SAP White Paper
Cloud Computing

Conquering Disruption Through Digital Transformation

Technologies, Leadership Strategies, and Best Practices to Create Opportunities for Innovation

SAP

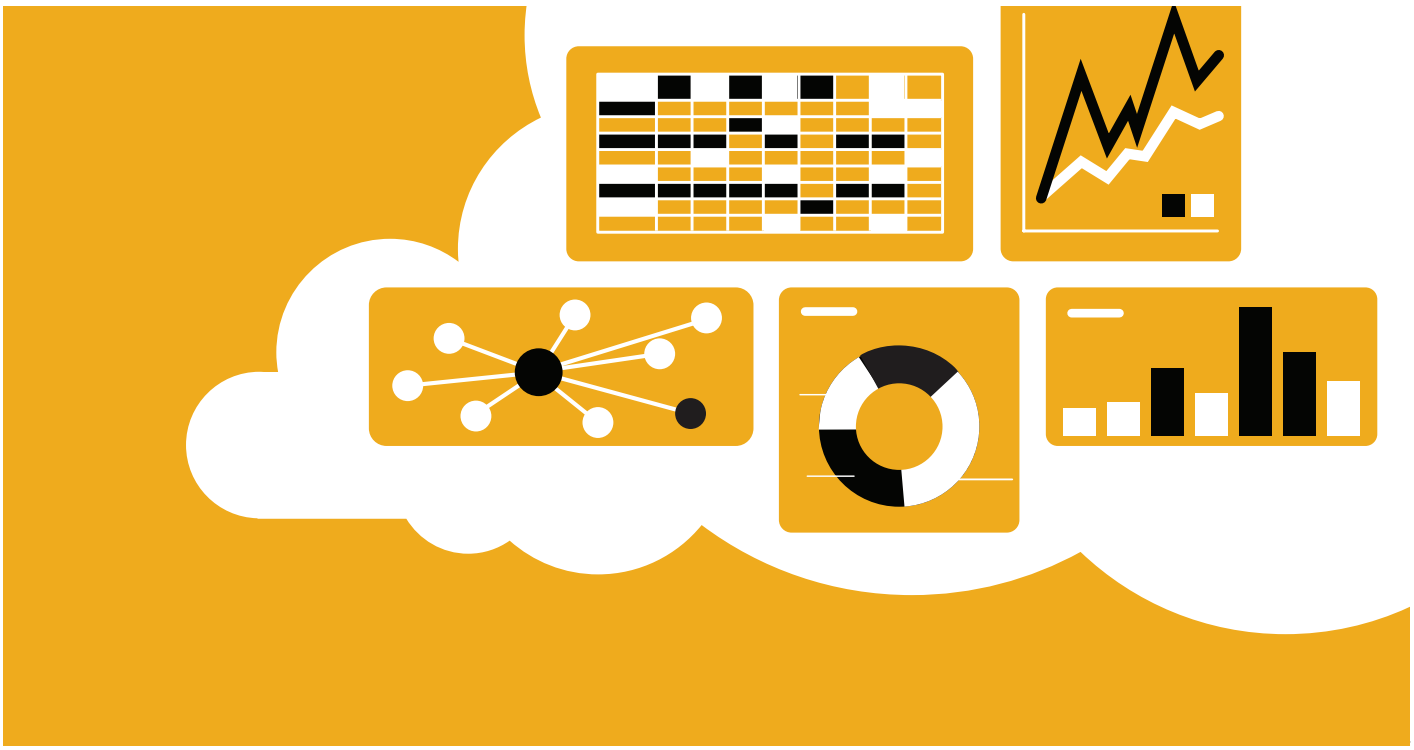
The Best-Run Businesses Run SAP®

Table of Contents

About the Author

Sven Denecken is global vice president of customer and partner strategy for cloud solutions at SAP SE. In this role he assesses customer and market requirements in the context of the cloud strategy advanced by SAP. Participation in co-innovation projects gives Denecken the opportunity to discover key trends and best practices in applying new technologies. As a result of his extensive experience working with customers, the field organization at SAP, and partners, Denecken can pull client issues directly into the solution development process. This focuses next-generation software solutions on customer requirements, helping customers gain competitive advantage while achieving business outcomes.

As growing digitization and evolving consumer demand rapidly change the marketplace, executives must find new ways to innovate for business advantage. By embracing digital transformation – the use of new technologies like cloud, mobile, Big Data, and social networks – companies can capitalize on new opportunities and optimize existing operations to achieve significant business improvement. But to transform themselves, they must have the right digital assets in place first to protect their own operations from disruption.

