

**Private company issues and opportunities**  
Global considerations for 2019

the *Journal of Applied Behavior Analysis* (1974), and the *Journal of Experimental Psychology* (1975).

There are a number of reasons why the *Journal of Applied Behavior Analysis* is the most widely cited journal in the field of behavior analysis.

First, the journal is published by the American Psychological Association, which is the largest and most prestigious organization in the field of psychology.

Second, the journal is published quarterly, which allows for a high volume of research to be published.

Third, the journal is published in English, which is the most widely spoken language in the world.

Fourth, the journal is published in a format that is easy to read and understand, which makes it accessible to a wide range of researchers and practitioners.

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# Executive summary



Mark Whitmore



Mennolt Beelen

Many people think of disruption as something to avoid. Synonyms for the word—disturbance, interruption, distraction, interference—all carry a negative connotation. But in today's competitive business environment, disruption can be a real positive—if you are embracing it and capitalizing on the opportunities it creates.

Across the world, that's the reality for many private companies. They are acknowledging that the marketplace is more complex and fast-paced than it was just a decade or two ago. It's not just technology, talent, or changing consumer behaviors and expectations driving this disruption—it's the interplay of all three. Truly innovative companies are proactively combining those inputs to transform their business model, pivot quickly in pursuit of new opportunities, and manage resources more effectively.

We undertook this report to provide a perspective for private companies, drawing on the experience of nearly two dozen Deloitte subject matter specialists around the world. We sought to uncover opportunities for private companies to succeed in the current environment and drive disruption rather than be disrupted. What we found is that the opportunities available to private companies fall into three main categories.

The first is using technology to get smarter. Of course, that means something different for each company. Some are well positioned to use advanced analytics to better understand clients, markets, and trends. Others can employ connected devices through the Internet of Things to drive new insights. Still others stand to transform customer interactions with artificial intelligence.

The second category of opportunity is rigorous self-improvement when it comes to supporting infrastructure. Technology has a hand here, too, with innovations such as robotic process automation, which can not only take on clerical-type tasks, but also reshape major parts of business functions such as finance. Companies can also be more vigilant about cyber risk and security and building cultures around stronger compliance. The opportunity for constant improvement extends to managing workforces as well, as new talent models provide more flexibility and access to in-demand skills.

Finally, many of the opportunities captured herein come from keeping the big picture in mind. Whether companies are expanding their sights to new global markets, taking on new partners through acquisition or joint venture, or adopting best practices in governance to realize the benefit of independent and diverse perspectives, success depends on stepping back from the day to day and thinking strategically about what the competitive landscape is going to look like not just next year, but five to ten years in the future.

In the articles that follow, we track how these three themes are helping private companies positively disrupt the status quo across many business dimensions. We also point out where companies might be able to do better. Never stop learning. That's what we tell ourselves every day, and it's clear from the private companies we support the world over that it's a refrain as universal as their desire to succeed.



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Deloitte Private Global Leader  
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# Meet Otto, the autonomous heavy-load material transporter.

The wheeled machine, which looks like an oversized floating computer scanner, is capable of moving up to 3,300 pounds around a warehouse without incident. It takes in its environment and learns, meaning that new obstacle somebody put in its way is now part of its programming. Otto receives orders, reports on its status, and notifies human operators of issues in real-time. And it has revolutionized warehouse management and logistics as we know it in just a decade: Otto's maker, privately owned Clearpath Robotics, was founded in 2009 by a group of four University of Waterloo graduates.<sup>1</sup>

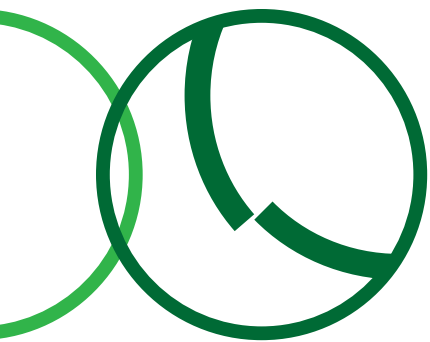
"In many ways, Otto is the manifestation of the exponential growth of technologies and the disruption it's causing across every sector of the economy," says Terry Stuart, Chief Innovation Officer for Deloitte Canada. "Where before we might have been talking about innovation sparked by robotic process automation or artificial intelligence or Internet of Things, now we're talking about all three in one package. It's the layering of all these technologies that is accelerating the pace of change, and it's what makes this time so exciting and also so scary."

