

Digital Business Transformation

A Conceptual Framework



GLOBAL CENTER FOR DIGITAL
BUSINESS TRANSFORMATION

An IMD and Cisco Initiative

A CONCEPTUAL FRAMEWORK FOR

DIGITAL BUSINESS TRANSFORMATION



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There is little doubt that digital tools and technologies are profoundly affecting the way business is being conducted today. They have already disrupted many industries and are threatening to disrupt others. In a recent study, we asked 941 executives across 12 industries about the strength of their industry barriers to protect against digital disruption. Twenty-nine percent of the respondents considered these barriers to be low to non-existent. In 10 of the 12 industries, including retail, hospitality, telecom, financial services, and entertainment, they predicted that at least 3 of the current market leaders would fall out of the top ten in the next 5 years. Indeed, more than a third of respondents feared complete digital disruption of their industries in the same time period.

The stakes are clearly high, but the risks and rewards are unevenly distributed. Some industries are more affected than others. However, there are actions that organizations can take to increase their rewards and decrease their risks. This document will define digital business transformation and outline the journey that organizations must undertake to avoid disruption, realize the benefits of transformation, and extract the most value from digital technologies and business models.

SECTION 1: DIGITAL BUSINESS TRANSFORMATION DEFINED

There is a great deal of hype these days about 'digital transformation'. The term is often used but rarely defined. Wikipedia notes that it can mean anything from 'going paperless' to 'the application of digital technology in all aspects of human society'. The business side of digital transformation has also attracted a lot of attention, particularly from consulting companies¹. Unfortunately, this attention has led to confusion in the marketplace as to what digital business transformation means, and as a consequence, it has been inconsistently defined and unevenly applied, and measures to address it have tended to be unreliable and incomparable.

We base our definition on the pragmatic needs of business leaders to drive performance benefits from their investments in digital tools and technologies as follows:

Digital Business Transformation is Organizational Change through the use of Digital Technologies and Business Models to Improve Performance.

Organizational Change

Transformation is fundamentally about change, and organizational change is the foundation of digital business transformation. Organizational change, related to people, processes, strategies, structures, and competitive dynamics, is where most of the challenges and opportunities reside. A Cisco report on the Internet of Everything (IoE) in 2013 projected that US\$19 trillion of economic value would be at stake between 2013 and 2022 across nations, industries, and organizations². The majority of this value would be unlocked through business change leading to faster innovation, higher productivity, increased efficiency in processes, and enhanced customer experiences.

The importance of organizational change is well illustrated by Kodak's fall from its position of market dominance, and its ultimate demise. It cannot be claimed that Kodak was not innovative. The world's first digital camera was developed by the company in 1975 and it made major investments in digital capabilities throughout the 1980s and 1990s. Kodak failed primarily because it was not able to make the necessary adjustments to adapt to new markets and changing customer requirements. The company was encumbered by legacy infrastructure, people, and knowledge that became increasingly obsolete, and was not willing to make tough choices early enough to adapt to changing market demands. In other words, it failed to enact sufficient organizational change.

Kodak's Japanese competitor FujiFilm was faced with exactly the same challenges, but managed to adapt and survive. The company accomplished this transformation by combining investments in digital technologies with radical organizational change. FujiFilm cut its workforce, sold underperforming assets, and shifted investment into new areas such as high-end imaging machines, coatings for LCD displays, and cosmetics. The company combined existing strengths with new digital capabilities to build a highly modified organization able to compete in new markets. Today, the company is worth more than it was in the heights of 2000.

The Kodak/FujiFilm stories are well-known and provide dramatic examples of digital transformation failure and success. However, the threat of digital disruption does

not always take place on such a large scale. Most organizations face a multitude of smaller threats, rather than imminent digital annihilation. Thus, the level of change can be incremental and cumulative, such as hiring new digitally-savvy employees and retraining existing staff, adding digital services to existing products, digitizing processes, and realigning incentives. Transformation does not have to mean radical change. Nevertheless, the lack of action - or a series of inappropriate actions - can dramatically increase a company's vulnerability to digital disruption.