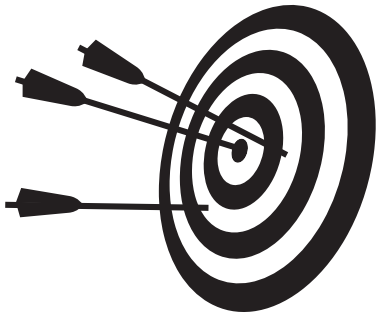


Executive Summary

Swamped by growing digitization of competitors' business processes combined with evolving consumer demand, companies worldwide tell us they must accelerate the pace at which they adapt to change by innovating more rapidly. It would enable not just their businesses but their clients to keep up. These decision makers see only two choices: fully embrace digital transformation – the use of new technologies to drive significant business improvements – or sustain the disruption the effects digitization would cause to their companies as nonparticipants.

To outpace today's market disruption, businesses must equip themselves with technology that will help them adapt quickly to change. Cloud technology gives them this capacity. When combined with mobile technology, in-memory computing, and predictive analytics, cloud technology becomes a driving force, enabling businesses to innovate with the speed required to achieve the specific outcomes they desire.

By combining these technologies with leadership strategies and best practices to support digital transformation, companies can gain new insight, forge innovative strategies, and put in place effective methods of interacting within and beyond the business. Well-planned and well-executed digital transformation can help enterprises capitalize on new opportunities and effectively transform to meet today's most difficult challenges.



As growing digitization and evolving consumer demand rapidly change the marketplace, executives must find new ways to innovate for business advantage.

The Impact of Technology Disruption

Technology innovation is changing the game for businesses, industries, and markets. At the heart of this digital transformation is a host of new technologies that are disrupting the old ways of doing business – with partners, suppliers, and customers.

Consider the smartphone. This single commodity device, which didn't exist just a decade ago, has disrupted dozens of companies in a variety of industries. It has given rise to millions of apps and blurred the line between home and work. Smartphones changed the way we play games and consume media and transformed the way businesses engage with customers.

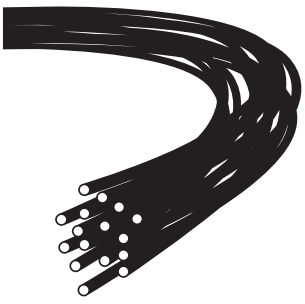
For many consumers, the smartphone serves as a portal to their world. The capacity of these always-on devices to receive products, collect outcomes, and channel experiences has empowered consumers. In today's networked economy, consumers armed with smartphones can perform tasks that only businesses could do five years ago.

Smartphones have also transformed the concept of customer engagement. Consider how leading mobile phone firms such as Apple Inc. have changed their strategies to achieve a customer-first focus. With these organizations, customer engagement does not end with the purchase of a product. Customers can return for technical help from in-store tech support stations, learn how to use the device with online-scheduled workshops, and engage in product-specific one-on-one sessions. To personalize the customer experience, vendors are using localization features to help them greet customers individually the moment they walk in the store.

Clever digital initiatives are further increasing customer engagement. Consumers can view helpful product information videos on their tablets rather than having to read copious documentation. With online payment services from, for example, the provider EasyPay (Pty) Ltd., customers can buy things directly using their own mobile devices and purchasing accounts. Wallets are no longer needed. And such technologies are merely the beginning. In the future, there will be even more creative ways for technology to enhance customer engagement.

Yet this digitization of devices and processes is disrupting old business models. Let's consider the key elements behind this disruption.

> Companies worldwide tell us they must accelerate the pace at which they adapt to change by innovating more rapidly.



END-USER EMPOWERMENT

More than ever, consumer expectations matter. If a customer doesn't like the app she just downloaded, she'll write a critical review. The developer will respond, because not responding can result in lost customers and, if it all goes wrong, the failure of the business. In our end user–centered world, enterprises must recognize that both customers and employees have rising yet mercurial expectations. Strategies that worked a few years ago won't fly today, nor will those of today be effective tomorrow. Business-to-business (B2B) commerce is not immune to this shift. Even B2B companies must make decisions that satisfy their customers' customers in order to survive in the everything-as-a-service economy.

Accustomed to receiving instant answers from leading search engines, consumers now expect the same rapid response from all enterprises. Providing instant value, mobile functionality, and a user-friendly interface are no longer viewed as bonus features, but as necessities. When customers complain online, they expect their feedback to be displayed and addressed quickly, no matter which channel they use. Ignorance of a customer's buying history is unacceptable. Presenting a customer with an advertisement for a product he or she just purchased is considered an intrusion.