Technology isn't the only force disrupting businesses in this environment, but it has a hand in all of them. Increased globalization stems at least in part from the Internet-enabled free flow of information across borders. Digitalization is upending talent models

across whole industries, leaving many workers dislocated and companies struggling to find replacements with new skills. Increased transparency aided by technology is putting downward pressure on pricing by empowering consumers and businesses to comparison shop and force concessions. Social media has promoted greater corporate social responsibility. And so on. And so on.

## The power of the pivot

Companies that are succeeding in this environment not only recognize these forces are colliding, but are adapting to the emerging business landscape. "In today's economy, those that are nimble and can pivot are ultimately going to win the day," Stuart says.



“You’re going to see the smaller companies definitely taking advantage of a wider range of disruptive brainstorming.”

**Terry Stuart**

Chief Innovation Officer for Deloitte Canada

Pivots can result in big payoffs. Slack, the immensely successful team messaging app, started out as a video game.<sup>2</sup> Pinterest was a platform for people to browse and shop their favorite retailers before transitioning into an affinity app for housing people’s collections of their favorite items and ideas.<sup>3</sup> Starbucks as we know it today might not exist if it hadn’t shifted its focus from selling espresso makers and coffee beans to opening coffeehouses.<sup>4</sup>

Then there’s the case of China’s Pinduoduo. The company’s founder, Colin Huang, a Chinese entrepreneur who started his career in Silicon Valley, worked on early search algorithms for e-commerce, and returned to his native country to start his own company.<sup>5</sup> His first company sold consumer electronics and mobile phones, but Huang realized it was too similar to other e-commerce sites. Eventually, he realized he could combine e-shopping with social networking to create a shopping app in which users earned discounts on purchases when friends joined them. Pinduoduo was founded in 2015 and recorded more than 100 billion RMD in merchandise sold just two years later.<sup>6</sup> The company went public in July 2018, raising \$1.6 billion.<sup>7</sup>

“Pinduoduo caught the wave because it was able to use technology to take advantage of China’s slowing economy and the trend of consumers wanting to spend less,” says Roger Chung, a Technology, Media and Telecommunications industry researcher for Deloitte in Shanghai. “It’s a powerful example of how private companies can quickly capitalize on disruptive forces to leapfrog the competition virtually overnight.”

Many private companies have an inherent advantage in overhauling their business model, Stuart says. As a group, they tend to have more streamlined organizations with less bureaucracy and direct access to leadership. And they have less baggage in terms of legacy IT systems and other infrastructure, which means fewer sunk costs and fewer integration issues to inhibit new ideas. They also can maintain a long-term perspective because their shareholders aren’t pressuring them to meet revenue projections each quarter.

“Private companies have some inherent advantages in being able to deal with and drive disruption,” Stuart says. “And in a lot of cases, the ideas for new growth don’t have to be all that new.”

**Stackable innovation**

Private businesses can easily turn to open-source tech stack tools to lay the software foundation for their next e-venture.

“There really aren’t that many ‘aha’ moments,” Stuart said. “The real breakthrough innovations such as the smartphone were decades in the making. What companies are finding out is that what’s more important are the processes and people you put in place to take advantage of it and getting out to market.”

What is different are the approaches companies are taking to solve such problems. Some are hosting “hack-a-thons,” which bring a large number of people together over several days to collaborate on computer programming and scout next-generation talent. Another increasingly



popular tactic is gamification, a process of taking something that already exists—a website, an enterprise application, an online community—and integrating game mechanics into it to motivate participation and encourage fresh insights. And then there are crowdsourced competitions in which companies challenge outside innovators to pitch solutions to problems they're facing for a set amount of money. "You're going to see the smaller companies definitely taking advantage of a wider range of disruptive brainstorming," Stuart says.