As we will argue later, organizational change requires a clear recognition of the need to transform, an understanding of what must be transformed, and a roadmap of how to make the required changes. Successful trans-

formation requires the development of a key capability we call *digital business agility*. This form of agility, described later, is fundamental in allowing organizations to respond to the high paced and unpredictable change characteristic of digital disruption.

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Digital Technologies and Business Models

A business transformation is digital when it is built on a foundation of digital technology. This focus on digital technology is distinct from other potential transformation drivers such as political, social, cultural, or economic shifts. The technologies and business models that underpin digital transformation are not fixed. They vary over time and also, to some extent, by industry sector and geography. Currently, the following technologies are most significantly associated with digital business transformation:

- Analytics tools and applications, including ‘big data’,
- Mobile tools and applications,
- Platforms upon which to build shareable digital capabilities, like cloud solutions and app marketplaces,
- Social media tools and applications,
- The Internet of Things, including connected devices and ‘smart’ networks.

Together these digital technologies, often cumulatively referred to as the Internet of Everything (IoE), is having a profound effect on how organizations and industries are transforming, often as a result of new technology-enabled business models.

Let’s take the healthcare sector for example. Social media and the Web are rapidly reducing the information asymmetry between patients and healthcare professionals, shifting power away from physicians and moving it to patients and care givers. Mobile applications and devices allow for real time monitoring of health status, and can provide live links to healthcare professionals. Proteus Digital Health, for example, measures real time vital statistics from a pill that a patient swallows³. Analytics tools can assess and analyze information to diagnose, treat, and monitor patients, and big data is leading the charge to personalized medicine. Pharmaceutical companies and other life science players need to transform themselves to take advantage of these trends, since digital transformation is facilitating the entry of non-traditional competitors into the health and wellness domain, including IT firms and food companies⁴.

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Improved Performance

The combination of organizational change and digital technologies, in turn, has the potential to improve performance in multiple areas. Indeed, it is a mistake to restrict the assessment of performance to a single metric. Broadly speaking, performance improvements can be achieved in the following areas: increased revenues, improved efficiency and reduced costs, faster and more successful innovation, more effective knowledge collection, sharing and use, enhanced customer engagement and customer service, and finally sustained protection against digital disruption. These performance improvements are quantifiable because they can be measured and

reported. The quantifiable nature of many digital technologies, such as connected devices, big data, and social media is a key enabler of digital business transformation.

The Walt Disney Company provides an interesting example of the use of digital technologies and business models to improve performance. Over the past three years, the company has made a big push into digital through two separate initiatives: first the acquisition and subsequent deployment of MagicBands, and second, the purchase of Maker Studios. The MagicBand is a wearable RFID device used in Disney theme parks that acts as a virtual key (for hotel rooms), ticket (for attractions), payment mechanism (for food and merchandise), and reservation maker (for restaurants and rides). The MagicBand is worn by all visitors, who are tracked as they move through the resorts, and thus generates a treasure trove of information on their behaviour and movement. The bands have helped Disney's parks division to achieve 20% revenue growth over the past year, and higher levels of guest satisfaction. Meanwhile, Maker Studios is the world's largest multi-channel network of YouTube stars, attracting more than 10 billion views every month with over 650 million subscribers⁵. It is a new business model that competes with Disney's existing entertainment assets, which is partly why Disney snapped it up for nearly USD 1 billion in 2014⁶. With these investments, Disney is betting on a more digital future and financial markets appear to agree – Disney's share price is up over 30% in the last year.

SECTION 2: THE DIGITAL BUSINESS TRANSFORMATION JOURNEY

Digital business transformation is not a state of being, it is a journey and this journey is guided by three questions:



The Digital Business Transformation Journey

Why transform?

