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Asia Rising: Digital Driving

Executives seeking a digital business advantage should take a page from the playbook written by leaders across the Asia-Pacific region, according to findings from our primary research.



KEEP CHALLENGING™



Executive Summary

Asia is fast becoming the center of digital innovation for the world. The region accounts for half of the world's total 2.8 billion Internet users, and it is already the largest regional e-commerce market. By 2025, today's fast-changing technologies – including the mobile Internet, the Internet of Things (IoT), cloud technology, 3-D printing and advanced robotics – are expected to lead to 30% GDP growth in Southeast Asia alone, 20% to 30% GDP growth in India, and up to 22% GDP growth in China.¹

The pendulum swing of economic power from West to East has accelerated over the last decade; in fact, Asia has become a crucial growth engine for many companies, across industries – perhaps sooner than most global economy pundits had imagined. While digitally-enabled consumers throughout the world are shaking up business models, value chains and ecosystems, nowhere is this more apparent than in this region. The old saying “may you live interesting times”² is playing out across the continent, as waves of new technologies are rapidly emerging, disrupting every conventional (and conceivable) business notion.

The transformation agenda is also introducing some unforeseen challenges, in the form of new investments, organizational structures, internal skills, change management, and roles and responsibilities for companies. The mandate has intensified for businesses in the region to quickly rise to these challenges and turn them into opportunities. Based on what we've learned through our primary research, we believe it is critical for global decision-makers to learn from the first-hand experience of leaders in the Asia-Pacific, both to participate in the enormous opportunities of digital transformation, and to import the region's game-changing innovations, business strategies and successful approaches into their own businesses.

This report is based on original research in which we surveyed over 300 business and technology executives in Australia, New Zealand, India, China, Hong Kong, Indonesia, Malaysia and Singapore, between May and July 2015 (see Appendix, page 19, for more details on the survey methodology.) Our study provides an important look at how digital transformation is generating new levels of value for companies throughout the Asia-Pacific, at rates much faster than in first-world economies. Through our findings, global decision-makers can catch a glimpse of the future of business, playing out right now in the region.



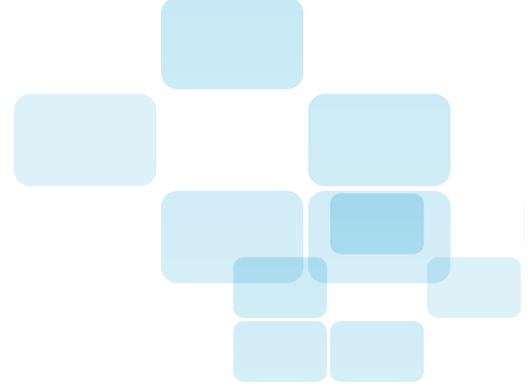
The shifting of economic power to Asia has given us a competitive edge. In today's world, it is not the big fish that eats the small fish. It is the fast fish that eats the slow fish." – CEO, Media & Entertainment Company, Malaysia

Key Findings

Our research reveals the emergence of the following important trends, whose impact in some cases will soon ripple around the world:

- **"Digital first" is the new norm.** While 37% of companies are already undergoing digital transformation, almost 60% plan to embark on the transformation journey over the next 12 to 24 months.
- **"Digital" equates to growth.** Improving new products and services (63%), increasing revenue (60%) and improving sales, new customers, marketing and customer relations (58%) are the top three goals for digital transformation.
- **Digital means money, period.** Digital transformation will unlock an incremental US\$20.1 billion in revenue opportunity for companies in the Asia-Pacific region by 2017.
- **Digital now!** In some parts of the world, "digital" is still an initiative for next quarter – or the one thereafter. In Asia, however, rising customer expectations (65%), increased competition (57%) and demanding employees (55%) are compelling companies to start now. Any organization not acting – at full speed – on digital is on a fast track to market irrelevance.
- **Business-processes-as-usual is a strategy to lose.** Companies are more likely to be disrupted by poor integration across processes than by competitors or customers. The sales/marketing/customer service process (62%) will be most impacted by digital transformation, closely followed by new product/service development (60%), as well as strategy setting and implementation (46%), and financial planning, tracking, analysis and reporting (45%).
- **Strong digital leadership will shape the growth agenda.** The role of the chief digital officer will become more and more pivotal; 70% of companies surveyed plan to have this role in place over the next two to three years.

- **Technology-driven disruption will promote innovation.** Investments in foundational technologies are being made with two key objectives in mind:
 - **Building the digital foundation.** The investment in social, mobile, analytics and cloud (SMAC) technologies will increase significantly, nearly doubling in many cases.
 - **Enabling digital innovation.** Investing in new technologies (robotics/drones, telematics, wearables, sensors, etc.) is like investing in five promising stocks in parallel without knowing which one will pay major dividends in the long run.



Asia Demonstrates Digital's Future



Digital transformation will play a key role in driving innovation and growth in the region; it will optimize resource and capital allocation, while driving growth for the business." – CFO, Auto Manufacturing, Indonesia

By 2020, emerging economies will account for approximately 60% of the increase in global spending.³ The region's digital story is all about growth – massive growth. At the heart of this, Asia-Pacific companies are counting on digitization as a key element in their near- and long-term future. Tech entrepreneurs are already leveraging digital platforms and quickly building billion-dollar fortunes, thereby challenging traditional business models and industries.⁴ Four of the top 15 worldwide global public Internet companies (Alibaba, Tencent, Baidu and JD.com) are based in China; their total combined value is \$542 billion.⁵ Venture capitalists and equity firms looking for the next Alibaba are pumping billions of dollars into e-commerce companies such as Flipkart in India, hoping to unearth the next new thing.⁶

Despite the slowdown fears looming around China, business leaders believe this fiery growth trajectory will continue; 64% of the executives surveyed for this report claim to be “bullish or very bullish” on the Asia-Pacific region for business growth. These leaders clearly see growing signs of digital opportunities as companies quickly adapt to the changing market requirements of the region. They also believe digitization will help Asia Pacific economies contribute to global expansion and bypass all the concerns quickly.