### Task orchestrators

One major constraint for any company these days is talent—where to find it, how to land it, and how to hold onto it. Tight global labor markets are intensifying the war on talent, and many smaller private companies don't have the brand-name appeal of public, multinational corporations. Younger workers are doing some of the disrupting by changing jobs much more frequently than those from previous generations. And recent trade disputes and policy changes have slowed the flow of skilled workers across some borders.<sup>8</sup>

Past talent management strategies relied on the education system structure. But recruiters and employers are discovering now that the same system isn't keeping

up with the pace of technological change. Artificial intelligence and blockchain are two examples where universities are struggling to catch up. "The best talent available isn't necessarily coming from the go-to educational institutions of old," Stuart says.

Talent shortages are raising the stakes for retaining top talent. Chung says a private commercial satellite launch company recently tried to recruit a scientist at a state-owned enterprise in China with a 1 million RMB salary. They were rebuffed when the enterprise formally complained to the government that it wouldn't be able to solve critical problems without him. Few occupations are in such hot demand as those that can find and extrapolate data. For example, job postings for data scientists in the United States rose as much as 75 percent between 2015 and 2018 at some job-search sites, and data science PhDs now command starting salaries of \$300,000 or more.<sup>9</sup>

But even in the hunt for talent, technology is offering solutions. The rise of contingent workers means many private companies can scale up quickly without having to take on a lot of overhead. The gig economy has infiltrated almost every sector of the economy, from health care to manufacturing to finance. "Private companies are

increasingly becoming task orchestrators rather than full-time employers," Stuart said.

### Preparing for quantum change

Even with the right talent on board, private company leaders must work harder to foster a culture of collaboration. Business ecosystems are extending well beyond companies' own workforces, extending across organizations, sectors, and geographies. But the resources that make up those ecosystems don't connect organically. In his book *Where Good Ideas Come From: The Natural History of Innovation*, author Steven Johnson argues that good ideas generally evolve over time as "slow hunches," and that it's only when you put people together to share their hunches that real innovation occurs.<sup>10</sup>

If that's true, then the increasing connectivity that governs business interactions today is both a source of disruption and an opportunity for companies to do some disrupting of their own. "The World Economic Forum is calling this the Fourth Industrial Revolution," Stuart says. "Certainly this kind of quantum change doesn't come around all that often. Every private company out there has to be thinking about how this exponential curve we're on is going to affect them and how they're going to prepare for it."

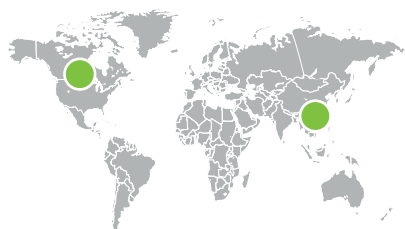
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Professional athletes use data analytics for work, even when players are off the job. Every team in the NBA has data analysts on staff.<sup>1</sup> Coaches use the technology to pick the best new recruits. Some players wear monitors when they're asleep to track the effects of fatigue.<sup>2</sup> Whether in professional sports or shipping, analytics has transformed how organizations learn about their own performance.

Private companies are embracing analytic insights with enthusiasm: In Deloitte's most recent global survey of private companies, 62 percent of respondents said they're using technologies such as predictive analytics to increase efficiency, while 46 percent of respondents say the technologies help them improve customer engagement.<sup>3</sup> Yet one of the biggest challenges for private firms is finding the right people to put data-related technologies into action. In a Deloitte survey of CIOs about the technical skills that will be most difficult to fill over the next three years, analytics and data science are at the top of the list.<sup>4</sup> Companies that can attract data scientists will put them to work on projects such as immersive analytics—which not only pinpoints digital information but provides a mixed-reality view of the assets—helping companies further elevate their understanding of the data that surrounds them.<sup>5</sup>