THE GROWTH OF DIGITAL PROFICIENCY

The digital proficiency of customers and employees is growing rapidly, especially among younger generations. And those generations are on the cusp of representing the majority of the workforce. Within the next few years, nearly half of the workforce will be employees born in 1980 or later. Professional services network PwC estimates that 80% of its workforce will be millennials by 2016.[1]

However, age is not the key factor in achieving digital proficiency. According to R. Ray Wang and Alan Lepofsky of Constellation Research Inc., digital proficiency is merely a reflection of ability. Wang defines five levels of digital proficiency:[2]

- Digital natives, who grew up with and are comfortable with digital
- Digital immigrants, who tend to adopt digital
- Digital voyeurs, who cautiously recognize the digital shift
- Digital holdouts, who resist and ignore digital
- Digital disengaged, who give up on digital

One additional category might be "digitally balanced," which refers to those who understand and use technology but walk the middle ground between naysayers and instant adopters. Although digitally savvy, the digitally balanced evaluate the risks of technology and weigh the benefits and costs to help decide the direction their digital initiatives should take. It is important for businesses to have sufficient digitally balanced employees along with the right mix of the remaining five digital profiles, both in IT and in business.

1. PwC's NextGen: A Global Generational Study, 2013, www.pwc.com/en_US/us/people-management/publications/assets/pwc-nextgen-summary-of-findings.pdf, 6.
2. "Ray" Wang, "Tuesday's Tip: Understand the Five Generation of Digital Workers and Customers," November 12, 2013, http://blog.softwareinsider.org/2013/11/12/tuesdays-tip-understand-the-five-generation-of-digital-workers.

INNOVATIVE APPLICATIONS OF NEW TECHNOLOGIES

The advent of new technologies that can deliver real-time data and connectedness enables businesses to pursue new innovations. When users can access the right information at the right time or even in real time, decisions become more accurate and reliable. Ultimately, decisions could become predictive – thus enabling businesses to make the right decision from the start and improve planning capabilities to optimize all required resources.

For example, SK Solutions in Dubai, UAE, used new technologies to develop an anticollision system for operations involving people, processes, and data as well as vehicles, machinery, and physical assets. Based on sensors affixed to cranes and other machinery, the company's Asteroid solution tracks movement. Through real-time Big Data analysis, the solution performs corrective adjustments, thus preventing collisions. This innovative software significantly increases the safety and efficiency of activities occurring within complex industrial landscapes.

WATCH THIS VIDEO TO LEARN HOW SK SOLUTIONS IS TRANSFORMING BUSINESS WITH THE INTERNET OF THINGS.

To outpace today's market disruption, businesses must equip themselves with technology that will help them adapt quickly to change.

NEW BUSINESS PROCESSES AND OPERATIONS

Digitization changes the way many businesses work. By employing new approaches, companies can realize dramatic efficiency gains in operations, deploy inventive business processes, and create new methods of engaging customers and employees.

For example, leading automobile manufacturers have been using digital technologies to expand and innovate. Using real-time marketing and predictive analytics, they have taken customer engagement intelligence to a new level. Recognizing that customer expectations are always changing, these manufacturers resolved to keep processes and services agile so they can flexibly respond to shifting demand, with customer data instantly accessible for use across the entire organization.

How does this change their operations? These companies use automated, reproducible processes to manage more effectively the experiences of prospects and customers during their buying journey. By correlating purchase ability with predictive analytics to identify purchasing patterns, these companies convert more potential customers into paying customers.

Not all companies are equally successful at changing their business processes to take advantage of digitization. A majority of businesses merely substitute technology for their analog processes. In other words, they digitize their old processes without adapting those processes to make use of the new technologies, thereby losing all opportunity for innovation. Naturally, this approach is less likely to deliver the benefits that can come from using technology to support true digital transformation.

By combining new technologies with leadership strategies and best practices to support digital transformation, companies can gain new insight.

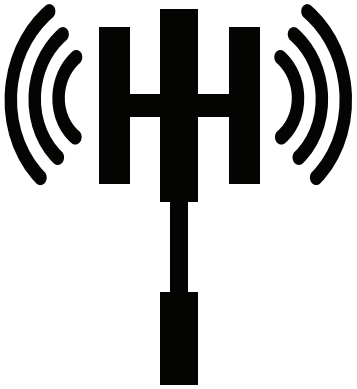
The Building Blocks for Digital Transformation

Bill Gates once said, "Information technology and business are becoming inextricably interwoven. I don't think anybody can talk meaningfully about one without talking about the other."[3] This quote perfectly captures the idea that technology and business can no longer be seen as two separate branches of an enterprise. Yet Gates said this in 1999.

Now, more than ever, the entire business must be focused on digital transformation. IT alone cannot fuel this change. All lines of business and operational processes must be aligned to support transformation. For example, marketing can benefit greatly from social and data analytics that support a deeper understanding of each consumer's desires. Armed with technology, businesses can take advantage of predictive marketing and provide enhanced customer service as well as an integrated experience.

Four key building blocks are essential to digital transformation: cloud, mobile technology, data, and networks. Together, these building blocks can fuel an enterprise's shift to the new way of doing business. Let's consider each element.

At the heart of this digital transformation are new technologies disrupting the old ways of doing business – with partners, suppliers, and customers.



3. William H. Gates, *Business @ the Speed of Thought: Succeeding in the Digital Economy* (New York: Warner Books Inc., 1999).

