

THE WORK AHEAD

40 Months of Hyper-Digital Transformation

By Kevin Benedict

The Center for the Future of Work

The Work Ahead is a research series providing insight and guidance on how business – and jobs – must evolve in an economy of algorithms, automation and AI.

Critical underlying technology trends are at the heart of the digital transformation occurring all around us. Tomorrow's winners will need to think differently, follow different strategies, deploy different technologies and make cybersecurity a top priority. In this installment, we report on the technology trends that businesses must embrace -- quickly -- to succeed in the digital age.

Forty months is not a lot of time to design, develop and deliver something monumental. Consider that it took 182 years to build the Notre Dame Cathedral in Paris, 20 years to build the Great Pyramid of Giza and 10 years to build the Panama Canal. Executives from digital-leading companies, however, tell us that in just over three years – the year 2020 – 17 different digital technologies will dramatically impact the way they work, and transform the work that gets done.

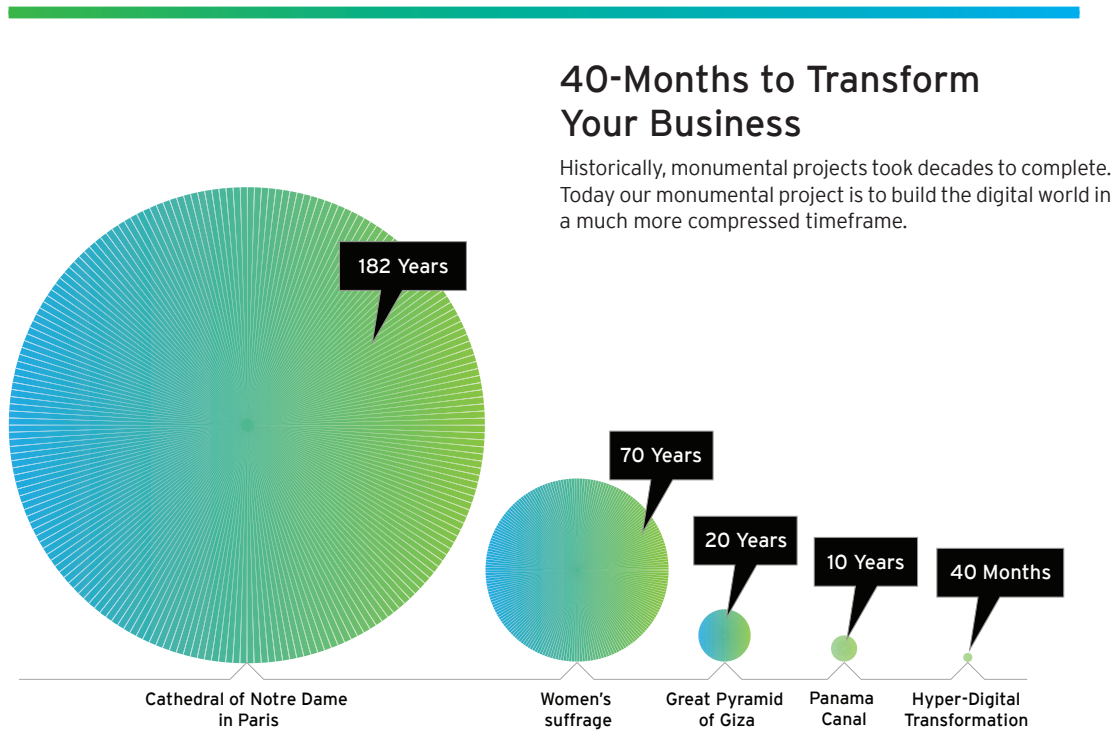


Figure 1 Source: Cognizant Center for the Future of Work, 2016

This means that within the next 40 months the exponential growth of digitization and machine learning will fundamentally change how businesses create value, satisfy customers and outperform competitors. This also means that in this same time period, companies must take actions that position them for the next level of success. If they don't embrace digital, for many it will be game over.

To better understand the strategies and technologies that digital transformation winners require, Cognizant's Center for the Future of Work, in partnership with the renowned economist Nouriel Roubini, surveyed 2,000 executives, 500 managers, 150 MBA students and 50 futurists across 18 countries. This installment of "The Work Ahead" series focuses on the critical underlying technology trends at the heart of the digital transformation occurring all around us. (For more on the study, see our Methodology, page 20, and our foundational paper, "The Work Ahead: Mastering the Digital Economy.") What we found is that today's and tomorrow's winners will need to think differently, follow different strategies, deploy different technologies and make cybersecurity a top priority – all while realizing that time is slipping away.

Guiding a business through the turbulence and friction of digital transformation is perhaps the great challenge of our time. Just as John Ellis's invention of high-temperature oils unleashed the power of railroads, industrialization and economic growth in the 19th century, data is the lubricant of today's digital age. More to the point, today's hyper-digital transformation will be driven by optimized information logistics systems (OILS) and IT infrastructures capable of facilitating real-time digital interactions.

Key Findings

Our research revealed several findings that we will detail throughout this paper:

- **Digital leaders think and act differently.** Digital leaders recognize that digital transformation is the key to their future relevance and success, and they act as though their lives depend on getting transformation *right*.
- **Recognition alone is not enough, though.** Digital leaders also execute the right actions and technologies in the right sequences to successfully navigate resource constraints.
- **Digital technologies are the keys that unlock a golden door.** The 2,000-plus executives we surveyed have already generated \$328.7 billion in total revenue through the strategic deployment of digital technologies in the last year. Respondents believe there's much more to be had, though: We found businesses could unlock another \$151.6 billion in value if they take full advantage of the digital opportunities at hand (see Figure 2).

Digital Technologies are the Keys that Unlock a Golden Door

Executives surveyed believed they could unlock a potential \$151.6 billion in value if they fully took advantages of the opportunities at hand.