#### Issues

The shortage of professionals who are proficient in analytics is a persistently tough challenge for private companies as they consider technology investments. The technologies can offer amplified intelligence that leads to faster transformation; the solutions are more powerful than those of prior generations; and, cloud-based access makes them less expensive to acquire.<sup>6</sup> But the competition for data scientists who can manage the technology is fierce. Job postings for data scientists on the US platform Indeed.com increased 75 percent from 2015 to 2018. Meanwhile, annual salaries for data scientists at large consulting firms can approach hundreds of thousands of US dollars for candidates with doctoral degrees.<sup>7</sup>

“Even though the technology is getting cheaper all the time, people who really understand the technology are becoming more difficult to hire,” says Tom Davenport, professor at Babson College and independent senior advisor to Deloitte Analytics. “Private companies may have a hard time getting those people and even when they can get them, they're going to have to pay them a lot,” says Davenport, who wrote a frequently cited *Harvard Business Review* article on the job outlook for data scientists.<sup>8</sup>

Another challenge is prioritizing the data on hand. Every minute of every day, there are more than 3.8 million Google searches, for instance.<sup>9</sup> Enrico Cianci, senior manager, Deloitte Italy, says private firms can't afford to overwhelm limited resources if they intend to boost their analytics capabilities.



“Companies need a response that includes analytics as a first line of defense backed with human judgment to attack the problem.”

**Tom Davenport**

Professor at Babson College and independent senior advisor to Deloitte Analytics

“Companies have to think about the kinds of data they need to avoid information overload,” Cianci says. “Rather than collecting more data, use existing data in a more highly targeted way.”

Data security is another area that requires prioritization, according to Davenport. With the continual threat of cyberattacks, he points out that companies need a response that includes analytics as a first line of defense backed with human judgment to attack the problem.

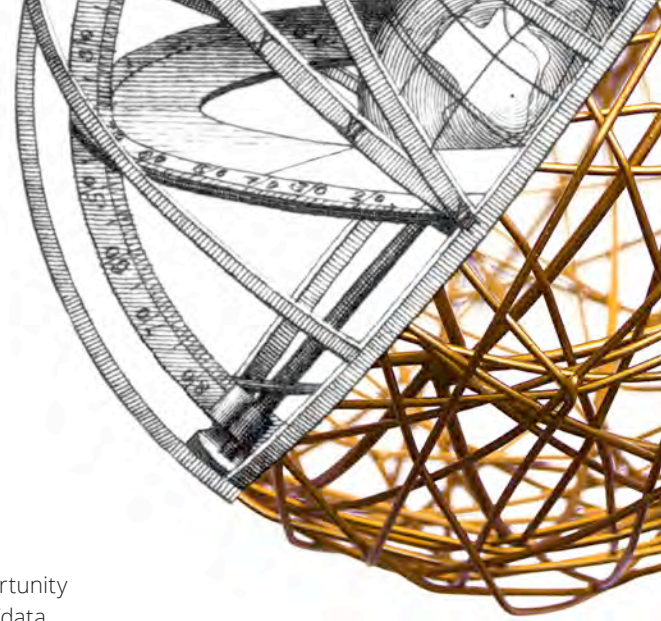
“We don’t really have any choice but to start to use analytics to predict threats and respond to them,” Davenport says. “And if we have a hack or breach that needs to

be investigated, that still requires human intervention. There’s really no choice but to start moving down this road, given the number of potential threats every company faces.”

**Opportunities**

The opportunities to achieve stronger business outcomes through analytics are vast. Private organizations are using real-time analytics on global supply chains to manage unpredictability, forecast demand, and handle supplier issues. Companies are using analytics capabilities such as text recognition and machine learning to decipher data in financial records. Manufacturing firms are using analytics to better predict when physical assets need servicing.

Francesco Sagrati, a manager for Deloitte Italy, sees several main areas of opportunity: gathering information about markets; supporting marketing research;



improving internal processes; and, product development. “Analytics helps mid-market companies create accurate forecasts, model business scenarios, and reach outcomes more quickly than before,” Sagrati says.

