vision for driving systemic change both inside and out of the marketplace.

### Fear of Failure: Tackling Imposter Syndrome

If you don't currently have the skills to succeed in digital business, don't worry: You have company. The pace of change is so great that leaders suffer from imposter syndrome. Currently, many CEOs say they lack the digital skills they need to drive their companies forward — and many business managers feel the same way. A recent survey found that among companies considered digital leaders, just one in five possessed both digital leadership and management skills. <sup>15</sup>

We recommend using a simple framework to drive change from within: becoming a precise perceiver, subtle sensemaker, and careful choreographer to become a successful leader. See pages 7-10 for new strategies.

However, leaders at all levels also need to become technologists, using self-study and digital tools on the job to develop new skills and model desired behavior for their employees. Executives may not become coders, but they can certainly use collaboration platforms and social media and interpret analytics reports.

Leaders should also consider business or executive education to gain competencies and perspectives they need to build their careers. By taking time to lean out, leaders can then lean in — with a stronger strategic vision, global networks, and negotiation and team-building skills, among other gains.

So how can companies help employees build these valuable abilities?

# To Build a Digital Business, Start With Leadership

If structure, processes, and technology aren't enough to transform businesses, what is? Leadership. Leaders need to embrace change and adopt a framework for driving change that can withstand industry change, corporate upheavals, and market corrections. Let's borrow a model from **Tony O'Driscoll**, Global Head of Strategic Leadership Solutions at Duke Corporate Education, to analyze the path forward. Leaders should become:

- · Precise perceivers
- · Subtle sensemakers
- Careful choreographers

What does this look like in action?

## **Becoming a Precise Perceiver**

Leaders today need to become curious problem solvers and approach each new situation with fresh eyes. Don't fall into default thinking or lean on past experiences. Digital leaders at legacy companies will have to unlearn faster than they learn. Otherwise, they risk falling into a "predictably irrational" trap. In his book by the same name, James B. Duke Professor of Psychology and Behavioral Economics **Dan Ariely** discusses how individuals can think they are making smart, rational choices while falling prey to issues ranging from relative comparisons, to the allure of zero costs, to ownership pride. <sup>16</sup>

That thinking is echoed by industry analysts. "Digital transformation is not about putting an online wrapper around the existing product suite; it's about fundamentally rethinking the company, from customer acquisition and retention, to market expansion and product innovation," says Adriaan Bouten, a digital transformation B2B and B2C expert.<sup>17</sup>

Farming and manufacturing are cases in point in how technology can transform "old-world" services and products. Bayer Crop Science is moving farming into the digital age, using tools such as satellite imaging, GPS, and sensors to collect and interpret data and analytics to help commercial farmers turn agriculture into a precision science.<sup>18</sup> Meanwhile, in manufacturing, sensors, automated lines, and advanced robotics enable diverse products to be made on single assembly lines and decision makers to rapidly respond to changing market demand.

Leaders will need to condition themselves to become comfortable with uncertainty, with seeking the perspectives of a wider range of experts, and with continuously evolving themselves and their businesses. The only constant is change itself.



#### **HOW CAN YOU BECOME A PRECISE PERCEIVER?**

- Learn, unlearn, and then learn again. Don't worry if you feel like a digital imposter. Leaders today are running
  businesses they increasingly don't understand. Overcome the fear factor and create a framework for developing
  yourself. What's important is to understand the gap between your current skills and where the market is headed.
  It's also essential to constantly challenge assumptions and surround yourself with like-minded peers.
- **Be customer-centric in the extreme.** Business leaders know that the customer experience is the number-one strategic priority for their firms. So they work hard to understand customer needs, using both soft skills and end-to-end business processes to remove pain and surprise and delight customers with value-added services. "By 2020, customer experience will be more important than price," says Jay Baer, author of *Hug Your Haters*. <sup>19</sup>
- **Be a curious learner**. Digital leaders set aside time each week, if not every day, to learn. However, they focus on the right things knowledge and skills relevant to their current or desired roles. "The right amount of learning, served at the right time, and in the right portions keeps a leader growing," say Samir Mehta and Holly A. Downs from the Center for Creative Leadership.<sup>20</sup> Convert knowledge into new behavior to lock skills in place.
- Gain adjacent competencies. Digital experts with one competency become skilled individual contributors. Those
  same experts who learn additional skills become much-in-demand managers. A UX expert we know is regularly
  recruited as a CMO. Why? She also mastered global, digital, and partner marketing at a leading technology
  company and runs a top-flight digital and content marketing agency.
- Be ready to experiment. Digital leaders are ready to take both small and large risks in their companies and their careers. Some 60% of digital leaders use experiments to test and refine business strategies.<sup>21</sup> Many business leaders cite taking the path less traveled taking a role in an emerging market, pioneering an unproven business model, or going all-in on an emerging technology as key to their career.

### Becoming a Subtle Sensemaker

Subtle sensemakers are able to look beyond their company and industry to understand and make connections in the marketplace. Digitally savvy leaders look for broken processes, suboptimal experiences, and unused capacity that can be exploited to create new sources of value. They're also willing to take risks with their companies and careers. Deloitte says that Silicon Valley companies have a "zoom out" to "zoom in" philosophy: anticipating where the market will be in 10 years to place strategic bets for the next six to 12 months.<sup>22</sup>

Leaders at all levels are monitoring emerging technologies and trends such as the Internet of Things and smart devices, blockchain and fintech, autonomous cars, genetic engineering, and 3D printing, and placing early strategic bets on those they think will revolutionize their industries. It's better to experiment and "fail fast," gaining insight and experience that can be applied to other initiatives, than wait for something to become mass market and lose the opportunity altogether. Think about Amazon, which has conquered ecommerce and online platforms and is entrenching itself in consumers' lives in myriad ways ranging from Dash ordering buttons to same-day delivery to the Echo voice-activated assistant.