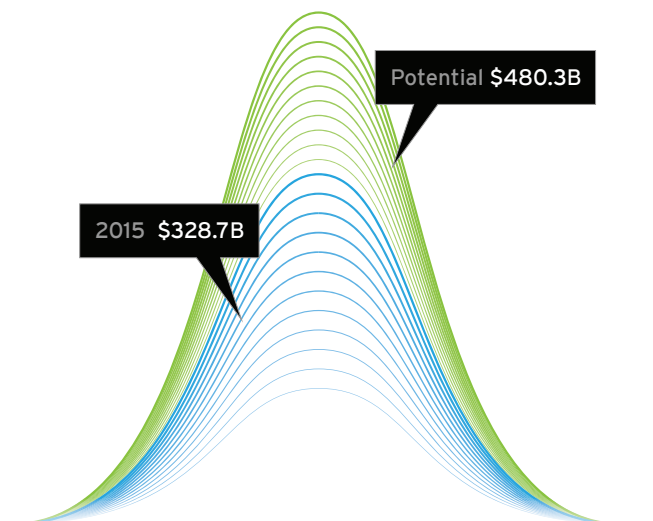


Figure 2 Source: Cognizant Center for the Future of Work, 2016

- **Market timing pays off with digital transformation investments.** Our research shows that digital transformation will take place over three distinct, relatively short periods of time. We call these three periods:
 - » **The disruptive transformation era**, the time period in which the new technologies that change everything develop.
 - » **The hyper-digital transformation era**, when accelerated adoption of digital technologies quickly leaves digital laggards behind.
 - » **The ubiquitous transformation era**, when digital technologies are widely adopted, matured and required.
 - **Leaders are hyper about hyper-transformation.** Today we sit firmly in the period of hyper-digital transformation. Understanding which digital technologies are required now, and which are soon to be important, is critical for making effective plans, prioritizing budgets, sequencing investments and scheduling implementations to maximize returns.
 - **The bold and the brave win the day.** Managers in our survey believe executives must move faster, have a clearer digital transformation strategy, be stronger digital transformation leaders, invest more in new digital technologies and focus more on cybersecurity.
 - **Without a map, it's hard to plan a route.** We believe digital transformation winners will have a digital transformation doctrine to guide and time their technology implementations and align specific digital technologies with specific digital strategies. They will know why they need to implement specific digital technologies, and in what sequence in order to maximize ROI.
 - **Businesses must ensure they have the organization, systems and resources required to sustain the tempo of change required to compete in a digital world.** The goal is to develop an agile and digitally transformed enterprise capable of acting and reacting to perpetually changing data and digital flux fast enough to matter.
-

DIGITAL POWERS BUSINESS TRANSFORMATION

We have all changed as a result of digital technologies and platforms. Enterprises must now follow and transform, in order to support these changes or risk falling behind faster competitors. Our adoption of digital technologies produces oceans of data that are today changing the competitive landscape. Digital leaders will be those organizations that use business analytics to offer deep insights into customer behaviors, wants and needs, develop new products and services, and ultimately innovate and exploit new business opportunities.

Tomorrow's winners will need to digitally transform in order to take advantage of this data. While all industries in our study (see Figure 3) believe digital transformation is important to their future success, belief does not always translate into action; our data shows many are still failing to act.

One of the most surprising findings in our study is the magnitude of difference between digital leaders and digital laggards. Digital leaders anticipate huge business impacts from a wide range of digital technologies over the next 40 months, while in many cases, digital laggards don't (see Figure 4). These differences are reflected in each group's priorities, budgets and strategies, and will guide their future competitiveness. (For our definition of leaders and laggards, please see page 21.)

Digital Transformation Is Important to All Industries

All industries believe digital transformation is important to their future success, yet many are still failing to act.

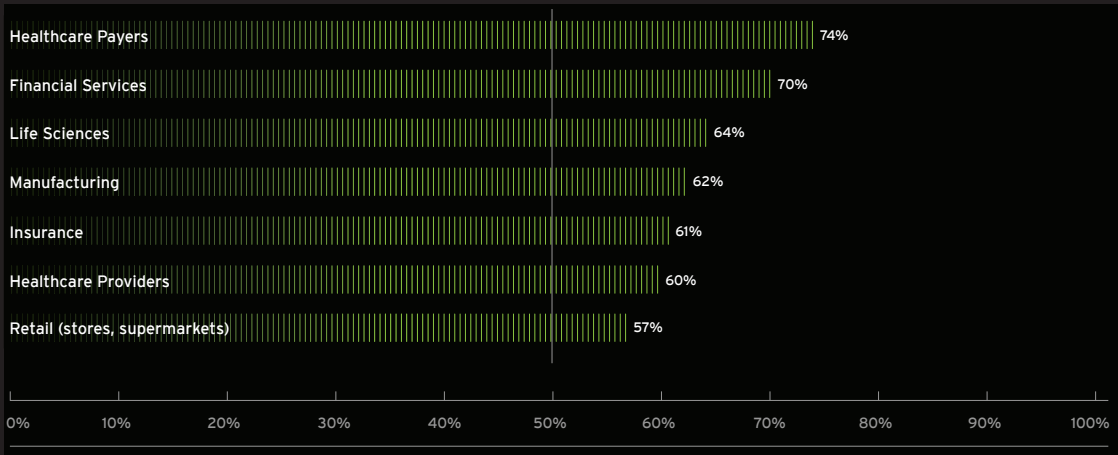


Figure 3 Source: Cognizant Center for the Future of Work, 2016 | Response base: 2000 global executives

Leaders and Laggards - Differences in Thinking

Digital leaders anticipate huge business impacts from a wide range of digital technologies over the next months, while in many cases digital laggards don't.

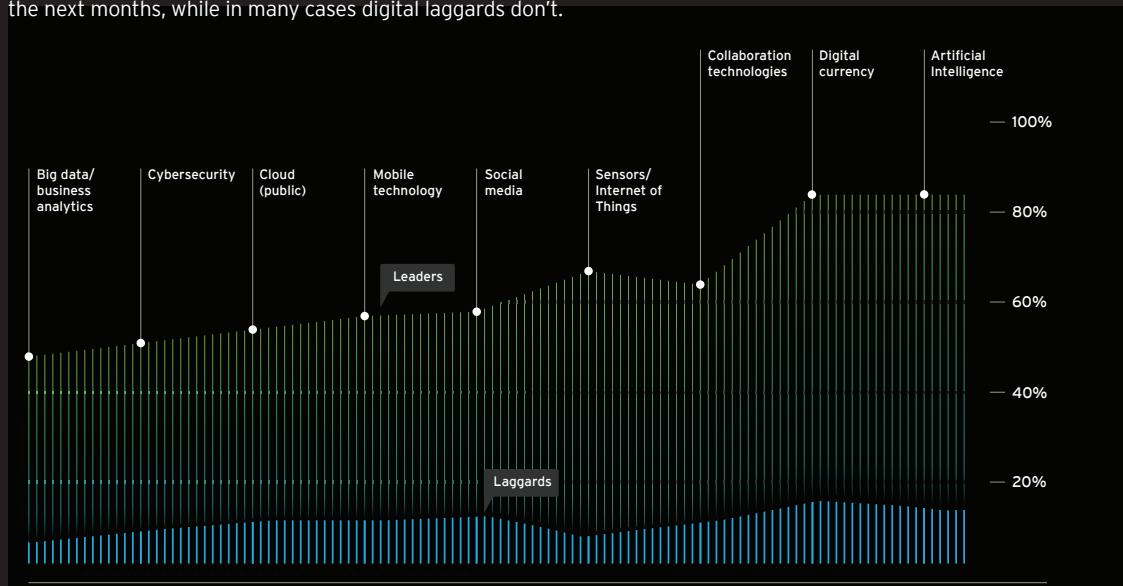


Figure 4 Source: Cognizant Center for the Future of Work, 2016

Breaking IT in Pursuit of Speed

There are now over 7.6 billion mobile devices around the world – more than there are working toilets (4.5 billion)¹. By 2020, a projected five billion smartphones will be connected to the Internet with access to millions of mobile applications. Near ubiquitous access to mobile and digital technologies has resulted in massive volumes of new data available for analysis, skyrocketing customer expectations and the need for speed. These forces are shaking up IT.