The *why transform* question is the starting point of all digital business transformations. As transformation is challenging, organizations need to be clear on the justification for change. Indeed, some industries face more imminent threats than others. Our research found that while close to 50% of respondents in hospitality, retail, and media sectors feared being put out of business due to digital disruption in the next 5 years, the comparable figure for respondents from the utilities and oil and gas sectors was less than 30% (see our report on Digital Vortex).

Digital business transformation can be motivated by a number of factors. In some cases, it comes from consumers, who are better informed than ever before. Consumers today are actively searching for enhanced service, lower prices, and higher levels of quality. The showrooming phenomenon in retail environments, where consumers visit physical stores to see items and then order them from online vendors, is an example of the increasing sophistication of customers to seek the best deals.

The impetus for transformation might also come from new competitors with enhanced offerings, better engagement models, or lower prices. There are many examples of firms like Amazon or Google entering new markets and disrupting incumbents. The disruption can also come from the inside. Indeed, in our survey, 65% of respondents felt that digital disruption would originate from within their industries.

The pressure for change might come from emerging technologies that enable new capabilities. These new technologies could provide points of competitive differentiation if adopted first, or internalized and integrated in new ways. For example, DHL and start-up QuiQui are experimenting with drones to deliver packages of medicine to households, hospitals and clinics, and Sky Insurance and others are trialling single use insurance policies, made possible by a combination of advanced analytics and mobile applications⁷.

Evidence of digital disruption is everywhere and organizations are well aware of the challenges it creates. In our study, 69% of respondents saw the need to adapt their business models to respond to the changing digital environment. Yet, despite this awareness, only 55% of them claimed that digital disruption was a board level concern, and only 25% had active plans to tackle the disruption head on.

