



# The untethered workforce

Empowering the 100 percent mobile worker

The workforce and technology are changing. They are more digital, more technological, and more global. At the same time, business expectations, needs, and demands are evolving faster than ever before. Deloitte is leading our clients into a more responsive, connected, agile future in which the workforce will be increasingly empowered through the use of mobile technology. Deloitte is reimagining business and developing transformational solutions hand-in-hand with clients and strategic partners around the world, defining the modern workforce and helping employees work the way they live. Please reach out to any of the contacts listed in this article for more information.

# How leading organizations are accelerating the transformation to a mobile-native workforce

The future of work will be driven by three forces changing how and where we work: automation and cognitive technologies, which are augmenting how people and machines work together; new workforce portfolios, including full-time, part-time, managed services, freelancers, gig workers, and crowds; and new ways of working.<sup>1</sup> The explosion of smartphones and tablets has created a new way of living and working. With more than 5 billion people connected to mobile services,<sup>2</sup> digital and mobile connectivity is shifting how we work and the relationship between businesses and their extended workforces. To better understand this shift and where it's going, we interviewed Mike Brinker, global Deloitte Digital leader, Deloitte Consulting LLP.

**JEFF SCHWARTZ:** Mike, the first modern smartphones were introduced about 10 years ago. How are organizations today bringing mobile to the forefront? And what differences do you see in how businesses are adopting this technology?

**MIKE BRINKER:** Smartphones now empower and dominate our personal lives. Mobile technology isn't just a phone—it's a supercomputer in our pocket. It connects us to family, friends, and businesses in ways few could imagine when the first smartphones emerged. Americans spend about five hours a day on their smartphone.<sup>3</sup> And that's increasing. We're texting, shopping, hailing cabs and cars. We're taking photos, watching TV, movies, ordering food, reading news, catching up on social media. The App Store has over 2 million apps<sup>4</sup> that are driving more and more of our lives.

But your question about the enterprise is really relevant. Just as smart devices are empowering our personal lives, they're also transforming how

we work. That's especially true for the 70 percent of workers who don't sit behind a desk every day.<sup>5</sup> Those untethered workers didn't benefit much from the PC revolution of the 1990s or the Internet revolution of the 2000s because they weren't connected most of the time. But now mobile devices are unleashing new levels of productivity, efficiency, and collaboration. Using mobile devices in the enterprise isn't a new trend—we've been talking about it for at least five years. What is different is that companies are starting to move 100 percent of their IT applications onto mobile platforms for workers who are not behind a desk. That's enabling employees to do everything on one platform. They're not splitting time between a mobile device and some remote PC. It's 100 percent mobile. That's the big trend we're seeing now. We think in the next five to 10 years the 100 percent mobile employee will be the majority. That doesn't mean desktop computers will disappear. But the new normal is likely going to be 100 percent mobile for those 70 percent who aren't sitting behind a desk.<sup>6</sup>

**SCHWARTZ:** So we're really seeing both a tethered and an untethered workforce. You and your team spent several months researching how organizations are actually using mobile and transforming work. What are some lessons you've learned?

**BRINKER:** Yes, we did a lot of research over the last six months. We looked at over 100 companies doing amazing things with their mobile strategies. We honed that down to a dozen companies, then conducted in-depth interviews with their business and IT leaders to figure out what those leading companies were doing and how they're moving the majority of their capability, if not 100 percent of it, to a mobile platform for employees.

FedEx is a great example. Think about its efforts to manage just the airplanes on the delivery side. It's a whole team of mechanics and pilots, people who service those planes and keep them moving. As part of its mobile strategy, FedEx gave an iPad® to all

its mechanics and pilots—people who aren't sitting behind a desk every day. They're not always connected, so empowering them with those devices was critical. For mechanics, FedEx wanted to reduce the time wasted waiting for parts or waiting for information, what FedEx calls "corrupted time." Equipping mechanics with an iPad put ordering parts or calling up information at their fingertips. That dramatically reduced corrupted time and made mechanics more efficient and more effective in getting planes serviced and moving. And it's not just an efficiency issue, it's a safety issue. For pilots, it's about safety and quality of life. When pilots aren't in the air, they're in the terminal, staying in hotels, they're on the ground, they're basically everywhere but behind a computer. Allowing pilots to get everything they need from an iPad has made them more effective at what they do. Based on initial feedback, FedEx is finding there is better collaboration and higher job satisfaction, things that truly empower workers.<sup>7</sup>

## AT A GLANCE

**Organization:** FedEx

**Sector:** Delivery, courier, and shipping

**Mobile-enabled employee base:** 2,700 mechanics and 5,000 pilots

**Overview:** The courier service delivery organization provides an iPad to all its mechanics and pilots, specifically tailored to each employee's job requirements and the long list of daily tasks they need to complete in their highly regulated work environment. For mechanics, it's all about what FedEx terms "reducing corrupted time." Every minute counts and the strictest safety requirements must be upheld. This means it is critical to make mechanics' time more efficient and effective. Through mobile technology, safety checklists (the norm in aviation) have been digitized, providing clear maintenance documentation and aiding inspection by regulatory authorities. Mechanics can even order parts right from the plane side, an important improvement to a \$2.4 billion annual expense.