IT managers in our study believe the business impact of mobile technologies on their companies will jump 78% by 2020; this, in turn, will elevate the importance of cybersecurity. In fact, respondents list cybersecurity as the technology issue with the biggest business impact on their companies over the next few years (see Figure 5).

Increasing Role of Cybersecurity in a Connected World

Cybersecurity is the technology issue that will have the biggest business impact on companies over the next few years.

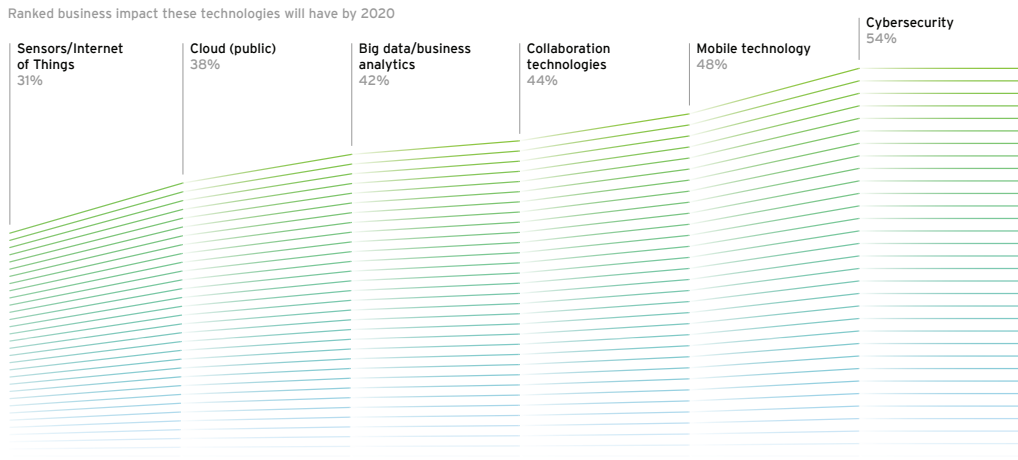


Figure 5 Source: Cognizant Center for the Future of Work, 2016 | 500 managers surveyed of which 80 are IT Managers.v

The migration of business and commerce to mobile devices is forcing IT departments to rethink, redesign and restructure. Sales, marketing, payments and customer service are migrating to mobile and digital environments. You may think mobile is already huge, but executives in our study think its business impact will increase by another 105% in the next 40 months (see Figure 6).

Big demands and expectations from mobile and digital customers are already producing unprecedented stress on the ability of “traditional” IT to respond and out-perform the competition. Traditional IT environments were never designed for real-time speeds; moreover, conventional business processes were not designed for real-time operational tempos.

The Rise of Mobile Technologies

As mobile and digital technologies increase in importance so also does cybersecurity.

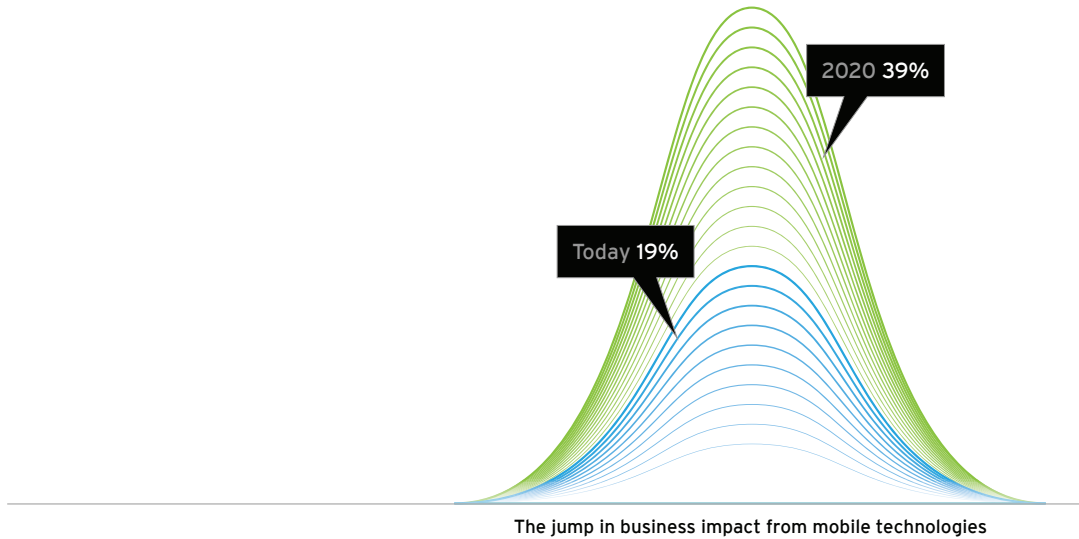


Figure 6 Source: Cognizant Center for the Future of Work, 2016

Meanwhile, humans must also upgrade their abilities, in the expanding digital world to manage the automated processing of millions of complex transactions on a daily basis, at speeds fast enough to satisfy impatient digital users. These developments require massive digital transformation that can support operations, business processes and decision-making speeds faster than is humanly possible.

Historically, digital technologies get faster, cheaper, more powerful and smaller every couple of years. We humans, however, don't. We operate in human time, a biological cadence influenced by the physical environment, our well-documented physical, mental and emotional limitations, and the universe that we live in. As digital interactions proliferate, so also does the volume of real-time data and required analysis. Most people are already at their limit of coping with the deluge of data, so we must now digitally augment our capabilities to handle the massive increases in the volume, speed and the complexity of it. These augmentations will involve OILS, supported by artificial intelligence (AI) and software for process automation.

Software robots (or "bots") can be developed to analyze vast quantities of data, make decisions based on codified decision trees that humans design, and then act in milliseconds. As Figure 7 reveals, 18% of digital leaders report intelligent process automation via bots is already having a large to very large impact on their businesses, and that figure jumps to 41% by 2020. This represents a dramatic increase of 128% in just 40 months.

The Rise of Software Robots for Process Automation

We - humans - already at our limit, must now digitally augment our capabilities to handle the massive increases in the volume, speed and complexity of data with bots.