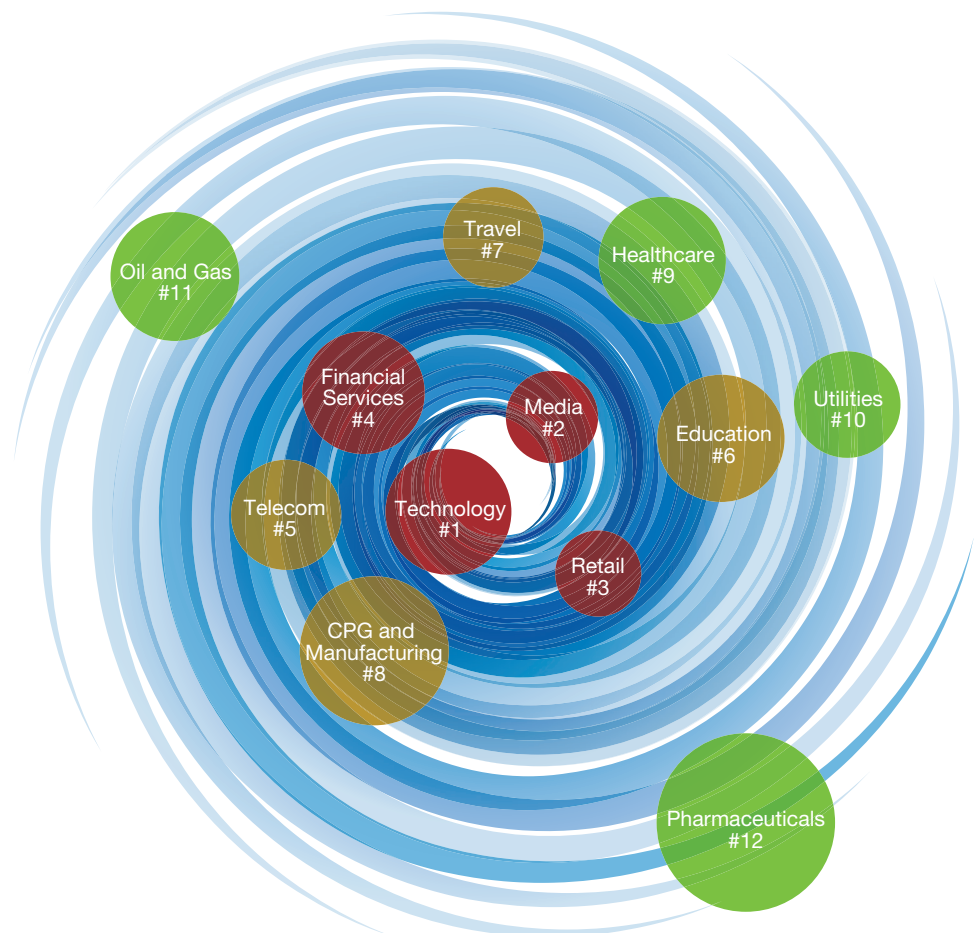


Figure 1: Industries Plotted
Within the Digital Vortex

In Figure 1, using a combination of survey responses and objective data, we have plotted each of the 12 industries we studied on a 'digital vortex'. Industries on the outside are least affected by digital disruption, while those most heavily impacted are shown closer to the middle.

What to transform?

Once the motivation for transformation has been clarified (the answer to the *why transform* question), the next stage of the journey begins – *what to transform*? Digital business transformation can take many forms and smart transformation requires prioritization. To help with the process of deciding what to transform, we have developed a tool that we call the digitization piano. The digitization piano defines 7 distinct categories, any of which could be transformed digitally.

The categories are: the business model (how a company makes money), the structure (how a company is organized), the people (who works for a company), the processes (how a company does things), the IT capability (how information is managed), the offerings (what products and services a company offers), and the engagement model (how a company engages with its customers and other stakeholders). These categories make up the most important elements of an organizational value chain as it relates to digital transformation. Some guiding questions for each category are shown in Table 1.

Transformation Category	Guiding questions to ask of each organizational transformation category
Business Model (how you make money)	What are your routes to market? How relevant is digitally-enabled commerce, i.e. e-commerce, m-commerce? Where does most of your revenue and profit come from? What are your main customer segments? Do these need to change? How are you differentiated from your competition? How relevant is this for the future?
Structure (how you are organized)	What type of organizational structure do you have? What is the balance between local and global decision making? Does this make sense for the future? Where do different aspects of 'digital' sit in your organization? Are they effective?
People (the people who work for you)	How digitally savvy are your employees across different parts of your organization? How digitally savvy are your leaders? What new capabilities are required? How will you acquire them?
Processes (how you do things)	To what extent are your processes automated and digitized? To what extent are your processes consistent across your organization? To what extent are your processes adaptable to change?
IT Capability (how you collect and manage information)	How effective is your IT infrastructure: core systems, networks, databases. Is it able to support your digital ambitions? How effective is your forward facing IT: websites, mobile sites, social media? How effective is your customer relationship management system? Do you have a clear IT strategy linked to your corporate strategy? Are your "dark assets" connected so you have all the data you need? Are you deriving value from your data?

Transformation Category	Guiding questions to ask of each organizational transformation category
Offerings (your products and services)	How digitally enabled are your products? How digitally enabled are your services?
Engagement Model (how you engage with customers, suppliers, etc.)	How strong is your relationship with customers? How many customer touch-points do you have, i.e. web, mobile, mail, face to face? How often do you engage with them? How loyal are your customers?