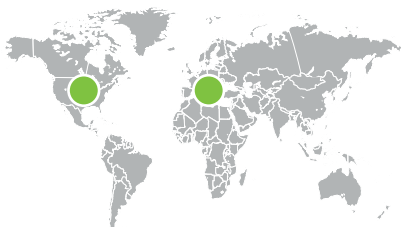
Accuracy and speed are two advantages private firms can seize as they invest in prescriptive analytics, according to Davenport. Prescriptive analytics technologies can advise sales staff on the optimal price to charge for products or services. Or in a manufacturing setting, the technology can alert staff about maintenance and repair schedules.<sup>10</sup>

Davenport says another area of opportunity for private companies is establishing “data lakes” that are run on open-source software. In comparison to traditional enterprise data structures with information in rows and numbers, the “lakes” house information in unstructured formats—including videos, audio streams, and social media posts—and thereby allow for more diverse sets of data.<sup>11</sup> “You can store anything in any format,” Davenport says. He adds that while data lakes are sophisticated undertakings for many private companies, “there are so many opportunities in analytics. You don’t have to be on the cutting edge to get a huge amount of value.”

### Questions to consider

- Has your company performed a serious assessment of its readiness for analytics?
- How can you assemble a team with the appropriate mix of technical and managerial skills to be successful?
- In which business functions are you most likely to improve outcomes if you invest in analytics?
- How can your organization incorporate predictive and prescriptive analytics into its operations?
- Is your organization aligned around a common purpose and framework for analytics?
- Would you be able to change course quickly with analytics investments should conditions change?

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Artificial  
intelligence



The exponential growth of artificial intelligence (AI) has transformed customer service departments, enhanced supply chains, and even entered the realm of fine arts, where the world's first algorithm-generated portrait recently sold for more than \$400,000 at auction.<sup>1</sup> Examples abound that demonstrate how the broad suite of machine learning capabilities within AI have disrupted the business world.

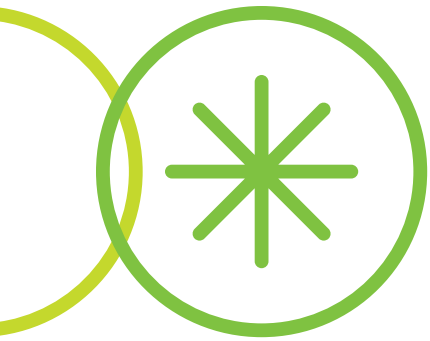
From image recognition technologies that can assess skin irregularities for cancer detection, to voice capabilities that layer audio onto video to create mouth movements that mimic real speech, AI has expanded the definition of what's possible when machines learn patterns in the world around them. In Deloitte's 2018 global CIO survey, 72 percent of organizations that are considered "digital vanguards" put AI at the top of their wish list.<sup>2</sup> As private companies decide how to adopt AI or expand their investments in the technology, they not only have to contend with the question of whether machine intelligence will create value for the organization. Companies also will need to grapple with the responsibilities that come with the rise of cognitive technologies.

#### Issues

Rapidly expanding interest in AI has created an abundance of research on the topic. At Google for instance, it is estimated that the number of internal development projects focused on AI is doubling every 18 months.<sup>3</sup> Yet the picture is mixed among private companies, many of which are still building awareness around the technologies, says Prashanth Kaddi, partner, Information Management and Analytics, Deloitte Touche Tohmatsu India LLP. Kaddi points out that some CEOs at private firms have a strong command of the issue and are ready to deploy AI solutions. In other cases, there are CFOs and other C-suite leaders who embrace the technology, but haven't been able to assemble teams to build meaningful AI efforts. There is yet another group of private organizations, Kaddi says, that have brought in venture capital investments and are ready to engage with external partners to start serious discussions around introducing AI capabilities within their firms.

To help achieve those goals, private companies need to overcome the competition for talent with experience in mathematics, neuroscience, philosophy, and other disciplines that are in high demand for AI positions, says Naser Bakhshi, senior manager, Dutch Deloitte Consulting. Private companies also need to enhance their talent retention and development strategies.