CLOUD

At the heart of digital transformation is the cloud. Far more than just a deployment model, cloud is the platform for rapid development and business transformation. Because cloud is scalable, flexible, and accessible, businesses can focus on their core business with better collaboration and solutions that are always up-to-date.

The cloud enables companies to place the customer and end user at the center of their business. Customers have full flexibility to consume what they need, when they need it, on a simplified, unified, real-time platform. What is the result of this reduction in the gap between engineer and end user of a service? Unmatched speed of innovation, simplicity, and faster time to value.

A 2012 study from Oxford Economics and SAP found that 85% of businesses believe that cloud technology will transform their business or industry.[4] Only 48% of those surveyed reported minimal or no adoption of the cloud. Respondents clearly recognized the cloud as a critical element for digital transformation.

Interestingly, cloud adoption rates are higher for businesses in developing countries. In these areas, companies have fewer legacy systems in place and thus a smaller number of processes to disrupt. For these firms, integration or shifting to new systems is unnecessary as they migrate to the cloud.

Recognizing this reality, companies in developed countries must avoid the tendency to simply "get by" with legacy systems to protect their existing operations. Adopting the cloud, even as an extension to a working solution, is an essential best practice. There is no need to rip and replace systems that work. However, digital transformation happens more quickly and effectively when companies lead their transformation with cloud technology.

4. *The Digital Transformation of People Management, Oxford Economics and SAP, 2012,* www.sap.com/bin/sapcom/en_us/downloadasset.2014-03-mar-08-00.the-digital-transformation-of-people-management-pdf.bypassReg.html.

MOBILE TECHNOLOGY

Mobile technology not only enhances but is a necessary extension of cloud technology. It extends freedom and connectedness by allowing greater access. Instead of hauling around a computer, users can perform functions with a tablet or smartphone. The role of mobile technology is growing, with an astounding 50 billion connected devices predicted for 2020.[5]

Larger companies with revenues of US$20 billion or more and manufacturing firms are fastest to adopt mobile applications for functions such as travel booking and expense accounting. Smaller companies (with revenues of $100 million to $999 million) are more likely to use mobile apps for recruitment.[6]

Examples of how mobile technology is being applied exist in nearly every industry. In retail, employees use tablets to show off products and ring up purchases, so customers can skip the checkout line. Doctors, such as those who work at Städtisches Klinikum Braunschweig GmbH in Germany, can view test results and x-ray images during patient visits, saving time and increasing patient satisfaction. "The mobile app has made our daily routines more efficient, saving us a lot of time," says Andreas Schneider-Adamek, head of clinical systems in the IT department. "Our doctors can spend more time with patients, thanks to real-time access to medical records right at the patient's bedside."

DATA

Using the right data in the right context supports smarter decisions, opens up new opportunities, and ultimately creates significant competitive advantage. Big Data is growing, with over 2.5 quintillion bytes of data being produced daily.[7] Yet only a fraction of this is ever used, with the rest serving no real function. Some experts refer to this as "dark data." And data volumes will continue to grow, especially with the Internet of Things collecting data from sensors and wearable devices.

Before tackling these huge volumes, executives must understand that it's more important to use the right data, at the right moment of the process, rather than collecting just any Big Data. Businesses must be able to handle structured and unstructured data but, more important, be able to transform it quickly into essential business insights. To manage the enormous data streams, filtering and identification signals are key. Otherwise they'll be stuck on the "dark data" side.

In another example of innovative data usage, eBay Inc. employs about 5,000 data analysts to analyze consumer behavior. With over 50 petabytes of data, eBay's systems automatically filter data in a way that allows analysts to focus on connecting buyers and sellers most effectively. By observing and comparing surges in search results, eBay can forecast popular products in

5. . "The Internet of Things," Cisco infographic, http://share.cisco.com/internet-of-things.html.
6. . Ibid.
7. "2.5 Quintillion Bytes Created Each Day, Calculated ViaWest," StorageNewsletter.com, July 26, 2012, www.storagenewsletter.com/rubriques/market-reportsresearch/viawest-2-5-quintillion-bytes-each-day.

advance, and anywhere from – depending on the item – a single second to three months in advance. The data contains valuable signals that furnish insight to be conveyed to eBay's business partners. In addition, enhanced signal detection helps eBay to track and resolve errors more effectively.

LEARN MORE ABOUT HOW EBAY ENHANCED ITS SIGNAL DETECTION.

Sadly, not every business is as data savvy as these leaders. In a recent study by Saugatuck Technology Inc., 60% of surveyed companies reported that they may lack the necessary skills to use Big Data, despite recognizing its importance.[8]

Saugatuck has posited that through 2017, companies with data analytics skills will have a competitive advantage. However, after 2017, it states that data analytics will be a competitive necessity. It's easy to see why. Leveraging even a small sliver of this data can lead to big business value. Being able to find patterns in the data can enable better performance tracking, increase consumer understanding, and clarify projections of future needs.