At the same time, many study participants also recognize that along with the huge potential upside, the digital wave also presents a very real threat to business-as-usual. Alert and aware executives know that a “near-death” moment is no longer a theoretical abstraction for their businesses, but a very real and present danger. One important leading indicator of this reality is the US\$1.59 billion investment by Singtel, the Singaporean telecom provider, to fund a new division to create digitally-mediated revenue streams for the future.⁷

Defining Digital

As any market participant or observer can attest, there's little agreement about what “digital transformation” means. In some ways this is entirely understandable; in any early-stage market, definitional confusion always reigns, as competing voices claim to know “what's really going on.” Clarity is often late to the party.

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Asia Emerges as the Center of Digital Transformation

What is the current state of digital transformation at your organization?



Response base: 314
Source: Cognizant Center for the Future of Work
Figure 1

After sharing with our survey respondents various definitions of digital coined by market gurus the world over, we asked them to name the first thing that comes to their mind when they hear the term “digital transformation.” We received responses like “evolve,” “disruption,” “customers” and “participative democracy.”

With these responses and analyst views in hand, we then provided – for respondents and for the purposes of this report – our definition of digital transformation:

“Digital transformation is more than technology. It means innovation to connect technology, data science, devices, design and business strategy to change a business process or customer experience. It is about putting the customer, device, organization or business process at the center of change that improves agility, revenue and cost by connecting the physical world to the digital – code – world.”

Our survey clearly indicates that, regardless of country or industry, the digital transformation agenda is now a top priority for C-suite executives across the region. When only 4% of leaders are not engaging in digital transformation, you know a sea change in value generation is under way (see Figure 1).

Digital Transformation Delivering Significant Revenue Growth, Cost Savings

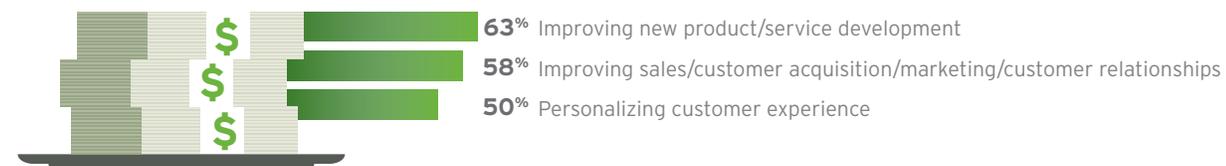
Digital is the key to addressing the wants and needs of current and future online consumers, who will represent half of Asia's population by 2020, up from one-third today.⁸ Realizing this, the leaders surveyed for this report are re-calibrating their business models to create new products and services, boost revenue growth and drive new operational efficiencies across their organizations (see Figure 2). Such efficiencies will enable respondents to refocus resources away from internal operations and toward growth opportunities enabled by digital business. Companies will collectively generate US\$20.1 billion in revenue by 2017 through digital transformation; already, respondents said they are experiencing 7.6% revenue growth as a direct result of their digital transformation efforts, and they expect that to nearly double by 2017 (see Figure 3, next page). Digital transformation is not a "game of survival" but a "mission to win."

No industry is immune to the impact of digital disruption, based on our research findings. Even highly-regulated industries, such as financial services, are under intense pressure to recast their operations. For instance, the payments arena that accounts for 20% to 25% of bank revenue is undergoing a profound transition as new digital entrants beyond Mint – such as Alipay (China) and Paytm (India), among others – challenge long-established incumbents. From traditional conservative companies to progressive enterprises, all are looking to leverage digital to rewrite their industry and their own

Companies will collectively generate US\$20.1 billion in revenue by 2017 through digital transformation.

Revenue Growth, Cost Cuts Are Key Digital Goals

Percent who agree that the following measures will have a greater impact on revenue:

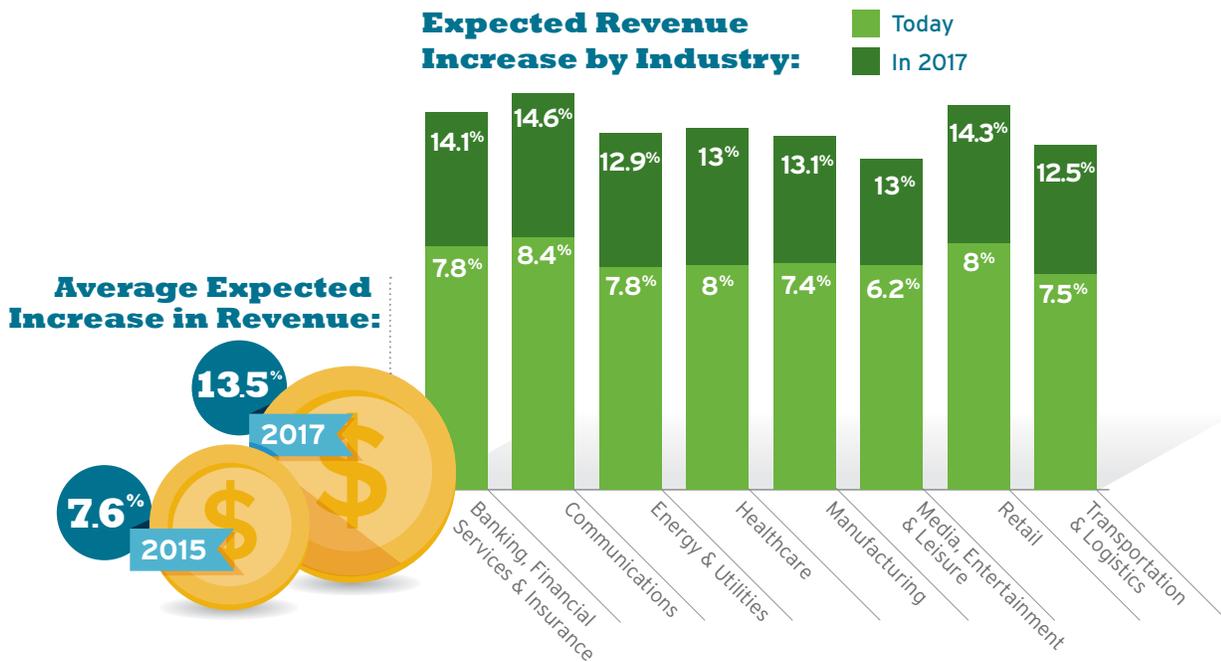


Percent who agree the following measures will have a greater impact on costs:



Response base: 314 (multiple responses permitted)
Source: Cognizant Center for the Future of Work
Figure 2

Revenue Impacts of Transformation



Response base: 314
 Source: Cognizant Center for the Future of Work
 Figures 3 and 4

future (see Figure 4). An example is Singapore Post, Singapore's nearly 200-year-old national postal service, whose mission is to become the leading e-commerce logistics and communications provider in Asia Pacific and to eventually go global.⁹

Digital is no longer a "bonus" or "nice-to-have" channel; it is becoming the most profitable future path. Leaders must challenge the status quo and reappraise every underlying principle of their business. They should continuously question the status quo. For instance, why do banks need to have a physical infrastructure in place? What if the physical infrastructure moves entirely virtual? Such questions ultimately give birth to concepts like the all-digital bank Atom,¹⁰ which will soon be operational.

Survey respondents expressed uncertainty about how much they should ideally budget for digital transformation, with 61% reporting no dedicated funds. In our estimation, companies should allocate at least 2% of their annual revenue (outside of the IT budget) to transformation efforts for starters, and then increase their expenditure every year after that, based on the outcomes, vision, strategy and risk appetite of the organization. Further, that spending needs to be tightly linked to clear business outcomes such as revenue growth and cost containment.

The Drivers of Digital Transformation

Although our business is doing well today, we know that it will look different over the next four to five years. Investing in digital now will allow us to grow as we transition to the new digital economy and prepare for our future." – CMO, large private bank, Singapore

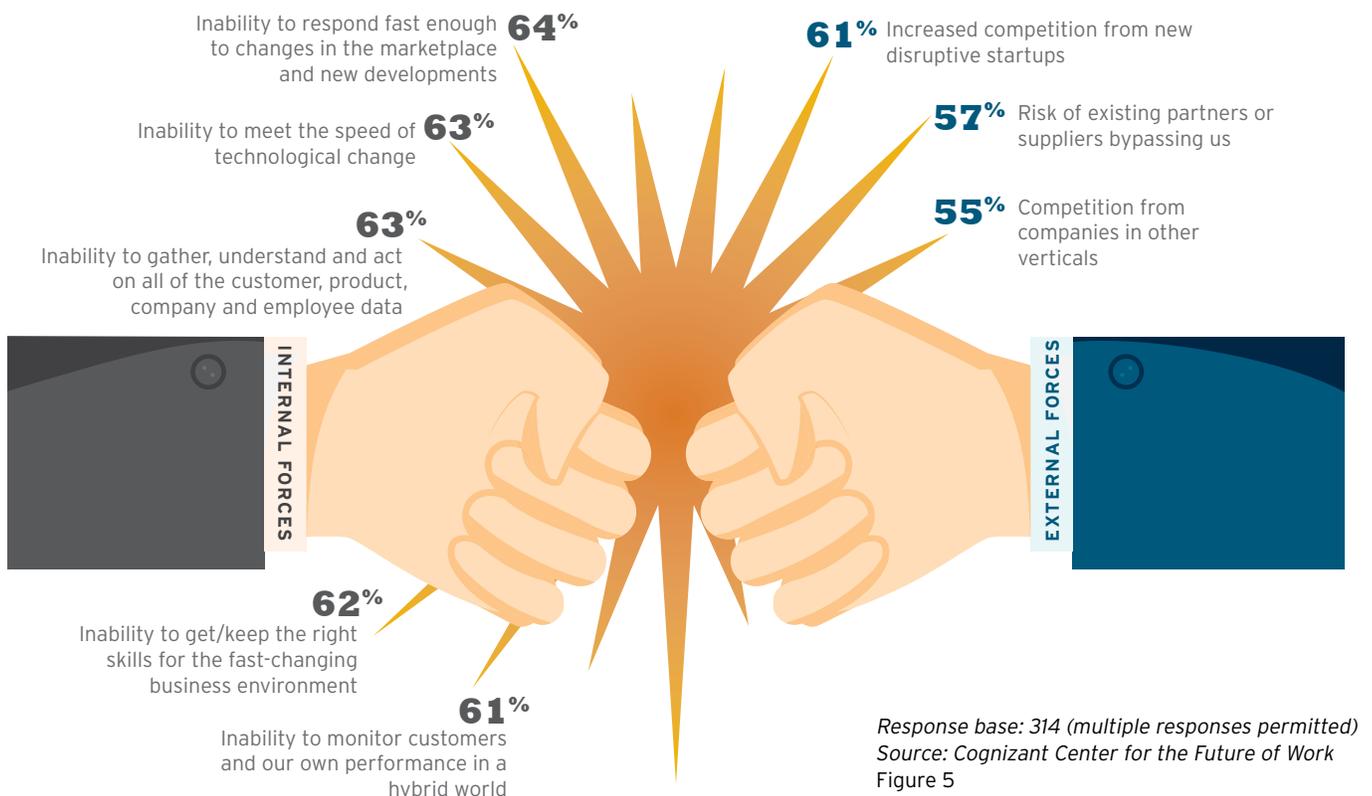
C-suite respondents report feeling tremendous pressure from inside and outside their organization to meet growing customer and market expectations. They are expected to respond to fast-changing market, technological, competitive and customer dynamics, and run businesses in a more prudent way (Figure 5).