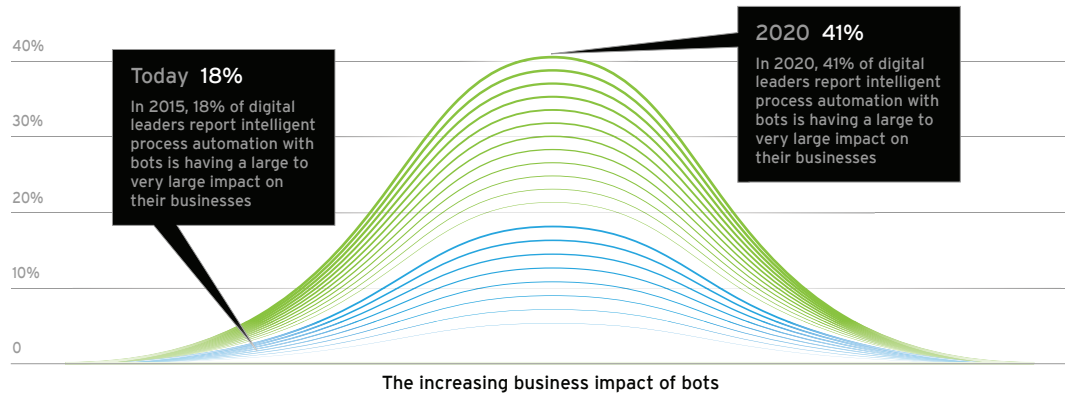


Figure 7 Source: Cognizant Center for the Future of Work, 2016

Today, slow service annoys us. We are immediately frustrated with people and brands incapable of supporting our digital habits and expectations. To achieve a real-time operational tempo, companies must evolve from "human time" to "digital time." When enterprises can support digital time, they can close process loops faster, harness immediate feedback on what's happening within the process itself, and act on those insights nearly instantaneously. The result: smarter decisions that enable businesses to operate like never before.

One of the biggest challenges enterprises face today in designing, developing and deploying OILS is upgrading core IT systems that frequently comprise legacy systems incapable of supporting digital time. Though this is hard work, it is the key to winning.

Augmenting Our Humanity

Our research clearly shows widespread consensus that AI is one of the most important emerging technologies that will help overcome many of these technology and human limitations.

Our respondents predict AI will be the top digital technology with the largest impact on their work by 2020. Currently, only 15% of the respondents think AI is having a large impact on their business. In the next 40 months, however, 46% believe AI will be critical (see Figure 8) - that's a 207% increase in pro-AI sentiment.

Digital interactions are often supported by AI systems that are dependent on real-time analytics to provide contextually relevant and personalized experiences. In addition, as the number of mobile and connected devices with billions of connected sensors increases, so also does the associated data in the ether that needs to be analyzed and turned into actionable intelligence that can be used by AI systems to deliver real-time business value. No wonder, then, that respondents forecast big data and business analytics will have the biggest impact of all technologies between the years 2020 and 2025. (see Figure 9).

The Rapid Rise of Artificial Intelligence

Executives predict AI will be the digital technology with the largest impact on their work by 2020.

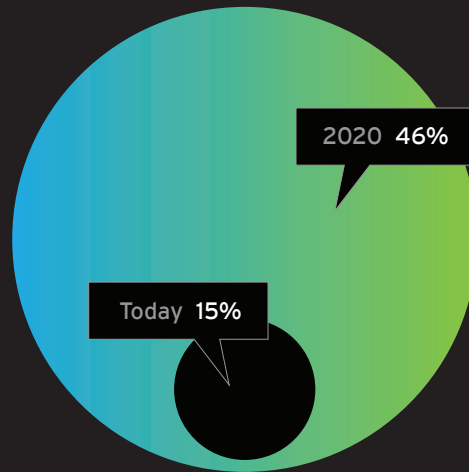


Figure 8 Source: Cognizant Center for the Future of Work, 2016

The Importance of Big Data / Business Analytics

Analytics is the key to automation in digital time.

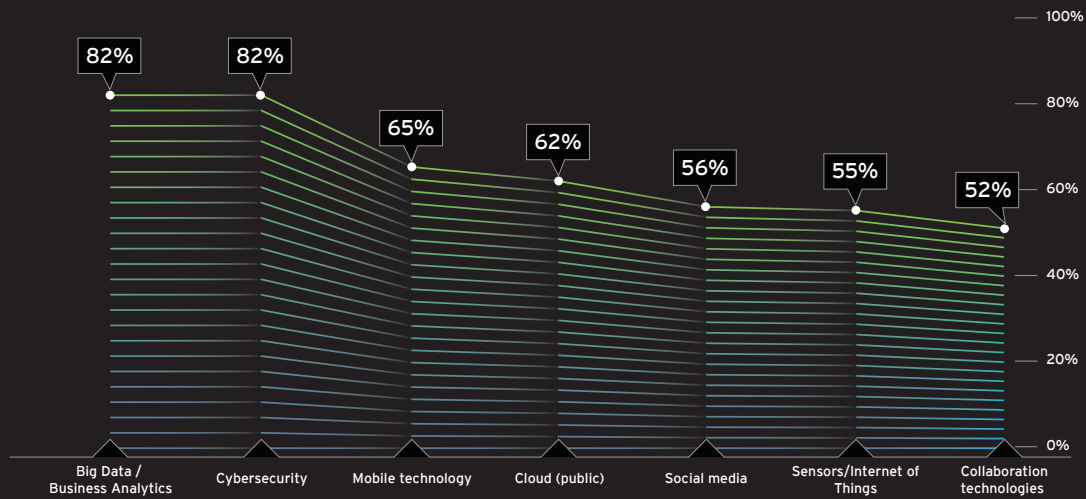


Figure 9 Source: Cognizant Center for the Future of Work, 2016 | 420 global executives identified as digital leaders (out of a total of 2000 global executives)

THREE AGES OF DIGITAL TRANSFORMATION

Change is hard, and many of us procrastinate, make excuses or lag behind. Today, we simply can't. Digital technologies are no longer "nice-to-have" tools of the business - today they *are* the business. Digital laggards are already finding their markets disrupted and their abilities to compete overturned. As they desperately try to outrun the Darwinian effect of their slow responses they are faced with not one but three periods - or ages - of digital transformation to navigate (see Figure 10). Understanding these three ages, and when they will emerge, is critical for business success.

The Three Ages of Digital Transformation

The importance of digital technologies by dates and ages.