NETWORKS

With over 1.3 billion people now on social networks, it's no surprise that networks play a large role in digital transformation. Many businesses use Twitter, Facebook, and LinkedIn for customer service and engagement. Businesses can also gain by using networks to connect with one another. Networks can create a vibrant marketplace for employees, partners, suppliers, customers, prospective customers, and the public.

Many of these networks represent real business clout. The Ariba® Network, for instance, has an annual transaction volume of $650 billion with more than 1.5 million companies connected. That's a lot of buying and selling opportunities that unconnected businesses miss out on. Networks can act as the platform through which customers share their experiences with a business and access content and other services.

Consider, for example, the Sunglass Hut store in Times Square, which provides an interactive "Sunglass Bar." Customers can share pictures of themselves wearing sunglasses with their

8. Mike West, "Cornerstones for Digital Business: Big Data, dPaaS, and DevOps," Saugatuck Technology Inc., June 25, 2014, http://saugatucktechnology.com/research/latest-research/2981-cornerstones-for-digital-business-big-data-dpaas-and-devops.html.

friends. In addition to boosting customer engagement, the Sunglass Bar offers a smart way to spread the corporate brand while improving the customer experience.

Networks should not operate exclusively outside the enterprise – they must also find a place within the enterprise. As Doug Conant, former CEO of the Campbell Soup Company, once said, "To win in the marketplace, you must first win in the workplace." Within a business, sharing information unites the enterprise and can spark new ideas. Information gaps across the business or the absence of an employee network are inexcusable in our digital world. Consultant Lee Bryant of consultancy Post*Shift stresses the necessity of integrating internal and external networks.[9] Information obtained from social media interactions with customers must be shared with other lines of business, including operations, customer service, and R&D.

Businesses can also benefit from internal-external collaboration. Better co-innovation with customers may require some restructuring of the business. As analyst and futurist Brian Solis of Altimeter Group says: "Businesses are no longer the sole creator of a brand; it is cocreated by consumers through shared experiences and defined by the results of online searches and conversations."[10] After all, who knows what customers want better than they do themselves? It's only natural for businesses to collaborate with their customers, especially with networks available to help them do so. Because co-innovation leads to co-validation, businesses need to embrace internal-external collaboration as they design plans for innovation.

Because co-innovation leads to covalidation, businesses need to embrace internal-external collaboration as they design plans for innovation.

9. Lee Bryant, "The Limits of Social Technology Within Existing Organisational Structure and Culture," February 14, 2014, http://postshift.com/the-limits-of-social-technology-within-existing-organisational-structure-and-culture.
10. Brian Solis, "10 Quotes on the Future of Business," June 9, 2014, www.briansolis.com/2014/06/10-quotes-future-business

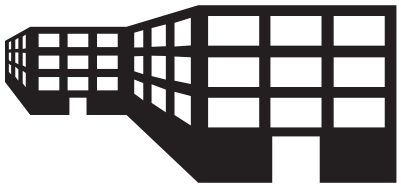
The Role of Leadership

Mastering the digital transformation under the pressure of possible disruption is challenging, especially because many businesses lack the required management and experience. Clear direction and initiative from the right leader can give an organization a substantial push forward toward digital transformation.

What prevents companies from getting started? In a recent survey, 40% of executives and managers cite a lack of urgency in the company as the biggest barrier to digital transformation.[11] Employees agree, with 93% stating that they would agree to a focus on digital transformation. While the exact entry point into digital transformation is less widely agreed upon – should it begin with customers, the business, or processes? – it is clear that business leaders need to adopt a digital transformation vision.

Although digital transformation is often pigeonholed as an IT topic, that is shortsighted. If done right, digital transformation involves the entire enterprise. An initiative might begin with a well-prepared CIO fueling the company with new tools and simplified processes. But because of the potentially huge impact on the entire company, any digital transformation strategy must be directed from the CEO's office. If digital transformation means the company shifts to an "x-as-a-service" business, all C-level executives will be responsible for directing change. The CFO, COO, chief marketing officer, and chief HR officer must adapt, since their key areas – financials, production, sales and marketing, and people – will all be affected.

This top-down approach worked successfully with the German Football Association (Deutscher Fussball-Bund). Oliver Bierhoff, the national team general manager, wanted to improve communication between players. Realizing that players preferred communicating digitally, Bierhoff commissioned a mobile app for team communication and data analysis. Within weeks, the team was using the app to communicate and debrief, perform split-second analysis, and gain deeper insights from player data. Having won the World Cup, Bierhoff and the team are thinking of new collaboration functions that can improve team performance.



Even B2B companies must make decisions that satisfy their customers' customers in order to survive in the everything-as-a-service economy.