Business leaders must show their readiness as the future unfolds. In particular, the following concerns are shaping the digital transformation mandate for leaders:

- Customers' digital expectations are higher than ever before.** Today, Wi-Fi is free in many Asia-Pacific countries; it's not something customers need to ask for or find in a café. Even with its low Internet penetration, India is expected to overtake the U.S. in 2015 as the country with the highest number of Facebook users. Indonesia is Twitter's largest base globally and among the fastest growing. These digitally-enabled customers are demanding new types of engagement and want service in their moments of need; any disruption in the digital customer experience is simply not acceptable.¹¹ Responding to customers' digital demands can drive economic benefits, according to research we published in December

Colliding Forces Threaten Growth

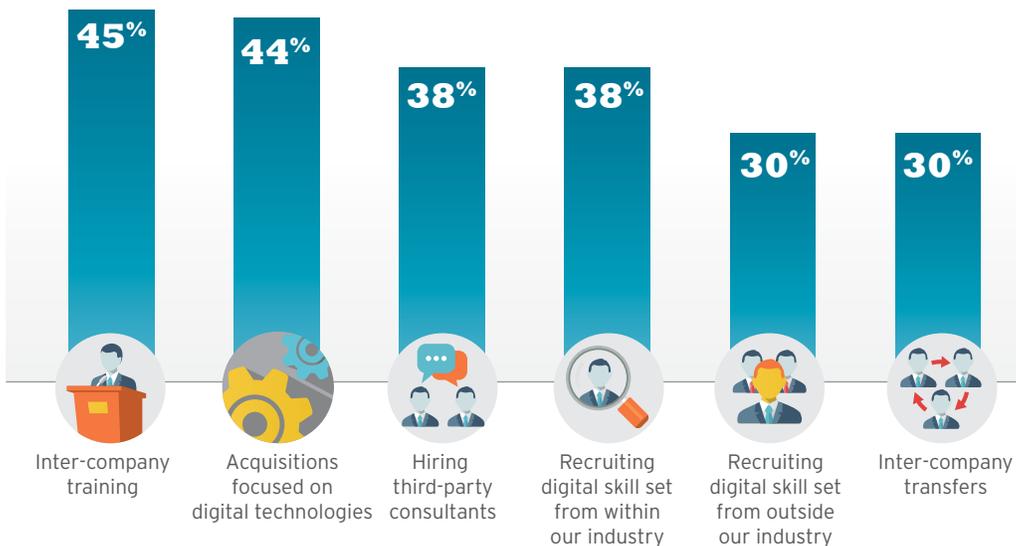
How concerned are you, if at all, about the following threats impacting the growth prospects of your organization?



2014, in which companies reported generating US\$766 billion in total economic benefits as a result of digital customer engagement.¹²

- **Competition is moving from “eat someone’s lunch” to “eat everyone’s lunch.”** Competition is increasingly transcending industry borders; in a digitally level world, few competitive boundaries remain. Executives understand that they face rivals at every turn, from disruptive startups to existing partners or suppliers bypassing the traditional value chain and serving customers directly. Consider these recent threats to the business establishment:
 - Mint, a third-party payments intermediary in Australia, was ranked ahead of many banks in a 2014 list of Australia’s 50 most innovative companies.¹³
 - Xiaomi became the world’s third largest smartphone manufacturer in just four years, with a disruptive business model based on monetizing apps and services rather than just hardware.
 - Retailers are gradually moving into the financial services domain; for example, Coles, Woolworths, Myer and David Jones all now issue credit cards in Australia. Coles has partnered with GE Capital to offer personal loans.¹⁴
- **Before data is an asset, it is a liability.** Too much data and not enough insight is creating a digital overload for many companies. As digitally empowered consumers leave their digital fingerprints, or what we call a Code Halo,^{TM15} on every professional and personal transaction and interaction, many leaders are (rightly) concerned about their ability to gather, analyze and act on the data to monitor and serve them. To stay ahead of the curve, companies need to embrace the concept that the crux of customer engagement is based on this metadata. An example is Rio Tinto, a large mining company in Australia, whose “Mine of the Future” initiative harnesses burgeoning data volumes in real-time to inform future decision-making processes.¹⁶

Solutions to Overcome Skill-Related Challenges



Response base: 314 (multiple responses permitted)
Source: Cognizant Center for the Future of Work
Figure 6

- **The battle for next-generation talent is heating up.** To transition to the new digital economy, companies need to find, recruit and retain the hybrid skill sets that are at the core of out-performing competitors. Survey respondents are providing inter-company training and retraining, along with recruiting digital skill sets from outside their industry (see Figure 6). In tandem, digital competencies are being shared across the business, rather than siloed, so that skills can be more easily and efficiently deployed.

Interestingly, 44% of respondents also plan to “acquire” (or acquire through the

acquisition of an entire organization) digital technology skills to fill the gap quickly. We believe a logical first step is to examine emerging threats within and outside the industry when acquiring talent. Companies must remember they are buying the company more for talent than for products and solutions.

Digitized Business Processes Super-Charge Profitability

As the digital transformation phenomenon intensifies, companies must invest heavily in digitizing their processes to proactively address radically different market conditions (see Figure 7). A large part of this starts with digitizing business processes, something that 45% of respondents reported doing. While a good number of respondents (42%) note that digital transformation is a cause for organizational consternation and cultural disruption, they are also clear that a digital-first mentality will make or break their future success.