For pilots, FedEx approached developing a system through the lens of "a day in the life of a pilot." Mobile technology gives them everything they need to do their jobs on an iPad, aiding efficiency and enhancing a pilot's quality of life.

**Results:** Already, the company estimates that nearly 85 percent of a mechanic's job (including 8 million pages of manuals) and nearly 100 percent of a pilot's is captured on the iPad. But FedEx wants to go further. It is constantly looking into the newest technologies to help make both pilots' and mechanics' jobs safer and easier. For example, the iPad could be used with a drone to permit visual inspection of the planes.<sup>8</sup>

**SCHWARTZ:** That’s an incredible portfolio of benefits. Efficiency, better use of time, improved safety, better quality of life, higher job satisfaction. You’ve hit most major challenges businesses look at, which really comes down to cost, value, and meaning. When we think about the future of work—taking a page from our colleagues John Hagel and John Seely Brown—we often talk about zooming out to see the big picture.<sup>9</sup> Can you zoom out from your research and tell us what leaders should be thinking about when it comes to a mobile-empowered workforce and organization?

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**BRINKER:** There are three big forces driving organizations to make mobile the platform of choice. The first is those untethered workers who make up 70 percent of today’s workforce.<sup>10</sup> They’re retail store associates or maintenance workers in the field. They’re warehouse workers, people in hospitality, restaurants, flight attendants. They’re doctors, nurses—so many people who aren’t digitally connected now, but could benefit from having instant access to information at any time. Most are already carrying a smartphone in their pockets.

That brings me to the second major force. For most people, technology in their personal lives is actually better than the technology they use at work. This is a recent phenomenon. Remember where the term Cyber Monday came from? Everybody went to work on Monday, where they had the best computer, the best Internet connection, and they would order. It sounds silly today when we have better technology in our pockets. If you think about it, the consumerization of the enterprise is a significant force. Employees have one of these amazing devices in their pockets, but they’re still using a bar code

reader from the 1980s or some old piece of equipment at work. They’re frustrated and shaking their heads. And that’s putting a lot of pressure on businesses to make how we work catch up with the way we live.

The third force is the shifting demographics of workers. Millennials are digital natives. Doing something on a mobile device at work is not a digital experience. That’s just called Tuesday. They come into the workforce with an expectation. They’re frustrated when something doesn’t work right or work

the way they believe it should. Our research showed that businesses that empower their employees with smartphones, tablets, and mobile technology enjoy a competitive advantage in recruiting and retention—especially in retail and hospitality, where there are lots of digital natives.

That said, those major forces don’t discount the need for desktop computers. Mobile computing isn’t completely displacing the PC but rather augmenting it for many workers. PCs are still critical for knowledge workers who produce complex documents and the creative workforce that will always want a larger, high-fidelity screen. But for the majority, they’re not necessary.

**SCHWARTZ:** Mike, I’m intrigued by the phrase that people want to work the way they live. You’ve studied how technology has evolved in the workplace. But going forward, how do you see the ownership of technology, the relationships of technology, and the shift between individuals and companies evolving?

**BRINKER:** If we think back to how technology has evolved in business, the fascinating thing is that most executives in their 40s or 50s have lived through almost the entire technology revolution. We tend to see different eras aligned to different decades. In the 1970s, you had mainframe computing. The 1980s brought us office computing, word processing.

The '90s ushered in the PC revolution, which gave us networking and email. Then 2000 came; we had intranets, the World Wide Web. By 2010, the digital era had arrived, with mobile, social, analytics, cloud computing. The PC revolution changed the way we did work, but it missed the majority of workers. It wasn't until mobile computing arrived that we were able to work in a really powerful way in the field or away from a desk with our entire job at our fingertips.

If you play that forward about five years, mobile platforms will dominate the way employees engage with the organization. There's also a fascinating side story about how companies have evolved their IT strategies related to mobile devices. Around 2010, many organizations launched BYOD programs—bring your own device—that let people access email and calendars on personal devices. But about three or four years in, many companies woke up and said, "Wait a minute, this is critical corporate data and the devices need to be more secure." So companies shifted to: "Well, you can use any device as long as it's these secure devices"—and they called it "choose your own device." Many companies still live in that world to balance security and the ability to provide basic capabilities to employees. But in our research, we saw leading companies making the next jump to a corporate-owned device strategy—a standard device they put in the hands of every employee. That lets them unlock real potential, because now they aren't developing for the lowest common capabilities and they are freeing up resources to focus on value instead of compatibility. When you look at the price point of devices on an amortized or lease basis, it isn't very high. But the potential it unleashes in terms of knowing what employees are carrying and being able to deploy applications and capabilities is very powerful.