11. Michael Fitzgerald et al., "Embracing Digital Technology: A New Strategic Imperative," MIT Sloan Management Review and Capgemini Consulting, October 7, 2013, http://sloanreview.mit.edu/projects/embracing-digital-technology.

FACING CHALLENGES

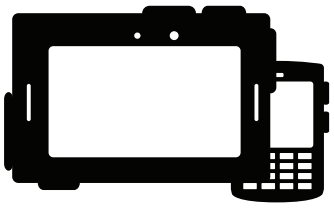
Leadership challenges are an unavoidable part of a digital transformation. Leaders must recognize varying levels of digital proficiency within the user community. Not every user will adapt easily to digital transformation, and some may even resist it. Other potential problems include inertia, defensive attitudes, and internal politics. To combat these challenges and to gain buy-in, leaders should offer change management workshops that communicate the benefits of the digital initiative and provide training to help workers to use the technology.

Another challenge arises from legacy systems that lack integration and are less efficient, especially in large corporations. Cloud solutions can help these organizations digitally transform themselves. Rather than overhauling all of the legacy systems, companies can adopt cloud solutions and integrate them with existing systems.

Leaders must weigh any trade-offs between functionality and security. Consider the popular navigation app Waze, from Waze Mobile, or the traffic software from Blitzer.de: while their features can prove tremendously useful when driving, they also track a user's location. In a corporate environment, the impact of sharing private data such as location might be an unacceptable trade-off. Leaders must balance these issues for their business.

Finally, leaders must recognize the implications of any digital initiatives they pursue. Carl Benedikt Frey and Michael A. Osborne from the University of Oxford predict that 47% of job categories may be taken over by machines in the next two decades.[12] Digital transformation is by nature disruptive, so leaders need to prepare for the possibility that any initiative may render some jobs obsolete. However, because certain employees are no longer needed to perform a particular function does not mean that they are of no value. On the contrary, by restructuring responsibilities and offering the right education and training opportunities, most employees can remain relevant.

Smartphones have transformed the concept of customer engagement.



12. Carl Benedikt Frey and Michael A. Osborne, "The Future of Employment: How Susceptible Are Jobs to Computerisation?" September 17, 2013, www.futuretech.ox.ac.uk/sites/futuretech.ox.ac.uk/files/The_Future_of_Employment_OMS_Working_Paper_1.pdf.

INNOVATING FROM THE TOP DOWN

Because business change must be comprehensive, digital transformation should be executed using a top-down approach. Companies may need to appoint a C-level executive, such as a chief digital officer or a chief innovation officer, to spearhead this transformation. Whatever the title, this executive will play a vital role in securing the future of the business.

What should the "CxO" set out to accomplish? First, recognize that technology changes quickly and that everyone needs to adapt and be committed. Acknowledge the urgency and don't wait for others to embrace digital transformation before making a move. Look for new ways to engage customers, employees, and partners. Build up a digital culture while playing to the strengths of the enterprise. And absolutely expect the unexpected.

Appointing one digital leader is only the beginning. All C-level executives must be aligned. Only when digital transformation is enterprise-wide will it be successful.

In some cases, businesses will create whole new departments to support this endeavor. The need for change will vary depending on the core business model and industry. Analyst Peter Kim of Constellation Research argues that keeping up with increasing digital expectations is a challenge for many businesses. All too often, companies fall flat in their efforts to satisfy digitally savvy customers. Kim says that 90% of customers want brands to share, but only 10% believe that brands do this well. The chronic understaffing of digital marketing departments is partly to blame. Allocating employees to the right departments or creating new, needed departments (like a social media organization) can bring real change to any business and help solve digital transformation issues.

How can businesses support digital transformation on a limited budget? Executives must develop a road map, weigh the costs and benefits of change, and invest for maximum impact. Professor John Kotter of Kotter International proposes an eight-step process that can help business leaders tackle digital transformation:[14]

1. Establish urgency
2. Assemble a group to lead the change
3. Develop a vision and strategies
4. Communicate the vision
5. Empower action and remove obstacles
6. Generate short-term wins
7. Never let up – continue the change, train employees, and take on new projects
8. Develop the culture

During this process, IT can play the role of key enabler. By supporting a connected network experience, strong communication, and the right technologies, IT can help enable digital transformation.

13. Peter Kim, "The Case for the Chief Digital Officer," Constellation Research Inc., June 18, 2014, www.constellationr.com/research/making-case-chief-digital-officer.
14. John Kotter, "The 8-Step Process for Leading Change," www.kotterinternational.com/our-principles/changesteps/changesteps.

IDENTIFYING GOALS

Despite the wide spectrum of business sizes and types, all businesses can share some broader goals for digital transformation.

Businesses should cultivate a digital culture in which they co-innovate with partners and customers as well as with their employees and suppliers. Co-innovation provides a channel through which each of these players can maximize value for the business:

- By co-innovating with customers, companies can better understand their needs and create relevant services.
- Co-innovation with suppliers helps companies understand their challenges and explore the benefits of network-enabled cooperation.
- Getting partners on board with a digital transformation initiative is the best way to gain their support for the business's future.