"Acquiring talent is one thing," Bakhshi says. "But companies also need to retain talent, and make sure this type of talent is also coached in the right way." Another challenge for midsized firms: moving from early-stage concepts to advanced AI use. "Transforming ideas from proofs of concept and minimal viable product stages to real products that produce value is a challenge," Bakhshi adds.



“AI is in every layer of society and our commercial ecosystem.”

**Naser Bakhshi**

Senior Manager  
Deloitte Netherlands

Bias within machine learning programs is another issue that organizations have to overcome as they build AI capabilities. There have been instances where AI-based recruitment tools have taught themselves to favor certain types of candidates, but Kaddi says organizations can address some of these issues with checks and balances. “Look at the methodology, have audit trails to see how models were coded, or have third-party reviews,” Kaddi says. “Have fallback options so if a pattern is emerging, there’s a mechanism that can monitor the outcome.”

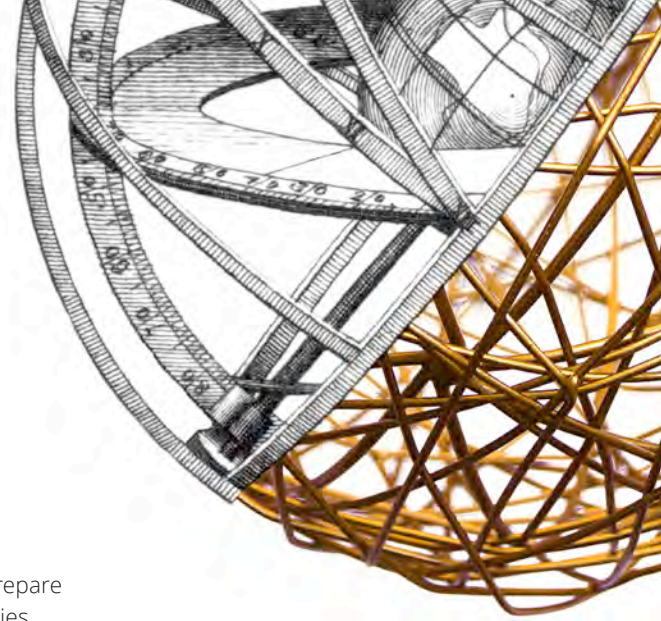
**Opportunities**

There are private companies that have taken AI far beyond the concept stage. Some retailers are using AI solutions to monitor and predict consumer buying behavior. For example, combining internal sales data with external information, such as customer segmentation and the weather, companies can now make smarter decisions about when to stock winter coats or other seasonal items.<sup>4</sup>

Companies are also using AI to enhance the human capital function by developing optimization models for staffing purposes, Bakhshi says. One example is layering AI onto real-time to continuously predict when companies will need outsourced staff, as opposed to depending solely on historical data for scheduling. “We can use that intelligence to fine-tune planning, but of course, you combine it with human knowledge,” Bakhshi says. “When we talk about artificial intelligence, people tend to forget that it’s also about tacit knowledge within the human brain itself.”

The sales function is another area in which AI technology can give private companies a competitive edge. Kaddi offers the example of a media company whose leadership wanted to arm sales staff with numbers so they’d be able to price their inventory better. Separately, an appliance retailer that keeps hundreds of different products in stock was able to give the supply chain more accurate information on which items to keep on hand. “Across several geographies you can forecast as precisely as possible what the sales will be for a future period,” Kaddi says, adding that the examples show how AI can help assess demand, inform pricing, production, and enhance employee performance.





Yet another use for AI is detecting fraud in financial services. E-commerce companies can use AI algorithms to flag “repeat offenders,” as Kaddi says, who abuse online retailers’ return policies.<sup>5</sup> “AI can give us a fair warning whether this person is likely to commit fraud,” he says.

Bakhshi says organizations need to prepare for universal adoption of AI technologies. “AI is in every layer of society and our commercial ecosystem,” he says. “It’s not just for big tech companies. For private companies, I would say identify promising ideas and try to embed of that innovation in your company.”