#### HOW CAN YOU BECOME A SUBTLE SENSEMAKER?

- Think broadly and creatively. Read widely from industry analysts and newspapers to blogs and books — to understand what the new futurists are saying and how industry is changing around the globe.
   Practice writing and sharing your ideas. James Altucher, an industry thought leader, recommends writing 10 new business ideas every day.
- Make far-ranging connections. Build your brand at industry conferences and events, as well as online.
   Dorie Clark, a marketing strategist, used strategic blogging and social media to get a book deal, becoming a recognized author on personal branding. She now travels the world speaking and also teaches Communication for Leaders at Duke University's Fugua School of Business.
- Schedule time for "deep work." The more successful leaders are, the less likely they are to have time for
  the creative thinking and strategy-setting that won them their leadership roles in the first place. Experts
  recommend allocating weekly time for "deep work," fallow time that is uninterrupted by emails or meetings.
- **Disrupt your own career**. If your industry or role is in trouble, read the tea leaves and begin your own professional transformation journey. It's best to do this proactively. One mid-life sales leader we know spent two years reskilling on data analytics after a job loss. While he now consults happily and successfully for a global digital business leader, the path to job recovery was extremely stressful for him.
- **Don't just deliver results measure them**. Currently, only 15% percent of companies can quantify the ROI of digital initiatives.<sup>23</sup> This is both a challenge and an opportunity. Leaders who can help companies make sense of their data and find the proverbial needle in the haystack using social listening, algorithms, and data visualization will chart their future at any company they desire.

## Becoming a Careful Choreographer

Market leaders know that it's hard to go it alone. That's why many are focused on building digital ecosystems, motivating partners to join them in transforming industries. Gartner says that digital business leaders take a "platform" rather than a "systems" view of their business. And only does this philosophy reduce risk, but it also speeds up innovation. Ecosystem participants integrate processes, share data, and create connected systems that become increasingly difficult to dislodge.

That's why Microsoft is encouraging its partners to use its Windows IoT platform to build connected devices that will transform financial services, healthcare, retail, and more. And it's why Google and Apple's commitment to connected cars has industry leaders in niches ranging from mobile hot spots to remote diagnostics and car sharing<sup>25</sup> salivating about future growth prospects.

#### HOW CAN YOU BECOME A CAREFUL CHOREOGRAPHER?

- Be "glocal." In business, the old adage was "go global," advocating moving overseas to gain new perspectives.
   Now, it is "think glocal," advocating understanding how global forces and trends affect your business and how they manifest differently in regions across the world. In India, for example, savvy leaders evolved outsourcing capacity and capabilities, transforming their companies from low-cost IT providers to skilled business process outsourcing (BPO) companies. Now companies are using digital technology to "glocalize" customizing products and services for different customer segments and regions.
- Build ecosystems. Constantly study the market for partners who can bring new capabilities to your company and customers. The old adage "build or buy" has given way to "borrow." Also build personal ecosystems of your own: mentors who can give you key strategy advice and early development opportunities and like-minded peers who are building careers like yours or ones you aspire to.
- **Develop social media literacy**. Leaders use social media both inside and outside of the organization to share their vision. McKinsey says that every leader should have six social media capabilities. These skills include being a producer, using tools like video, blogging, and Wikis to engage staff, spread messages, and build the technology capabilities of others.<sup>26</sup> Skillful social media users can inspire and draw others to their cause, viralizing ideas and converting them to action.
- Ruthlessly delegate and empower. Digital business is about collaboration, but constant meetings can be a productivity killer. Some knowledge workers and managers spend up to 95% of their time in meetings, up from 60% to 65% 10 years ago.<sup>27</sup> To propel the business forward, step back and let others lead key initiatives.
- Demonstrate ROI. Companies are struggling to connect the dots between digital initiatives and the ROI they
  provide. Leaders who can demonstrate the business value of the work they do will always be in high demand.

# With Digital Business, the Ultimate Leverage Is Leadership

Digital transformation is everyone's business.

While the media coverage around SaaS companies such as Facebook and Uber is breathless and unrelenting, it obscures the reality that most of the digital transformation work will be done by traditional enterprises — and the people who run them.

It's about "getting the elephant to dance", in the words of famed CEO Lou Gerstner, Jr., who led IBM's turnaround in the mid-1990s and wrote a similarly named book. The good news is the marketplace will be full of dancing elephants — companies that avoided red-herring quick digital fixes and responded decisively to black swan events.

Evolving away from legacy structures, processes, and systems can be difficult. Becoming a precise perceiver, subtle sensemaker, and careful choreographer will require a life-long commitment rather than a lucky break or a well-played hunch.

Leaders must commit to radical reinvention, from the inside out. But they also have the opportunity to make business history — for their companies and themselves.

Are you ready? Accelerate your digital leadership at Duke University's Fuqua School of Business.

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#### **FOOTNOTES**

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