Table 1: Guiding questions for each category of digital business transformation

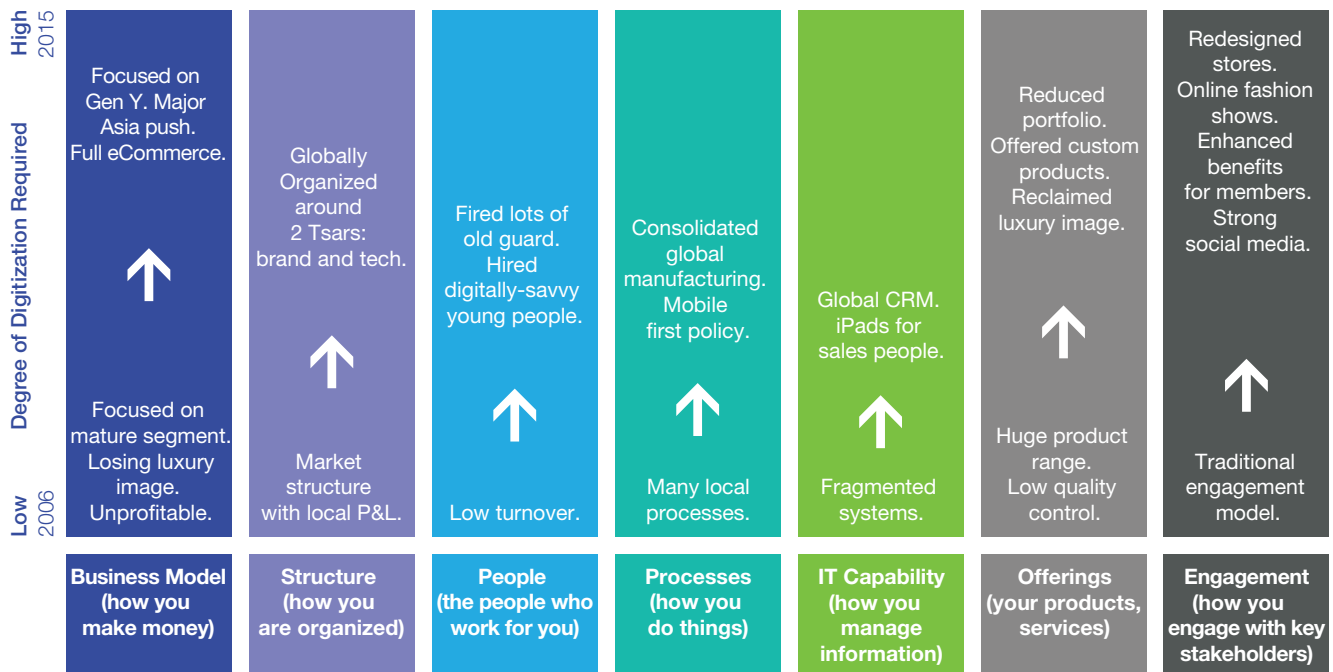
“IN ORDER TO MAKE THIS SHIFT, THE COMPANY NEEDED TO INITIATE A DIALOGUE WITH ITS CUSTOMERS IN A DIFFERENT WAY, AND HENCE IT MADE A VERY SIGNIFICANT MOVE INTO SOCIAL MEDIA.”

By answering these questions, the digitization piano can be used to provide a roadmap of transformation needs. An assessment can be made within each category of the *current* level of transformation and anticipated *future* required level of transformation. Thus, an organization can see a visual map of the existing state of pre-

paredness for digital business transformation along with the desired state. The difference between these two states represents the amount of transformation that is required. In some cases, the difference might be relatively modest, requiring incremental change. In other cases, the gap might be very large, suggesting the need for more radical change.

An example, illustrated in Figure 2, shows the various aspects of Burberry's digital business transformation between 2006 and 2015. In 2006, Burberry was faced with multiple challenges, including high costs, a fragmented manufacturing base, product proliferation, and inconsistent global pricing. However, the company's largest problem was the state of its brand. The iconic clothing company's image had been hijacked by so-called 'chavs', a kind of lower class ruffian. After several years of declining revenues, a new CEO, Angela Ahrendts, was brought in with a vision to digitally transform the company. She initiated a number of changes to the company across many elements of the digitization piano. For example, she made major

changes to the business model, deciding to focus on millennials instead of the traditional mature consumer base. She also shifted the revenue focus of the company to Asia and other emerging markets. In order to make this shift, the company needed to initiate a dialogue with its customers in a different way, and hence it made a very significant move into social media.