### Questions to consider

- Does your organization understand AI, its potential, and how to begin the AI journey?
- How can your organization use AI capabilities to enhance some of its most routine functions?
- Where are the gaps in expertise you need to fill to build AI capabilities within your team?
- How might AI help your organization forecast events?
- Is there an opportunity for your company to use AI to enhance its supply chain?
- How will you manage ethical concerns, privacy, and concerns around bias that have emerged amid the expansion of AI?

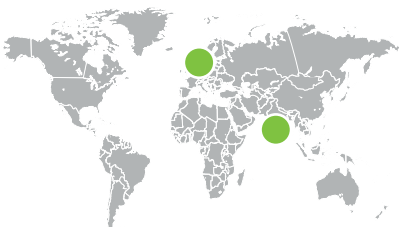
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# Internet of Things



Privately held companies depend on a range of technologies to increase productivity, enhance customer service, and improve outcomes for employees, whether those teams share a single office or are distributed across borders.<sup>1</sup> Increasingly, firms operating in global settings are turning to an intricately connected system of devices that connect assets, information, and commands in a timely manner.

This network of objects, commonly known as the Internet of Things (IoT), comprises a suite of technologies that generate data between locations. Through 2020, the enterprise/industrial sector will account for nearly 60 percent of IoT spending, with consumer companies and services firms splitting the remaining expenditures in roughly equal shares, according to a Deloitte analysis.<sup>2</sup> The real-world IoT applications are diverse—from an emerging class of personal health monitoring devices connecting patients and providers to the expansion of smart cities, where citizens, devices, and infrastructure exist in a connected ecosystem.<sup>3,4</sup> But connectivity for connectivity's sake doesn't necessarily translate to business value. Executives must carefully evaluate the inherent complexities within the innovations. The possibility of data security breaches, the difficulties in connecting disparate systems, and technical skills shortages are among the challenges private companies need to confront as they convert IoT investments into business value.

#### Issues

Private companies have found that gaps in preparedness are stunting their IoT ambitions. A global survey of more than 1,800 IT and business leaders in 2017 showed that nearly three-quarters of respondents' IoT projects were failing.<sup>5</sup> Among the most commonly cited challenges are the technical complexity of implementing IoT solutions, cost prohibitions, and finding the right people with the skills to put the technologies into use.

Another frequent misstep: neglecting to carefully define how to use the potentially rich information gleaned from IoT devices, says Michele Tarditi, Director, Technology, Strategy and Architecture, for Deloitte Italy. "Companies tend to look at IoT as a technical issue, thinking about connecting their assets without fully understanding what to do with the data," Tarditi says. "Some companies collect the data only to then throw it away because they don't see the value in analyzing and storing large quantities of data."

That missed opportunity speaks to a related issue—establishing clear objectives for the use of IoT technologies across the business. Sam Sluismans, consulting partner, Monitor Deloitte in Brussels, says companies need to do the groundwork to develop a feasible proof of concepts as they consider IoT technology. For instance, a company that is deciding whether to connect its production plants to the cloud should not only be aware of the opportunity but also the challenges in launching such an endeavor. "Many companies struggle with the business case, how it could work for them, what the real business model will be, and what conclusions they are going to be able to take based on the technology," he says.



“IoT gives companies the opportunity to know who their clients are and how they’re really using their product.”

**Michele Tarditi**

Director, Technology, Strategy and Architecture, Deloitte Italy

Private companies also need to address security challenges, which numerous surveys have identified as a key issue in the deployment of IoT solutions. Sluismans says one way to do this is by what he calls “security by design.” Whether it’s door locks on a smart home or an industrial setting such as a wind farm, companies need to ensure they aren’t giving hackers easy access to IoT-enabled devices. “You have to make sure that the sensors are by design already protected so that the data is encrypted,” Sluismans says.