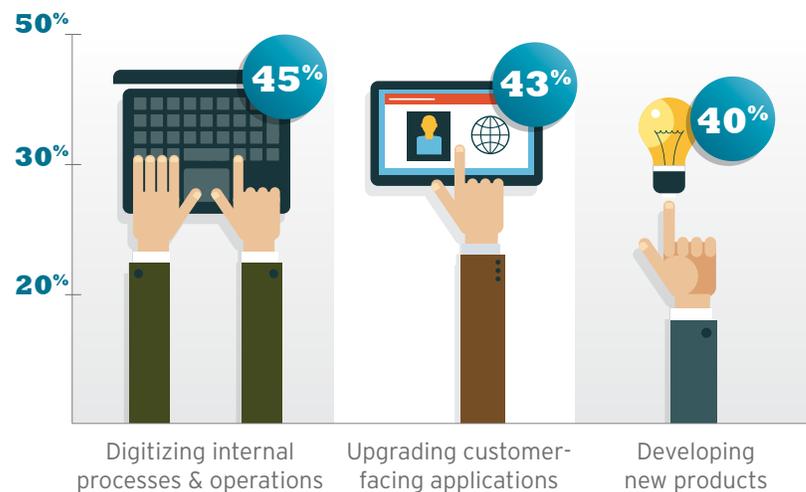
To do this, executives believe they need to focus on areas such as:

- **Adopting a “digital-first” approach to simplifying the customer experience and driving growth.** More than half of survey respondents are finding it difficult to implement a consistent customer experience across channels, due in part to business process integration challenges. Customers want a consistent and seamless experience, in particular when it comes to consuming complex services and products. But pick any industry, and it becomes clear that the customer’s “path to purchase” is unduly difficult.

For example, digital transformation in the healthcare industry is intended to make people healthier and happier, but instead, healthcare companies often end up complicating wellness services for their customers. Respondents believe that by digitizing customer-facing services and revamping the products and services portfolio, their companies will significantly improve their top lines (see Figure 8, next page). By redesigning their processes to embed digital properties (such as new mobile or social platforms), businesses can modernize service delivery structures and trigger a surge in customer retention, engagement and acquisition.

- **Relentlessly focusing on reducing costs and improving efficiency.** Although customer experience-focused processes are the most visible, companies are also realizing strong benefits from transforming internal processes. We believe that a 1% reduction in operational costs, resulting from revamped digitized internal processes, will deliver 2% revenue growth, as the savings can be

Top Three Digital Transformation Activities around Processes



Response base: 314 (multiple responses permitted)
Source: Cognizant Center for the Future of Work
Figure 7

Although customer experience-focused processes are the most visible, companies are also realizing strong benefits from transforming internal processes.

Digitization's Impact on Business Services



51% companies are facing difficulty in implementing consistent customer experiences across different channels due to business process integration challenges.

Response base: 314
Source: Cognizant Center for the Future of Work
Figure 8

pumped into customer acquisition and retention activities. Companies are moving beyond simple automation tasks such as implementing enterprise resource planning (ERP) systems for efficiency gains.

For example, one Hong Kong-based telecom operator reported that by enabling a self-service HR function, it is freeing up HR resources to refocus on more strategic tasks. Asian Paints, a large paint manufacturing company in India, digitally transformed its business in three key areas: customer experience, operational processes and business models. It centralized its customer-facing processes, which accelerated engagement with customers and retailers, helping to improve its operational efficiencies, while sustaining growth.¹⁷

From Analog to Digital Leadership: A Changing Paradigm for Changing Times



It is necessary that the leader have a vision and the skills to help the business prepare for the future. The technology and innovation must complement the business vision; otherwise, it is just expenditure. – CIO, Manufacturing Company, India

“Digital thinking” must be injected into a company’s core, and that extends to the social media presence of the company’s leaders. Of the business leaders we interviewed for this report, many were not on LinkedIn, and a large majority had yet to open a Twitter account (see Figure 9, next page). We call this attitude the “lack

Personal participation in the digital realm is the key for leaders to understand the digital consumer's state of mind and unlock digital's real value.

of time syndrome” as leaders feel they have more strategic tasks to fulfill than managing their tweets. However, the failure to establish or expand their digital presence will impact the future of their own role and business, as personal participation in the digital realm is the key to understanding the digital consumer's state of mind and unlocking digital's real value. Leaders need to take their ideas and transform them with the power of digital, not in the hope of becoming a digital expert but simply to jettison old habits and paradigms, with the goal of leading a digital-first company.

DBS in Singapore has taken a different route to developing future-ready digital leaders. As part of its DBS MegaHackathon initiative, the bank's employees are encouraged to create new apps, processes and organizational prototypes by collaborating with relevant startups to tackle business and societal challenges. The organization has already changed the mindset of hundreds of business leaders throughout the bank, which aims to impart digital thinking to every DBS employee before the end of 2016.¹⁸

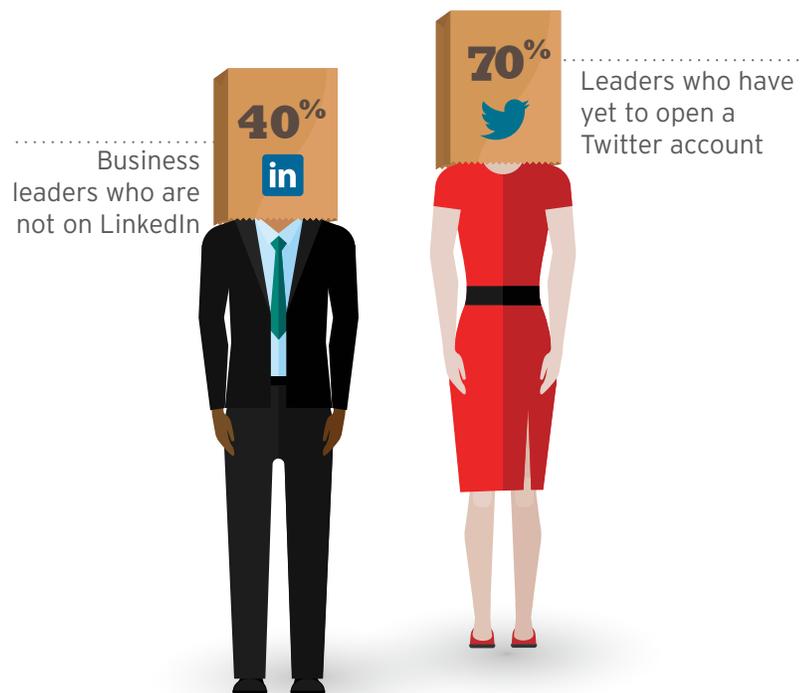
Digital Leadership Is Not a Part-Time Job

Organizations cannot truly think “outside the box” until they establish a clear digital leadership mandate. A charter to transform the business typically resides with the CIO/CTO or CMO as an added responsibility (see Figure 10, next page). We believe this approach is fundamentally flawed, as business transformation can't be achieved through a half-time responsibility. If the CIO/CTO or CMO is well-equipped to lead the transformation, he or she should give up his current role; if not, the business should hire someone to lead the charge.