Categories of Organizational Transformation

Figure 2: The Digitization Piano Applied to Burberry

Notice in Figure 2 how Burberry made major changes across different categories of the digitization piano. We refer to this approach as playing ‘chords’ rather than ‘keys’. The company chose particular areas to digitally transform in concert, rather than rely on a single approach. Burberry pursued a multi-technological approach, drawing on social media, analytics, and mobile solutions to achieve their goals. They also changed their organizational structure at the same time as recruiting younger employees.

It is extremely difficult to achieve digital business transformation benefits by making single changes or by employing single technologies. Lasting change can be accomplished much more effectively by transforming multiple categories and multiple technologies simultaneously. This level of change requires focus, as there are thousands of potential combinations, and a high degree of collaboration, which is part of the reason that many organizations fail in their digital transformation initiatives. According to Gartner, only 30% of digital business transformation efforts today will be successful⁸.

How to transform?

Tools like the digitization piano help to answer the *what to transform* question. It is important to have a clear idea of where transformation is required, and in what order it should be tackled. However, knowing what to do and how to do it are two very different challenges. Thus, we come to the third question: *how to transform?* Of the three questions in the digital business transformation journey, this question is the hardest to answer. Indeed, many of the transformation failures mentioned above can be put down to flawed execution.

Digital Business Agility

As we established in our Digital Vortex report, the differences in digital maturity and potential for disruption among industries is substantial. Because of this variation, there is no one-size-fits-all approach to successfully accomplishing digital business transformation.

However, regardless of which digital roadmap is pursued, we have determined that organizations need to develop a fundamental capability that we call *digital business agility*. This capability is made up of three components: hyperawareness, informed decision making, and fast execution, as shown in Figure 3.

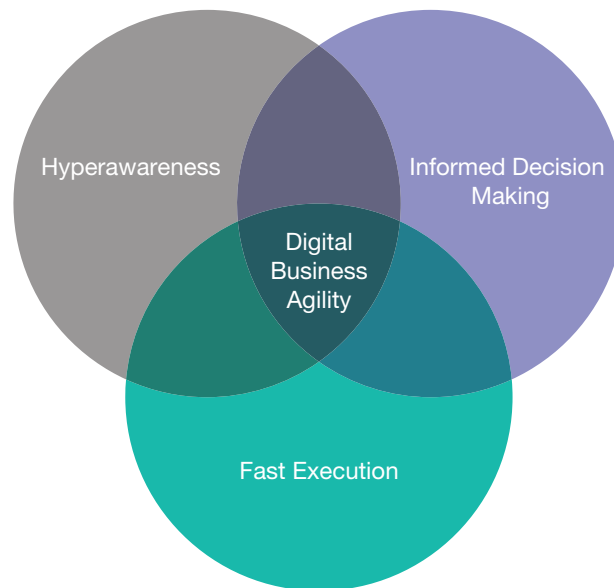


Figure 3: Digital Business Agility Components

Hyperawareness

Hyperawareness is an organizational capability to recognize future trends that will impact an organization. In an environment characterized by accelerating rates of change, it is imperative for organizations to sense the factors that will affect them. We have seen many examples of companies with blindspots that have inhibited them from sensing relevant trends. It is also the case that disruption is becoming hard to spot as industries start to blur and traditional competitors are supplanted by emerging players. One of the most well-known examples is Blockbuster, which failed to sense the growing dissatisfaction of its users to late fees on rented videos, as well as the shift to video streaming as an alternative to DVDs.

Hyperawareness is made up a several distinct sub-capabilities. The first sub-capability is the sensing of new technology trends. A second is recognizing changes in the competitive landscape, both within and across industries. A third is capturing new ideas from employees, suppliers, and customers. Part of hyperawareness is the need to 'leave the office' and see first-hand how products and services are being used in practice.

There is also a strong digital component to hyperawareness. Digital tools, like social media, connected devices, and analytics can act as digital barometers that are constantly monitoring the status quo and reporting back relevant changes.