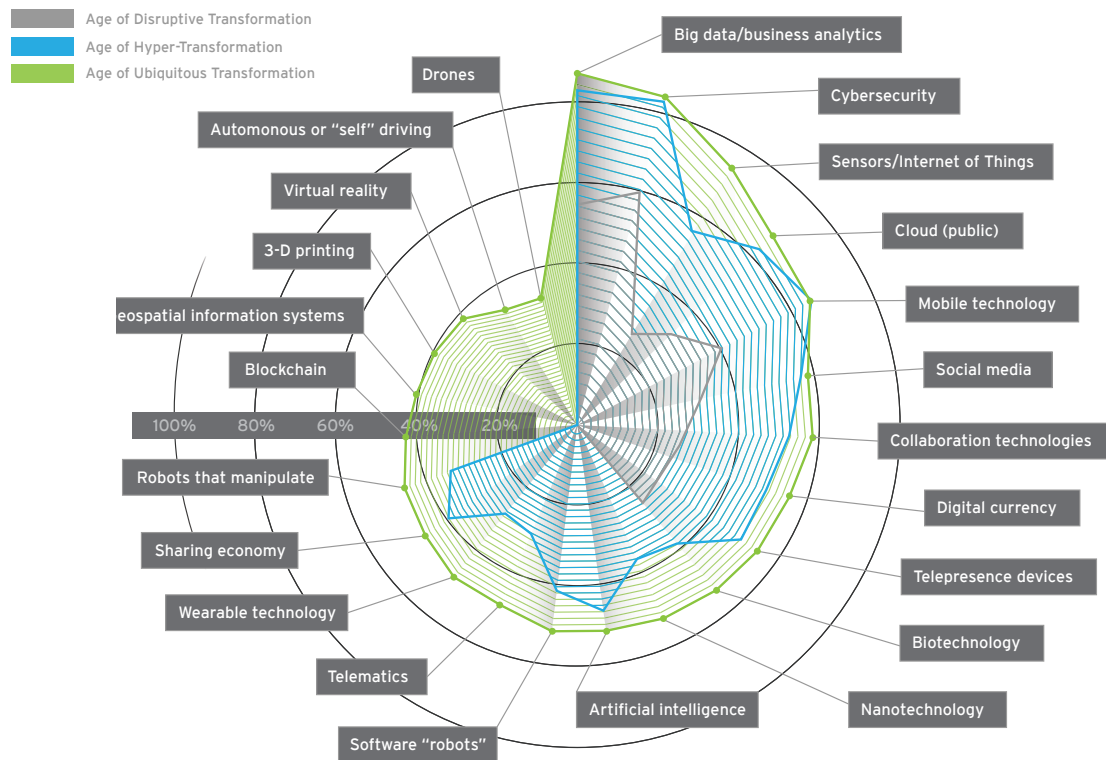


Figure 10 Source: Cognizant Center for the Future of Work, 2016

The Age of Disruptive Transformation

The Age of some may argue digital transformation started 70 years ago with ENIAC, the first commercially available computer, while others argue it started with the Internet. Whenever the starting point actually was, we can all agree that the proliferation of digital over the last five years has brought unprecedented personal and business disruption.

The age of disruptive transformation introduced eight specific technologies (see Figure 10) that disrupted traditional business operations and IT infrastructures, and are having a "large to very large" business impact on at least one-quarter of the digital leaders in our survey:

- Cybersecurity (59%)
- Big data/business analytics (54%)
- Mobile technologies (40%)
- Cloud computing (32%)
- Social media (31%)
- Collaboration technologies (26%)
- IoT/sensors (26%)
- Biotechnology (25%)

These eight technologies are data-centric - they are all about producing, managing, analyzing, securing and storing data in new and innovative ways, and then acting on it. With the exception of biotechnology, these digital technologies are critical components of OILS, and profoundly impact business strategies, business processes and human interactions.

These digital technologies - which should already be implemented and scaling to have an impact on your organization - now serve as the foundation for the next two periods of digital transformation. If these top eight digital technologies are not already in place within your IT infrastructure, the current age of hyper-digital transformation will threaten your company's very existence.

The Age of Hyper-Digital Transformation

During the second period of digital-related change - the age of hyper-digital transformation - the pace of change and the business impact of digital technologies greatly accelerate. The eight top technologies from the previous era will rapidly increase their business impact by an average of 74% among digital leaders by 2020. This increase is a sign of the enormity of the forces at work, the size of investments needed, and the cadence at which organizations need to adapt to stay relevant and competitive.

In the age of hyper-digital transformation, nine additional, incremental digital technologies join the eight from the previous age. These nine start with a relatively low level of importance today but increase by an average of 145% among digital leaders by the year 2020. These nine additional digital technologies reach the threshold of having an "important to very important" business impact among at least one-fourth of digital leaders:

- Telepresence (Skype, Google Hangouts, etc.) (49%)
- Digital currency (49%)
- Artificial intelligence (46%)
- Robotic process automation (software) (41%)
- Sharing economy platforms like Uber (39%)
- Nanotechnologies (35%)
- Robots (hardware) (33%)
- Telematics (29%)
- Wearables (28%)

When combined, these seventeen digital technologies increase their business impact among digital leaders by an average of 112% between 2016 and 2020 (see Figure 10). The predicted business impact of these digital technologies means that the business and IT organizations today will need to look very different by 2020 in order to keep up and compete successfully.

Retail is considered a canary in the coalmine for many other industries. As such, when retail giants begin to fail, it is important to pay attention and heed the warning signs. Retail giant Sports Authority filed for bankruptcy in March 2016, and according to many analysts, this was due in large part to the company's slow response to online and mobile competition.² In May 2016, Aeropostale filed for bankruptcy, and according to analysts, it couldn't keep up with fast-changing consumer behaviors and the speed of emerging fashion trends at the same rate as their online competitors.³ Also in May 2016, the UK-based BHS entered administration (i.e., filed for bankruptcy), and according to reports, the company had fallen far behind its digital competitors and fast-changing consumer trends.⁴

The consensus among retail analysts is these companies failed to digitally transform quickly enough, which resulted in lost ground to more tech-savvy competitors.

The Age of Ubiquitous Transformation

In the final period of the digital transformation trilogy - the age of ubiquitous transformation in the year 2025 - our research finds the business impact of the previous age slowing as companies work to digest the incredible change of the two previous ages. However, even in this more pedestrian age, respondents expect an impressive 35% increase in the business impact of digital technologies (see Figure 10).

In this era, six new technologies mature and join the previous seventeen, all of which are now having a “large to very large” business impact on the organizations at the forefront of digital change:

- Blockchain (43%)
- Geospatial information systems (41%)
- 3-D printing (40%)
- Virtual reality (39%)
- Autonomous self-driving cars (34%)
- Drones (33%)

Among digital leaders, these six digital technologies are expected to increase their business impact an average of 96% between 2020 and 2025.

These six additional data-driven technologies are at once foundational and revolutionary. They highlight dramatic changes to come in industries such as transportation, banking, finance, commerce and manufacturing, all made possible by the digital transformations that preceded them.

Timing is everything, and the correct sequencing of technology implementation and budgeting, from proof of concept through implementation of production-ready systems, is critical. Our list of 23 digital technologies, their maturity timeframes and projected business impact (posited by our respondents) are powerful tools to plan your organization's digital transformation strategy.