Accordingly, about 70% of survey respondents already or will soon – have a chief digital officer/digital head role established. While the rise of the CDO has been well-charted, the sheer magnitude of individuals holding this title – and their role in digital business transformation – is probably greater than many observers had imagined (see Figure 11, next page). While CMOs and CIOs/CTOs will be at the frontline of digital events, survey respondents firmly believe that the CDO role will lead company-wide digital transformation.

The CDO is seen by respondents as a leader who can connect with all stakeholders, break down organization silos, change the company's culture, set up a digital office, realign employee incentives, rewards and growth plans, and address the myriad challenges that companies face as digital transformation accelerates (see Figure 12, page 15).

Leaders Lack a Digital Presence



Response base: 314
Source: Cognizant Center for the Future of Work
Figure 9

CIO/CTOs Lead the Digital Strategy

How involved are the following executives in making or executing the digital transformation strategy in your organization?



Organizations cannot truly think outside the box until they establish a clear digital leadership mandate.

Inside the Tornado of Rapid Technology-Driven Disruption

With emerging digital technologies playing a key role in digital disruption, leaders are investing in these technologies with two key objectives in mind (see Figure 13, page 16):

- Building a new foundation with SMAC technologies for higher digital economic impact.** By the end of 2016, the Asia-Pacific region will account for more than 40% of global mobile data traffic, which highlights the central role of mobile in digital transformation.¹⁹ It is evident that mobile capabilities are at the center of companies' customer engagement strategies. By reinventing grocery shopping with mobile, for example, Tesco in South Korea has increased sales 130% in just three months.²⁰
- Experimenting with new technologies to find a diamond in the rough.** Beyond SMAC, our research shows companies are increasingly dedicating a portion of their budgets to experimenting with new technologies (3-D printing, IoT, robotics, etc.) that advance the

The Fast Rise of the Chief Digital Officer



Expected CDO Responsibilities and Challenges



Response base: 199 (multiple responses permitted)
 Source: Cognizant Center for the Future of Work
 Figure 12

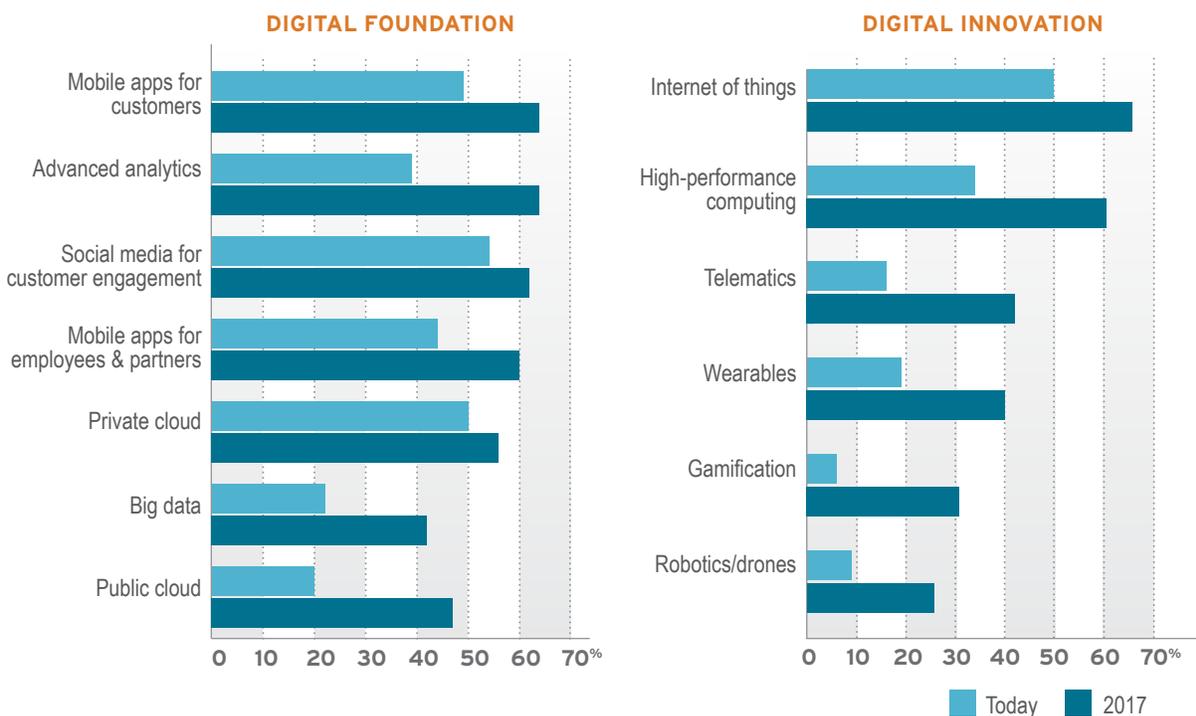
digital transformation agenda. With the increasing number of emerging technological possibilities, enterprises must explore areas such as new sensors, advanced chips and much more to ascertain the likely investments they will need to make in the near- to medium-term future. The question is not whether this future will come to pass but how fast it will happen and which organizations will enable and manage it, as well as how privacy-related issues will evolve. The key is to latch onto these new technologies in the early phase of their disruption so that when they go mainstream, the business is equipped with the infrastructure and experience to ride the wave.