In addition, effective talent acquisition and development is essential to digital transformation. Companies should promote and support a talented workforce that is willing to seek out answers and innovate for the benefit of the business.

Organizations must adopt the right technologies to enable new business models and ideas. For example, predictive analytics can help companies make data-informed decisions.

Although the path differs for every business, all companies must get on the road to digital transformation. With the right building blocks and the right leadership, effective digital transformation is well within reach.

More than ever, consumer expectations matter. If a customer doesn't like the app she just downloaded, she'll write a critical review.

Digital Transformation by Industry

Digital transformation differs across and within industries. Some industries are more transformative than others. Every industry has digital beginners, the digitally mature, and all stages in between.

ASSESSING DIGITAL MATURITY

For the purposes of discussing digital maturity on the industry level, let's borrow the definitions of digital maturity outlined by the MIT Center for Digital Business and Capgemini Consulting. Digital maturity stems from two factors: digital intensity – a firm's initiative in incorporating technology, and transformation management intensity – its leadership in transformation efforts.[15]

Focusing on these two factors, businesses can be assessed as having one of four digital maturity profiles:

- Digital **beginners** possess low digital intensity in both technology and leadership.
- Digital **fashionistas** launch some digital initiatives, but they fail to maximize business benefits.
- Digital **conservatives** hold back and may miss opportunities as a result.
- **Digirati** convert digital culture and investments into a competitive advantage and operate as the digital elite.

Companies that qualify as the digirati are by far the most profitable. On average, the digirati enjoy 9% higher rates of revenue generation, 26% higher profitability, and 12% greater market valuation. Unsurprisingly, digital beginners are the biggest losers in all three categories: they are 4% lower in revenue generation, 24% lower in profitability, and 7% lower in market valuation.[16]

Another study realized similar conclusions. After comparing the intensity of digital transformation across 10 industries, McKinsey & Company found that digital leaders have a 50% boost in net profits over the following five years compared to businesses that are digital laggards.[17] Part of this growth is fueled by a 2.5 times increase in digital sales.

15. MIT Center for Digital Business and Capgemini Consulting, "The Digital Advantage: How Digital Leaders Outperform Their Peers in Every Industry," November 5, 2012, http://ebooks.capgemini-consulting.com/The-Digital-Advantage/index.html.
16. Ibid.
17. McKinsey & Company, "The Digital Tipping Point: McKinsey Global Survey Results," June 2014, www.mckinsey.com/insights/business_technology/the_digital_tipping_point_mckinsey_global_survey_results.

UNDERSTANDING VARIATION ACROSS INDUSTRIES

Certain industries are by nature more likely candidates for digital transformation. For example, businesses offering virtual products – such as telecommunications companies – possess obvious opportunities for digital transformation.

Traditional businesses, such as grocery and apparel stores, might seem to be poor candidates for transformation. For these industries, it is anticipated that sales will originate primarily from brick and mortar stores in coming years. By 2018, only about a tenth of grocery sales and a quarter of apparel sales are expected to be digital. Most customers still prefer picking their produce and trying on clothes before purchasing them. Going shopping with friends lends a social aspect to the experience that, as of yet, cannot be entirely replicated online. Nevertheless, every sector has digital transformation opportunities. For example, trips to the grocery store could be complemented by digital initiatives like promotions and personalized campaigns. Savvy executives will not wait to find out which golden opportunities their competitors identify – in both traditional and nontraditional industries.

National Basketball Association

Already backed by a huge fan base, the National Basketball Association (NBA) continues to enhance fan engagement with a high level of digital intensity.

With the launch of NBA.com/Stats, the NBA brought its entire history of official game statistics to fans with a user-friendly, high-capacity Web site. It not only gives fans access to existing NBA statistics, but it has made the experience interactive as well. And it didn't stop there. The NBA added video content, more-detailed box scores, and made everything available on smartphones and tablets.

It worked – visitors to the Web site continue to increase each season. On top of that, fans spent over 50% more time on the site in the 2013–2014 season compared to the previous season.

RECOGNIZING THE CHANGING EXPECTATIONS OF BUSINESSES

Empowered customers are clearly demanding more from businesses. What may be less obvious is that the businesses themselves are becoming more demanding as customers in relationships with their providers in the service industry.

Providing instant value, mobile functionality, and a user-friendly interface are no longer viewed as bonus features, but as necessities.

Consulting firms now face increasing pressure from clients, who expect more help with their digital transformation. In the past, businesses expected consulting firms to help them reduce costs and increase efficiency. Today these clients expect consultants to deliver improvements in innovation and processes.

Driven by digital transformation, this shift is being felt in many IT departments. Yet adding value to businesses is only possible when IT enables real business change and delivers tangible improvement. Simple automation is not enough.