THE END GAME OF DIGITAL TRANSFORMATION

Digital transformation requires participants to have a vision for and understanding of what they are trying to achieve and why. In fact, the lack of a clear digital strategy is the second biggest mistake companies make in digital transformation, right behind moving too slowly, according to the managers we surveyed. Digital strategies, however, should evolve out of a documented, enterprise-focused digital transformation “doctrine.”

The purpose of a digital transformation doctrine is to create a unified understanding of why digital transformation is needed. An organization's doctrine should influence its strategy, its operating model and the tactics it uses to compete. A simple example of a doctrine could be:

The digital transformation of our marketplace is changing the behaviors of our customers and the nature of our competition, and we must embrace these changes by employing digital technologies and strategies, and by creating a digitally agile business. We will achieve transformation and information dominance by investing appropriately to develop and maintain an optimized information logistics system. We will restructure our organizations for business agility, speed and real-time decision-making through the use of AI. We will develop a culture that encourages collaboration, innovation and creativity.

The justification for the pain and stress of digital transformation is to compete at a higher level. Digitally-transformed enterprises have fully functioning “digital nervous systems” consisting of sensors, mobile devices, technology-enabled people, shared situational awareness, networked applications, automated data collection, optimized processes, advanced analytics and a centralized OILS. This system provides full visibility, in real-time, into system changes that require a response from humans and/or bots. This awareness enables leaders to make data-centric decisions and implement automated bots using AI to speed up responses to data triggers.

PG&E is a great example of a company with such a doctrine and an accompanying “digital nervous system.” PG&E supports 50 million customers with 1,500 distributed work crews managed from 67 different locations using separate software applications and databases. With this scale of customer service operations, PG&E’s pre-digital infrastructure was highly stretched and brittle. Each dispatcher’s visibility and authority was limited only to the local work crew’s schedules, which resulted in poor and inefficient resource allocation, slow responses to major events and high administrative costs.

To solve these inefficiencies, PG&E redesigned its business strategy and IT infrastructure by implementing an OILS, including cybersecurity, mobile, telematics and IoT systems, and consolidating all of its dispatching and field services management into two centralized centers, which were standardized on a shared software solution for scheduling. The results: Management now has centralized control over workforce scheduling and can accurately measure work crew utilization. With these capabilities, management can move work crews between different regions for optimal efficiency; dispatch is now consolidated to two offices (from a previous 67); and the company is standardized on one solution that can be enhanced and upgraded in a uniform manner.⁶

Forces, Futurists and the Ax2 Phenomenon

Revenue growth and costs savings are clearly the central justification for digital transformation, but it's how these are achieved that is the critical differentiator between success and failure - relevancy and irrelevancy - in the Work Ahead. We asked 50 futurists - professionals employed to review data, analyze technology trends and develop strategy - to identify and rank the top five ways they believe digital transformation will drive value generation between now and 2020 (see Figure 11):

Futurist on How Digital Transformation Generates Value

The top 5 ways digital transformation generates value.

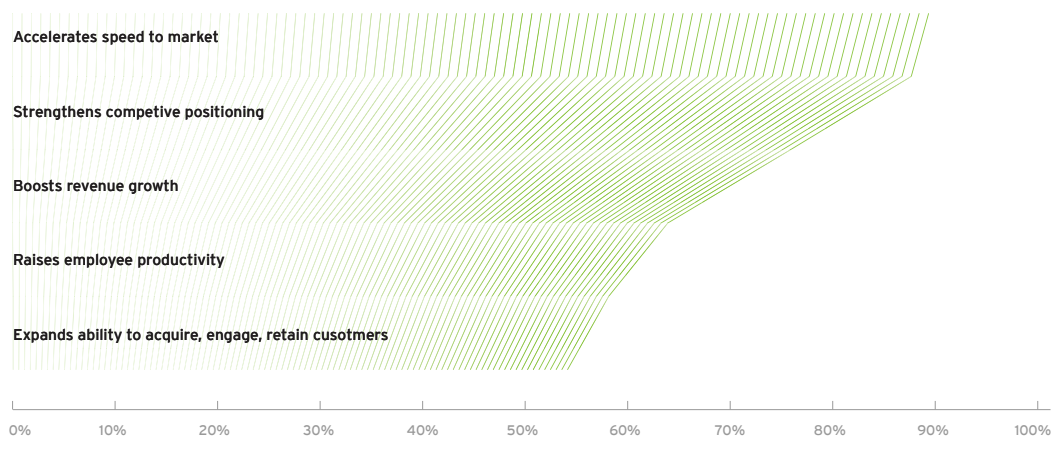


Figure 11 Source: Cognizant Center for the Future of Work, 2016

These top five value generators offer significant business advantages; but if your organization can achieve them faster than your competitors, there is an additional advantage, which we refer to as the Ax2 phenomenon (advantages have advantages). Not only do digital leaders realize competitive advantages before others, but they also have the advantage of insights from new data, which leads to new actions and new insights not yet understood or possible for laggards.

Research In Motion (RIM), the progenitor of the Blackberry, responded slowly to Apple's launch of the iPhone. Years passed before RIM responded with its first smartphone. During this time, Apple worked at "digital speed" to improve its iPhones and the iOS operating system, and hundreds of thousands of software applications were developed for it. Each of these versions provided additional insights into consumers and their behaviors. The Ax2 phenomenon enabled Apple to rapidly widen the gap between leader and laggard, a competitive advantage that proved impossible for RIM to overcome.

Executives must closely watch the innovation efforts of competitors, and recognize that it is not only the new products and services that are being introduced that can be differentiating but also the data they glean from those new innovations.

Information dominance is the strategic imperative of the 21st century. The good news for executives is that investing in digital technologies to gain information dominance makes sense as the return on investment for digital technologies averages nearly 50% among survey participants, but jumps to an astounding 230% for the top 25%.

Achieving information dominance involves understanding the data required to achieve competitive advantage, and then collecting and analyzing it to glean business meaning faster than the competition.

Information dominance, however, is meaningless unless it results in actionable insights, which lead to appropriate actions, at the right time and place. It's not the ability to collect and analyze data faster; it is the ability to understand and act on it faster. Businesses that can "understand and act with speed" will dominate those that are slower.