The city of Barcelona provides an interesting example of hyperawareness. The city decided to install thousands of connected devices across the city to monitor what was going on, to improve the lives of its citizens and tourists, and to save money. For example, city planners found that one third of the traffic in the center of Barcelona consisted of drivers looking for a parking spot. Therefore, they placed sensors in parking spots and linked them to apps, so that drivers could quickly and easily find the closest place to park. They also placed sensors in garbage bins to detect the fullness level, and dynamically schedule pickups accordingly.

In another example, food and beverage giant Nestlé located a Digital Acceleration Team at its Swiss head office. This team of young employees was given the responsibility to constantly monitor the Web and social media platforms for mentions of the company's products and brands as an early warning system for any emerging issues.

Informed Decision Making

Having a strong hyperawareness capability is necessary, but not sufficient for digital business agility. Often, organizations collect interesting and relevant data and information that is subsequently ignored. *Informed decision making* is the capability to actively analyze information that comes in through hyperawareness.

Like hyperawareness, informed decision making is based on a number of sub-capabilities. They include a governance process to prioritize information, a high level of cross functional coordination so that different parts of the organization can actively listen and share what they know, and an IT infrastructure that facilitates the capture, analysis, and dissemination of relevant information. The result of these sub-capabilities is an ability to make fact based decisions in a timely manner.

Like hyperawareness, informed decision making has a strong digital component: knowledge management systems to organize insights, collaboration systems to facilitate remote conversations, dashboards to display relevant information, and analytics systems to provide evidence-based insights to support decision making. Decisions are 'informed' due to the currency of the data and the rigour of the analysis.

Like many organizations with call centers, Nationwide Insurance adopted a 'first available operator' rule to answer calls. However, after a sustained period of testing

and analysis, the company discovered that retention rates for customers wishing to cancel their policies dramatically increased when they were matched with agents with compatible profiles. This insight was unexpected and challenged the prevailing view of call prioritization. The company consequently made the decision to match callers with agents based on profile compatibility even if it meant a longer waiting period. Retention rates doubled as a result of the change.

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Fast Execution

Hyperawareness is crucial to understanding relevant trends, informed decision making is critical to deciding upon the right response; however, neither of these matter if an organization is unable to quickly execute the necessary changes. *Fast execution* combines two elements: speed and implementation. Both are critical to achieving successful digital business transformation. Fast execution is a response capability that incorporates turning decision into action. In our research, respondents told us that fast innovation and high agility were the two most dangerous capabilities of emerging digital disruptors.

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There are a few crucial elements of fast execution. One is the importance of an organizational culture that encourages experimentation and tolerates failure. By definition, innovation and experimentation do not succeed all of the time. Indeed, most new initiatives fail. A fast execution capability acknowledges that failure will occur, and considers it acceptable as long as there is a strong effort to learn from the failure, adapt, and try again.

A successful digital business transformer like Google has a huge legacy of failure, exemplified by products like Google Wave and Glass, yet the company is comfortable to learn from these failures, leave them behind, and move on. This capability is much more difficult to master for large organizations in legacy businesses.

Another aspect of fast execution is the ability to move resources quickly and efficiently to where they are most needed. High levels of bureaucracy and organizational silos are the enemy of fast execution. Organizations that execute quickly are typically empowered to take action at lower levels of the company hierarchy. Resources are digitized to the highest extent possible to allow for easy and frictionless movement to where they are needed.

The importance of digital business agility

Regression analysis on the data we collected shows that digital business agility is significantly and positively associated with two measures of performance: comparative financial performance over the past 5 years, and response to digital disruption. Thus, digital business agility not only helps organizations to respond to the challenges of digital disruption, it is also linked to sustained financial performance, compared to a group of peer companies.

In addition to their combined effect, each component capability of digital business agility is also positively and significantly linked with the two performance measures. The association with financial performance is strongest for hyperawareness, then informed decision making, and finally fast execution. This ranking is reversed when it comes to the ability to respond to digital disruption: the strongest link is for fast execution, followed by informed decision making, and then hyperawareness. These results expose an interesting finding; in order to achieve the full benefits of digital business transformation, organizations need to balance all three elements of digital business agility.