The Road Ahead: The Promise of Digital Transformation

While every company will follow a different path to digital transformation, consistent nuts-and-bolts lessons can be learned and applied from digital winners. Digital transformation is not a “technology-fenced” development, as nearly 40% of respondents presume it to be. Companies must first simplify the complexity associated with digital transformation for their business, and then identify and implant the technology needed to get there. As they pursue their digital transformation agenda, leaders should consider additional actions in order to contend with a business future filled with both uncertainty and remarkable opportunities.

Technologies for the Digital Foundation and Innovation

Respondents are focusing on the following technologies for digital transformation.



Response base: 314 (multiple responses permitted)

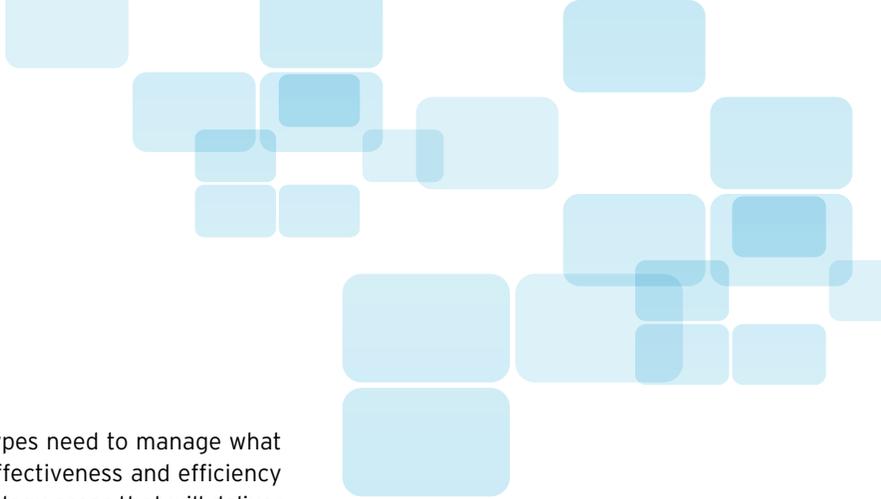
Source: Cognizant Center for the Future of Work

Figure 13

- Consider a converged West-East strategy for innovation and growth.** Global companies will need to deal with aggressive technology-charged companies in the Asia-Pacific region, many of which are free from the burden of legacy systems and outdated business practices, and are able to quickly adapt to new, innovative processes, and take greater risks. These new competitors will not restrain themselves to their home country or region. The “digitally-level world” enables them to move westward and strike into the home territories of many companies based in the first world.

Global companies need to move beyond leveraging emerging markets as a low-cost, low-quality product-push destination, to converting constraints into technological breakthroughs. The mindset shift should be rooted in global headquarters and executed at the local level.

- Improve the company-wide digital quotient.** It’s time to say goodbye to analog leadership. The biggest issue here is organizational complacency, resistance to change and an ability to recognize the urgent need to change. Senior leadership must stop asking their teams to just “fix the problem” and instead ask them to “fix their digital quotient.” By communicating the digital vision clearly, leaders can ensure that the entire company is marching in one direction – building digital at the core of the business. The first step is to undertake a digital leadership assessment across the organization, including the board and the CEO, to understand the current state of digital leadership, and act accordingly.



- **Execute the “dual mandate.”** Organizations of all types need to manage what we call the “dual mandate” – generate operational effectiveness and efficiency while simultaneously investing in business and technology areas that will deliver new capabilities that drive “digital-first” success.
- **Understand that data is at the center of every strategy.** Data is the Holy Grail of business. Companies must do a better job of gathering, analyzing and acting on data to serve digitally-empowered customers. An example is Ashok Leyland, the second largest manufacturer of commercial vehicles in India, which built a data-driven culture by democratizing business intelligence usage across the organization. With quicker decision-making, the company can quickly adapt to constantly changing market dynamics.²¹
- **Recognize that digital disruptors are your best friends.** The biggest mistake that companies make is ignoring digital disruptors until they become too disruptive to handle. Leaders of traditional companies should aim to do the opposite: They must monitor startups in all industries to generate ideas and learn new ways of conducting business in a particular sector. The benefits may not be immediately felt, but the relationships and connections that companies form over time will prove far more valuable than can be imagined as they fuel technological innovation and a better understanding of the creativity necessary to drive and fund digital transformation initiatives. This is a key learning that many of the executives surveyed for this report appreciate, but many have yet to fully internalize.

The winners in this new digital world will challenge conventional thinking on product innovation, customer engagement, organizational structure, strategy and business models.

The Future Is Here and Now

The Asia-Pacific region represents the most significant digital opportunity of the next decade, and it’s a source of innovative ideas for leaders across the globe. Thoughtful observers of this shift already recognize that they cannot ignore this next wave of multi-billion-dollar digital transformation opportunities. The winners in this new digital world will challenge conventional thinking on product innovation, customer engagement, organizational structure, strategy and business models. Leadership must be willing to make significant organizational changes in line with a strategic digital vision, rather than the more common “as-needed/ad-hoc procurement/tactical” approach.