RECOMMENDATIONS AND NEXT STEPS

In today's age of hyper-digital transformation, enterprises must digitally transform and implement OILS that can respond to change with self-sustaining business agility. These abilities take more than digital technologies; they require a new way of thinking, which is revealed in our data on digital leaders:

- **Digital leaders recognize and respond to underlying market forces**, and are budgeting and planning to implement specific business strategies and digital technologies in specific sequences to maximize ROI and competitive advantage.
- **Digital leaders recognize the impact of digital technologies on the expectations of consumers and markets.** These expectations are speeding the tempo of operations beyond human time to digital time. The demands for digital time require humans to upgrade IT environments and augment their capabilities with AI and robotic process automation (bots) to enable mass volumes of transactions to be processed in milliseconds in order to support real-time and mobile environments.
- **Digital leaders develop a digital doctrine and strategy** to unify and guide all business and technology strategies, tactics and investments and provide a shared frame of reference across their organization.
- **Digital leaders are exploiting the Ax2 phenomenon.** The Ax2 phenomenon enables enterprises to gain new and unique business insights earlier than their competitors, leading to competitive advantages that result from the collection and analysis of data not yet available to digital laggards.
- **Digital leaders identify the digital technologies they expect to have a significant impact on their businesses** across the three digital transformation ages spanning 2016 to 2025. These technologies are not all created equal in their business impact, and some are still not ready for prime time, but are maturing fast. As a result, it is critical to carefully time the adoption and implementation of digital technologies in accordance with the age in which they will deliver maximum ROI and competitive advantage.

First and foremost, digital leaders understand the reality and degree of impact that digital technologies are having on their customers, and their ability to compete. They recognize the pace of change and are aligning their strategies and budgets in ways that will provide them with competitive advantage now and in the future.

Note: All company names, trade names, trademarks, trade dress, designs/logos, copyrights, images and products referenced in this white paper are the property of their respective owners. No company referenced in this white paper sponsored this white paper or the contents thereof.

Footnotes

¹“The Mobile Economy 2016,” GSMA, 2016,
<http://www.gsma.com/mobileeconomy/>

²Charisse Jones, “Sports Authority Shutting Down with Giant Going-Out-of-Business Sale,” USA Today, May 23, 2016,
<http://www.usatoday.com/story/money/2016/05/23/sports-authority-going-out-biz-sales-should-start-end-week/84792816/>.

³“Aeropostale Auction Closes with a \$243.3 Million Bid,” Fortune, Sept. 2, 2016,
<http://fortune.com/2016/09/02/aeropostale-bankruptcy-auction/>.

⁴Hugo Gye and James Burton, “BHS Put into Administration over £ 1.3 billion Debt,” Daily Mail, April 24, 2016,
<http://www.dailymail.co.uk/news/article-3556777/BHS-facing-oblivion-High-street-giant-collapse-today-1-3billion-debt-putting-11-000-jobs-risk.html>.

⁵Lucy Clarke-Billings, “BHS Collapses into Administration after Failing to ‘Stay Relevant,’” Newsweek, April 25, 2016,
<http://www.newsweek.com/bhs-collapses-administration-after-failing-stay-relevant-high-street-452150>.

⁶“Pacific Gas & Electric Shifts Crew Assignments to Meet Customer Needs with Help from ClickSoftware,” ClickSoftware
http://www.clicksoftware.com/wp-content/uploads/2016/08/CaseStudy_Pacific-Gas-And-Electric-Company-2016_8-1.pdf.

Methodology and Demographics

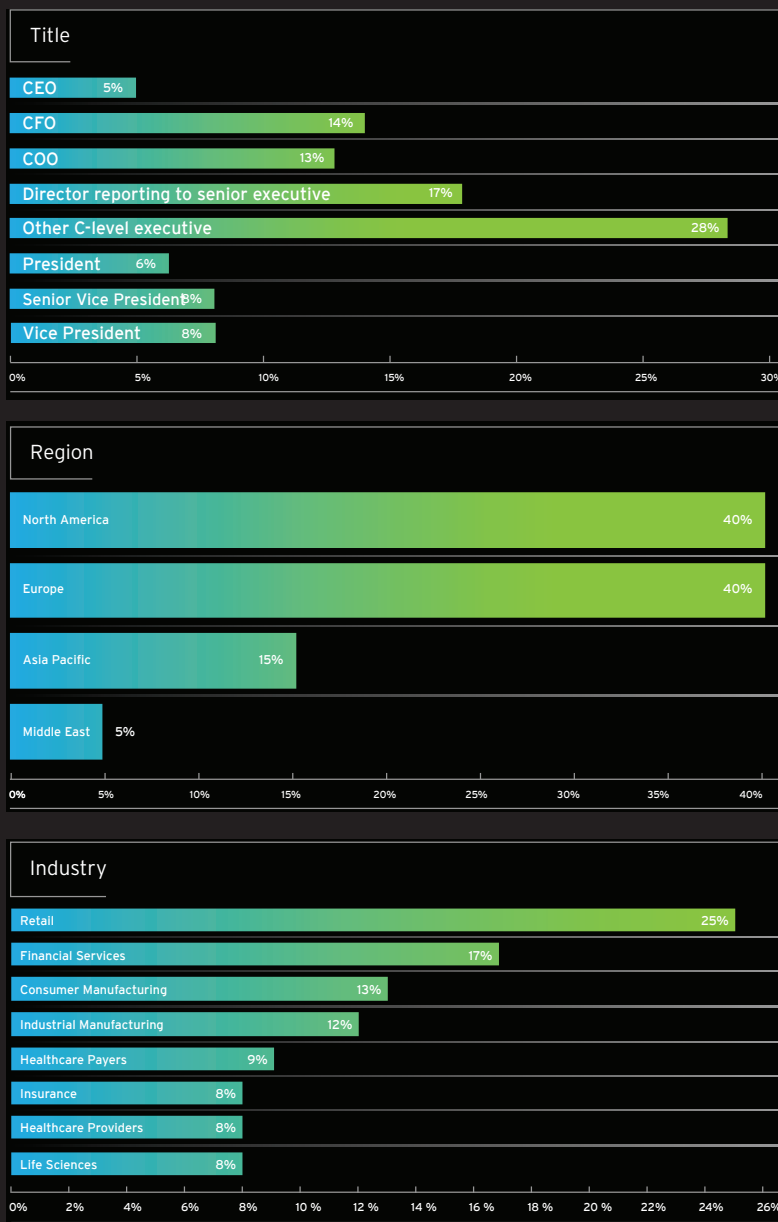
We conducted a worldwide survey between December 15, 2015, and January 28, 2016, with 2,000 executives across industries, 250 middle managers responsible for other employees, 150 MBA students at leading universities around the globe, and 50 futurists (including journalists, academics and authors). The executive and manager survey was run in 18 countries in English, Arabic, French, German, Japanese and Chinese. We used telephone interviews for executives and online surveys for the managers. The MBA and futurist surveys were fielded in English using telephone interviews (in 15 countries for the MBA survey and 10 countries for the futurist surveys). The study was conducted with research and economic support from Roubini ThoughtLab, an independent thought leadership consultancy.