**SCHWARTZ:** Part of what you're describing is how mobile devices really sit at the center of the work we're doing. When we think about the future of work, we often talk about four critical stakeholders: the customer, the workforce, the company, then our broader society. In your research, what benefits have you identified across these four constituencies?

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**BRINKER:** That focus on benefits really drove our research. I'll break those down in a slightly different order.

First, for the company, the benefits center around having more agility in the business, more connectedness, greater speed, better responsiveness across the organization. Rather than supporting two, three, four different platforms, companies are standardizing IT platforms, making them simpler and easier to manage. That's generating ROI from increased productivity, lower costs, and greater efficiency. Many companies told us about lower risk and better customer experiences. A great example is in retail. One leading retailer told us that its individual stores used to have just three cash registers. When the holiday rush came, they'd have lines out the door, but they couldn't process sales fast enough. Those cash registers were a massive bottleneck that hurt sales, frustrated employees, and just ruined the customer experience. So they made a decision: Let's get rid of those cash registers

and put 50 smartphones in the hands of the store associates. That basically made every employee a point of sale. It gave them incredible agility to ramp up or ramp down during the holidays or at any time. It also allowed employees to get out from behind the desk and serve customers better.<sup>11</sup> Every company we spoke to had significant ROI after deploying mobile technology to workers.

The second area: employees. Once smartphones and tablets were deployed, there was a real sense of empowerment expressed by workers and managers who had previously been disconnected or had to go back to a PC. That empowerment drives all types of dynamics around culture, around lower attrition. It even makes an organization more attractive to work for. We're all competing for talent. Another retailer told us about an employee greeting app that runs on the smartphones they give employees. It welcomes them to their shift. It delivers important messages from management, important news about the company, the products. It's very tailored and personal and makes employees feel more connected than if they just came into the store and got a hit-and-run from the store manager saying "hi" to them.<sup>12</sup> We also talked to the Netherlands postal service, PostNL. The organization armed its 20,000+ mail carriers with a smart and intuitive mobile application and saw a 20 percent increase in satisfaction of employees in just three months.<sup>13</sup> Talk about ROI!

The third area you mentioned, the customer, came up again and again. Giving employees better technology lets them serve customers better. Customers get instant answers, more face time with employees, just better service overall. Verizon is a great example. It's a telecom carrier with retail stores spread across the United States. It has equipped retail workers with tablets that give them access to every piece of product information they need to serve their customers. But Verizon went beyond this by developing beautiful native apps for store associates. Their litmus test was that an app must be good enough and simple enough to show the cus-

## AT A GLANCE

**Organization:** PostNL

**Sector:** Postal service

**Mobile-enabled employee base:** 20,000+ mail carriers

**Overview:** Faced with declining mail volumes and a search to cut costs, the postal service of the Netherlands (PostNL) switched from paper systems to mobile devices for its 20,000+ mail carriers. Carriers wanted a digital way to see their schedules; the company wanted a way to communicate with its carriers and encourage the team leads (responsible for 100 carriers each) to be in the field or with customers rather than behind a desk.

**Results:** In only 18 months, the new mobile-driven system significantly cut labor costs while delivering higher employee satisfaction. Now all carriers are fully connected to the company, and the system is developing greater functionality, such as the ability to scan small packages. A "self-management" app permits carriers to schedule themselves for open routes. "It's like a marketplace for work, which gives the carriers ownership and a higher level of involvement in their schedules, and it's going to save us money in the future," said one PostNL executive.<sup>14</sup> For its innovation, PostNL won a silver Digital Interactive Award.<sup>15</sup>

tomers. Any retail employee can just turn the tablet around and show the customer what they're seeing themselves. This accomplished several things. One, they noticed right off the bat that employees had 30 percent more contact time with customers. They're able to stand side-by-side and quickly show customers what plans, features, and capabilities they're offering. They can truly do what's called "clienteling" in the business and have much more informed customers.<sup>16</sup> It's a powerful example of how the customer benefits.

## AT A GLANCE

**Organization:** Verizon

**Sector:** Telecommunications

**Mobile-enabled employee base:** 25,000 retail associates

**Number of retail locations (United States):** 5,000

**Overview:** Over the last five years, Verizon has transformed the customer service experience in its retail stores by shifting to a completely mobile solution for customer interaction. The company aimed to get associates out from behind the counter and into improved contact with customers. Rather than watching associates' heads staring down at screens, the system's design ensures the customer can also easily see the screen.