CREATING INNOVATIVE APPROACHES TO TRANSFORMATION

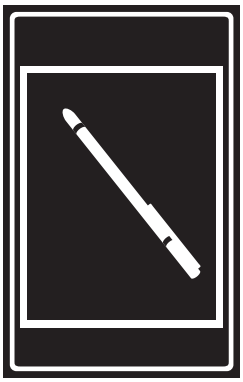
Recognizing the comprehensive impact of digital transformation, each business must look beyond the conspicuous technology features and pursue creative approaches. Only then can executives create progressive results that will enable the business to survive in a digitally driven world.

As many businesses morph from one industry focus to another and make the transition from classic products to "x-as-a-service" businesses, the ability to adapt expectations and attitudes will be vital.

Thanks to technologies like enhanced connectivity and data analytics, businesses can manage more volume and make smarter decisions. But they need to focus on having the right data for their business processes. Merely deploying a few tools on top of existing systems is not enough. And simply digitizing existing processes yields neither transformation nor innovation.

Strong leadership is needed to manage true digital transformation. Done correctly, digital transformation will result in coordinated investments, an engaging vision, and a comprehensive linking of IT to the whole business. With the right combination of leadership and digital initiative, digital transformation is achievable for all businesses.

The digital proficiency of customers and employees is growing rapidly among younger generations who will soon represent the majority of the workforce.



The Outlook for Transformation

Imagine that it is 2020. A driverless car pulls up to your driveway at 5 p.m., precisely when you requested it. You grab your phone and head out, the lights and appliances in your home automatically turning off as you step out the door. As you buckle in, a message is sent to your date to let her know that you'll arrive to pick her up in precisely 17 minutes.

As the two of you near the arena, the GPS reroutes the vehicle to avoid the traffic accident nearby. It then directs you to your final destination: the least expensive parking garage within a half-mile radius of the equestrian show venue.

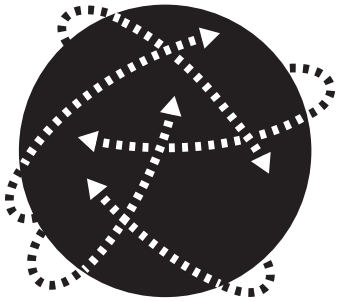
In no time, you've taken your seats with your phone in hand, totally immersed in each rider's performance. You can't imagine how people used to watch sports: with no real-time access to stats, with no option to watch the events from the rider's point of view. At the end of the performance, you rate the riders and compare your scores to those of the judges.

All the technologies in this scenario exist. In fact, digitized equestrian shows are already a reality with CHIO Aachen.

CREATING A STRONG PLATFORM FOR DIGITAL TRANSFORMATION

Businessman Nicholas Negroponte identified the importance of digital transformation when he said, "Computing is not about computers anymore. It is about living." Without a doubt, technology will play an ever-increasing role in peoples' lives. Being digitally clueless is no longer an option for businesses. Customers are changing and businesses need to adapt.

Digital transformation is an imperative for businesses. Equipped with the four building blocks – cloud, mobile technology, networks, and data – companies can unlock new potential to gain greater efficiency, perform instant data analysis, and achieve better collaboration. Undergoing a digital transformation helps businesses modernize, improve the customer experience, collaborate more effectively, and empower the workforce. Automation boosts efficiency. Data analysis unveils valuable insights within patterns to support predictive action.



With over 1.3 billion people now on social networks, it's no surprise that networks play a large role in digital transformation.

Yet simply putting everything on the cloud and providing mobile devices to employees is not enough. Business leaders must push for real transformation, while being prepared to meet challenges along the way. Some jobs will become obsolete, creating a need for businesses to retrain employees. Not everyone will be eager to jump on the digital bandwagon. Privacy and security concerns will arise from expanded data collection and sharing. When dealing with these challenges, decision makers must always remember the end goal: to facilitate a significant, transformational change that helps the business find effective ways to solve problems.

Sameer Patel, general manager for the collaboration and network software business at SAP, offers these four considerations to help accelerate digital transformation:

- **Experience** – Assembling the right team can make all the difference. Start this process before someone else disrupts your business.
- **Agility** – With customers changing as quickly as technology, there's nothing worse than not being able to react. Be ready for change.
- **Industry differentiation** – Maintain an edge. Remember, you won't be the only one undergoing digital transformation.
- **The network effect** – Which networks should you create or join? Choose wisely from the many available options, but make sure you choose.

While certain industries have greater digital aptitude than others, digitally mature businesses are found within every industry. Businesses with strong leadership can adopt the vision, culture, business processes, and technological investments they need to drive digital transformation. There is no reason to wait.

LEARN MORE

For more information on growing digitization, evolving consumer demand, the rapid changes occurring in the marketplace as a result, and how your business can cope, contact your SAP representative today.

The Best-Run Businesses Run SAP®