Leader vs. Laggard Calculation

Digital leaders were identified based on the responses to three questions:

- What percentage of your company's revenues today is invested in all technologies – including your central IT budget as well as spend by business units throughout your firm?
- Please estimate the percentage impact of using digital technologies on revenue and costs over the last financial year for your organization.
- How does your company compare with other firms in your industry in applying digital technologies to transform business strategies, processes, and services?

Leaders account for 21% of the sample and achieved scores of 35 or more; Laggards account for 28% of the sample and achieved scores up to 15. The Average group accounted for 51% of the sample.



Demographics

About the Author



Kevin Benedict is a Senior Analyst with Cognizant's Center for the Future of Work, and a popular technology pundit, writer and keynote speaker with over 30 years of experience. He brings a unique perspective as a veteran mobile industry executive who has taught IT and business strategy workshops in 17 different countries over the past three years, and written over 3,000 articles. Kevin can be reached at:

Kevin.Benedict@cognizant.com

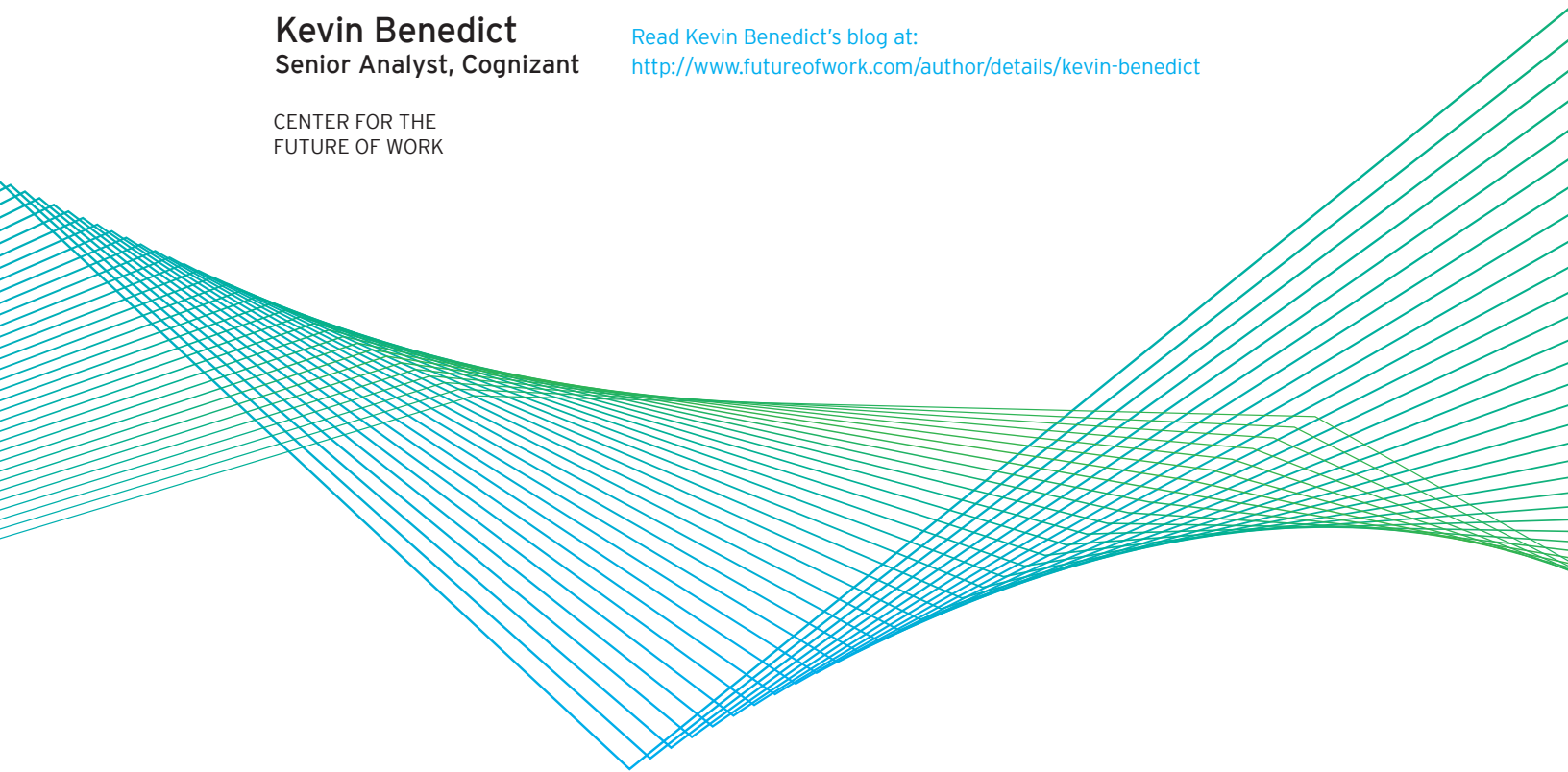
[LinkedIn: https://www.linkedin.com/in/kevinbenedict](https://www.linkedin.com/in/kevinbenedict)

[Twitter: @krbenedict](https://twitter.com/krbenedict)

Read Kevin Benedict's blog at:
<http://www.futureofwork.com/author/details/kevin-benedict>

Kevin Benedict
Senior Analyst, Cognizant

CENTER FOR THE
FUTURE OF WORK





Cognizant

Cognizant (NASDAQ: CTSH) is a leading provider of information technology, consulting, and business process services, dedicated to helping the world's leading companies build stronger businesses. Headquartered in Teaneck, New Jersey (U.S.), Cognizant combines a passion for client satisfaction, technology innovation, deep industry and business process expertise, and a global, collaborative workforce that embodies the future of work. With over 100 development and delivery centers worldwide and approximately employees as of 2016, Cognizant is a member of the NASDAQ-100, the S&P 500, the Forbes Global 2000, and the Fortune 500 and is ranked among the top performing and fastest growing companies in the world. Visit us online at www.cognizant.com or follow us on Twitter: Cognizant.

World

HEADQUARTERS

500 Frank W. Burr Blvd.
Teaneck, NJ 07666 USA
Phone: +1 201 801 0233
Fax: +1 201 801 0243
Toll Free: +1 888 937 3277
Email: inquiry@cognizant.com

European

HEADQUARTERS

1 Kingdom Street
Paddington Central
London W2 6BD
Phone: +44 (0) 20 7297 7600
Fax: +44 (0) 20 7121 0102
Email: infouk@cognizant.com

India Operations

HEADQUARTERS

#5/535, Old Mahabalipuram Road
Okkiyam Pettai, Thorapakkam
Chennai, 600 096 India
Phone: +91 (0) 44 4209 6000
Fax: +91 (0) 44 4209 6060
Email: inquiryindia@cognizant.com

© Copyright 2016, Cognizant. All rights reserved. No part of this document may be reproduced, stored in a retrieval system, transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the express written permission from Cognizant. The information contained herein is subject to change without notice. All other trademarks mentioned herein are the property of their respective owners.