**Results:** Mobile-enabling retail associates has increased customer "eye contact" time by 30 percent, transforming the way associates sell and vastly improving the customer experience.<sup>17</sup>

And now the last area you mentioned: society. How does society benefit? It's not as obvious, but think about how we're all better off when governments, cities, utilities, and transportation are better connected. The best example from our research was in police services in Queensland, Australia. The Queensland Police Service has approximately 7,000 first response officers who are out in the field as much as possible. The department gave an iPad to every officer, and they personally own the devices and can take them home, so they're always connected. At first they deployed it for street checks, which significantly reduced safety risks to the officers. It gave them critical information in the field, right when they needed it. They didn't need to be in their vehicle. But they kept adding capabilities. Now dispatchers can monitor the locations of police officers and redistribute them in anticipation of where crime might happen, making the community safer.<sup>18</sup> That's a fantastic example of how a mobile-equipped workforce is benefiting society.

**SCHWARTZ:** Mike, we've learned from past technology disruptions that it takes time to realize the benefits. It's a journey to actually get there. As we're finishing this discussion, what advice would you give organizations or business leaders on this mobile journey? What are your top suggestions to help them accelerate toward a fully mobile organization?

**BRINKER:** There are three things leaders should think about to accelerate their organization's journey.

First, make sure you have a defined end state. That doesn't mean the technology evolution is going to stop at some point. But you need a vision with an end state that's out at least three to five years. Many organizations are what I'd call "mobile wandering." They deployed mobile computing for one or two applications, then added something here and there, and they're just kind of taking it one year at a time. But there's no long-term road map, no vision of how the business should operate in the future. That's the most important thing. Once you have that road map, you can build incrementally toward that vision. Then you're not wandering; you're making informed decisions.

The second important task is defining the platform. Many organizations are supporting several different platforms, maybe a BYOD or choose-your-own-device environment. That's really holding them back. By selecting one standard, the company knows what capabilities they're developing for—they'll know if they can use facial recognition or biometrics like fingerprints. They'll know what technologies they can deploy in their ecosystem. By adopting one standard, you can drive more effective



**AT A GLANCE****Organization:** Queensland Police Service**Sector:** Law enforcement**Mobile-enabled employee base:** 7,000 policer officers

**Overview:** In 2013, Ian Stewart, commissioner of the Queensland Police, envisaged mobility as a future-enabling strategy for the organization and introduced a mobility program that developed the QliTE applications. The apps serve as a gateway into QPS's records and other databases.<sup>19</sup> The apps run on the iPad mini and are used by officers in the field. iPad now covers about 70 percent of an officer's most frequent IT activities, helping them do their jobs even in remote areas without a Wi-Fi connection. Reports can now be sent in from the field rather than requiring a return to the office.

**Results:** Since the adoption of the iPad, recording data jumped 400 percent. Where important data was not being captured due to limitations of paper and time, there is now a record. Mobile-enabled officers save about 45 minutes each per shift, allowing more time for police work and less for paperwork. Overall, Queensland has saved significantly through reduced labor costs, as officers are more efficient. Most importantly, officers with the devices feel safer because the solution helps them verify important information during traffic stops.<sup>20</sup> For the overall force, the system permits closer engagement with the community it serves, making both officers and citizens happier.

planning and execution and vastly accelerate the process. At the same time, security is always critical, so establishing security standards and management around that platform is critical.

The third piece of advice is to prepare your organization. You can have the vision and the technology, but if you don't have the people, the skills, the partners, and the capabilities, you're going to be challenged. You're going to need technology and infrastructure partners. You might need implementation partners. Many companies really struggle to get started. But once they put the right teams and partners in place, their journey accelerates and they start rapidly seeing the benefits.

**SCHWARTZ:** Just to really stick the landing as we're finishing up the discussion: If there's one thing business leaders should focus on to accelerate the journey toward a mobile enterprise, what's at the top of the list?

**BRINKER:** If I have to single out one thing for executives to get right, it's always to have a mobile-first mindset. That means, as you think about deploying technology in your workforce, business, companies, *always put mobile first*. Stop defaulting to desktop applications when considering technology investments. We've been on this 50-year technology evolution. Many executives have an unconscious bias to think like you did 10 or 15 years ago. If you were building a company from scratch today, you wouldn't start with desktop PCs when not all your workers are behind desks, right? So put the mobile mindset first when making IT investments, when thinking about where you're going to grow your business or how you're going to grow technology. If you do that, you'll be better positioned to accelerate the journey and capitalize on all the incredible benefits we've discussed today.

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