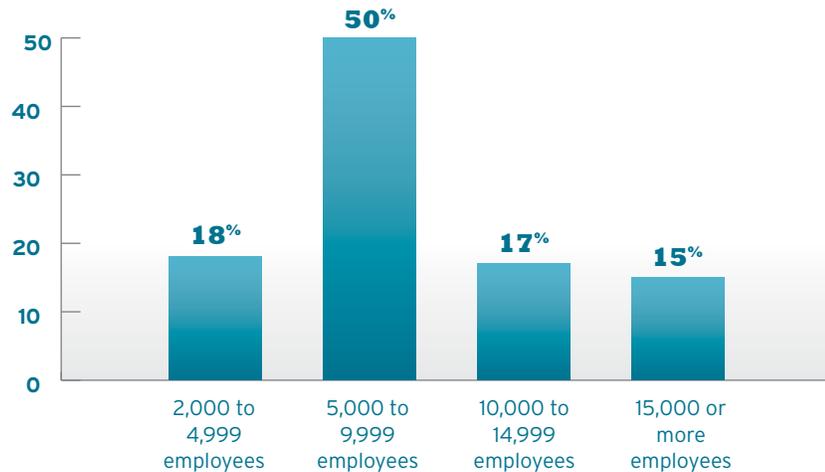
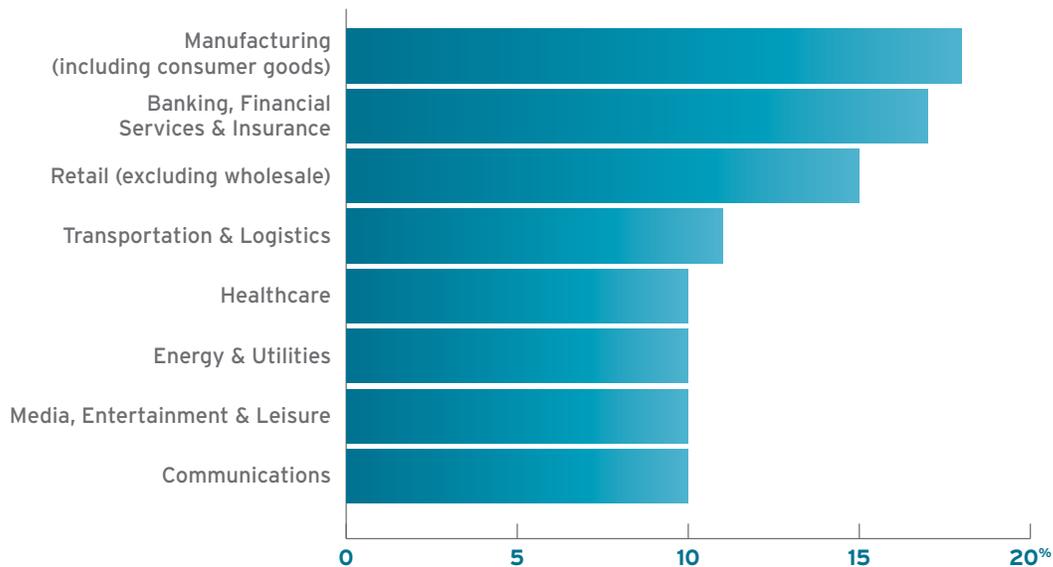
A new era of business, technology and commerce is emerging. Our report shows that switched-on leaders already recognize the need to transform the very essence of business value generation, as well as their own vision surrounding technology, work and the global economy. Leaders in the Asia-Pacific region must execute with bold precision to meet the greater ambitions of what it means to be digital while providing an example to the rest of the world of how the digital revolution will unfold.

Appendix 1: Methodology

Who Took the Survey?

We surveyed 314 senior business and technology decision-makers in May through July 2015. Survey respondents were distributed across numerous industries, including banking, insurance, financial services, healthcare, manufacturing, transportation and logistics, media and entertainment, communications and retail. Respondents represented numerous C-level titles and direct reports, several geographies (including India, China, Australia, New Zealand, Singapore, Malaysia, Indonesia and Hong Kong) and a range of profit margins. The companies included in this research report are not necessarily our clients.

Sample Distribution



Appendix 2: Definitions

The US\$20.1 Billion Opportunity

The study made the following assumptions:

- Weighted average revenue of companies covered in this report.
 - Asia revenue considered for global companies.
- Average percentage increase in revenue as cited by respondents. Average percentage increase in revenue includes net new percent revenue increase and percent cost decrease.

Please note that the established figures in no way signify the entire market and are representative only of the companies covered in this report.

Note: Code Halo™ is a trademark of Cognizant Technology Solutions

Footnotes

- ¹ Naomi Canton, "Disruptive Technologies Expected to Bring Massive Economic Boost to Asia," Asia House, Jan. 30, 2015, <http://asiahouse.org/disruptive-technologies-expected-bring-massive-economic-boost-asia/>.
- ² For more on the origins of this phrase: <http://www.phrases.org.uk/meanings/may-you-live-in-interesting-times.html>.
- ³ "The Next Billion Consumers," Schibsted Media Group, <http://schibstedfuturereport.com/trend-report-the-next-billion-consumers/>.
- ⁴ Yue Wang, "Asia to be the Center of the Gilded Age for Billionaires," *Forbes*, May 26, 2015, <http://www.forbes.com/sites/ywang/2015/05/26/asia-to-be-the-center-of-the-second-gilded-age-for-billionaires/>.
- ⁵ Andrew Sheng, "Great Technology Transformation Comes to Asia," Asia News Network, July 7, 2015, <http://www.asianewsnet.net/Great-technology-transformation-comes-to-Asia-77690.html>.
- ⁶ "More Amazons and Flipkarts in the Offering? Many Billion-Dollar E-Commerce Babies Expected Soon," *The Economic Times*, Dec. 31, 2014, http://articles.economic-times.indiatimes.com/2014-12-31/news/57558167_1_e-commerce-market-kunal-bahl-internet-user-base.
- ⁷ Michael Sainsbury, "SingTel's Digital Future Takes Shape," *Nikkei Asian Review*, May 8, 2014, <http://asia.nikkei.com/magazine/20140508-Asia-s-pull/Business/Singtels-digital-future-takes-shape>.
- ⁸ "United Nations E-Government Survey, 2014," United Nations, 2014, http://unpan3.un.org/egovkb/Portals/egovkb/Documents/un/2014-Survey/E-Gov_Complete_Survey-2014.pdf.
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