CONCLUSIONS

Digital business transformation is about change. Organizations preparing to meet the challenge of digital business transformation must ask themselves three questions: why do I need to transform, what do I need to transform, and how should I transform. The answers to these questions are by no means straightforward. Our research suggests that many firms underestimate the dangers of digital disruption, and thus may not be sufficiently prepared for the negative consequences that have already befallen many firms in the technology, media, entertainment, retail and other sectors.

Understanding the need for transformation (answering the why transform question) leads to the question of which parts of the value chain that need to be transformed. We have divided the organizational value chain into 7 critical elements that are at the core of digital business transformation: the business model, the structure, the people, the processes, the IT capabilities, and offerings, and the engagement model. We collectively refer to these elements as the digitization piano. We have found that the chances of successful transformation are enhanced if an organization addresses more than one element at the same time, i.e. plays chords rather than keys. This combinatorial response is appropriate to the threats of digital disruption that often come in multiple forms.

Understanding the need to transform and having a good grasp of what must change are important, but the key to success lies in the implementation. How to transform is where most organizations fail. While there is no one-size-fits-all roadmap for organizations across every sector, we found that a digital business agility capability is positively and significantly linked to both positive financial performance and the ability to respond to digital disruption. Digital business agility is composed of three sub-capabilities: *hyperawareness*, or the ability to detect relevant trends, *informed decision making*, or the ability to make evidence-based decisions quickly and collaboratively, and *fast execution*, or the ability to quickly translate decisions into action. Digital business transformation is by no means easy to achieve; but for many firms, it is a competitive necessity. Digital disruption is spreading quickly across industries and many executives are unsure of the appropriate responses. They know that they must act, but it is not clear to them what needs to be done. The frameworks we propose in this document help to guide the choices that executives must make to transform their organizations in the face of digital opportunities and threats.

NOTES

- ¹ All the major consulting firms and the consulting arms of the major accounting firms have developed or are developing digital transformation practices, each with their own models and definitions
- ² Internet of Everything (IoE) Value Index How Much Value Are Private-Sector Firms Capturing from IoE in 2013?, Cisco Whitepaper, 2013,
http://internetofeverything.cisco.com/sites/default/files/docs/en/ioe-value-index_Whitepaper.pdf
Internet of Everything: A \$4.6 Trillion Public-Sector Opportunity, Cisco Whitepaper, 2013,
http://internetofeverything.cisco.com/sites/default/files/docs/en/ioe_public_sector_vas_white%20paper_121913final.pdf
- ³ <http://www.proteus.com/how-it-works/>
- ⁴ Who is Looking After You? The Challenges of Blurring Industry Boundaries, Tom Malnigh and Tracey Keys, 2014
- ⁵ <http://www.makerstudios.com/about>
- ⁶ <http://www.cnet.com/news/disney-maker-studios-is-the-marvel-of-the-future/>
- ⁷ <http://www.theguardian.com/technology/2014/sep/25/german-dhl-launches-first-commercial-drone-delivery-service>
<http://quiqui.me/>
<http://www.skyinsurance.co.uk/temporary-car-insurance.html>
- ⁸ Top 10 Strategic Predictions for 2015 and Beyond: Digital Business Is Driving 'Big Change', Gartner Research, 2014,
http://www.gartnerinfo.com/exp/top_10_strategic_predictions_269904.pdf



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The Global Center for Digital Business Transformation

The DBT Center combines Cisco's leadership in the Internet of Everything with IMD's expertise in developing global leaders, focusing on the organizational change required for digital transformation. IMD is a top-ranked business school with a flexible, effective approach to real-world executive education and applied research. Cisco has the technical expertise and open innovation approach that can help executives generate practical insights to succeed in today's fast-moving competitive marketplace.

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