**Opportunities**

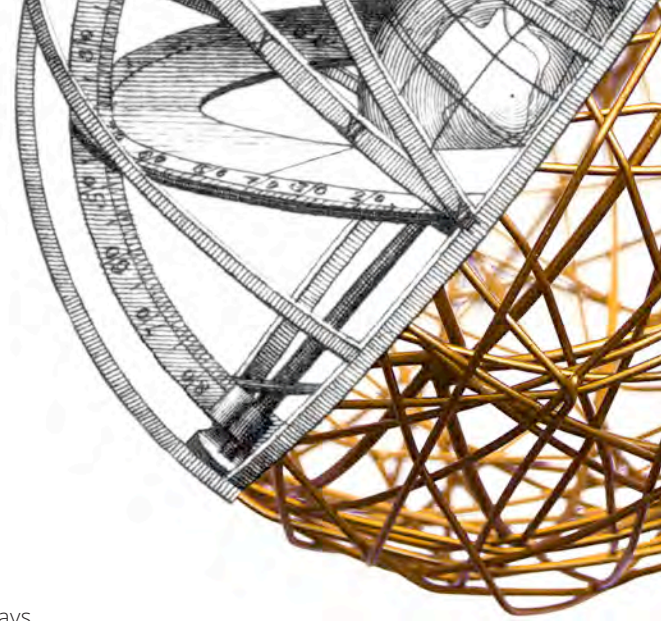
The wide range of use cases for IoT includes dynamic scheduling in manufacturing settings to smart irrigation on rural farms. A Deloitte analysis offers a number of examples that show how IoT solutions can help organizations become smarter planners, more skillful customer experience agents, and stronger service providers.<sup>6</sup>

IoT-enabled devices can also help organizations make curious discoveries. One opportunity that arises as companies use IoT-enabled devices is the ability to monitor how customers are using products and services once they are sold and distributed. Tarditi points to a manufacturer of scientific measuring devices designed for the food industry. While the company’s products are used to measure qualities such as nutritional content and test food reaction to heating and stirring, in this specific case, their product was used by a restaurant chef to stir and heat sauces in an extremely

precise way. For privately held firms without large-scale distribution networks, the IoT can offer intelligence on clients and unexpected information that can potentially lead to new business lines.

“IoT can thus open up new unimagined market segments. In the example, a product designed for laboratories can become a new appliance for restaurants,” Tarditi says of the product. “IoT gives companies the opportunity to know who their clients are and how they’re really using their product. This is something companies can only find out if products are connected, customers are profiled, and data is monitored and analyzed.”

Companies are making significant investments to ensure that IoT technologies become part of the corporate ecosystem; a global projection anticipates companies will spend roughly \$15 billion on IoT integration in the next three years.<sup>7</sup> Sluismans points to opportunities to use these investments to help companies improve functions such as process monitoring, helping to anticipate maintenance issues, and provide essential data on equipment in difficult-to-reach locations. Sluismans cites examples such as offshore wind farms where sensors can track the condition of underwater concrete foundations, offering technicians real-time information on costly assets.



“This helps maintain infrastructure in the optimal condition for as long as possible,” Sluismans says.

Tarditi says companies looking to initiate or expand their IoT pursuits should identify a function or process that could benefit from the use of connected devices and also consider the broader picture of how the technology can contribute to growth across the business.

“It’s critical to have a comprehensive strategy from the beginning,” Tarditi says. “You have to know where you want to extract value, what the applications should do, what the benefits should be, and how you can bring those benefits to the company.”

#### Questions to consider

- Has your company taken steps to help your teams become familiar with IoT technologies?
- Have you developed a comprehensive vision for connected devices across your firm?
- Have you established a proof of concept and a path to test the concept?
- Have you thought about ways you can use the IoT to track your assets over time?
- Have you considered how IoT might help you get a better sense of how your products are being used?
- Have you thoughtfully examined your security procedures?

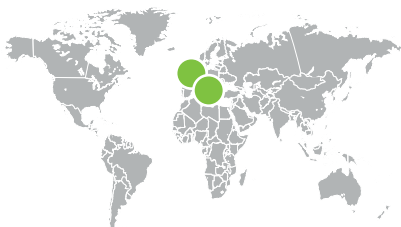
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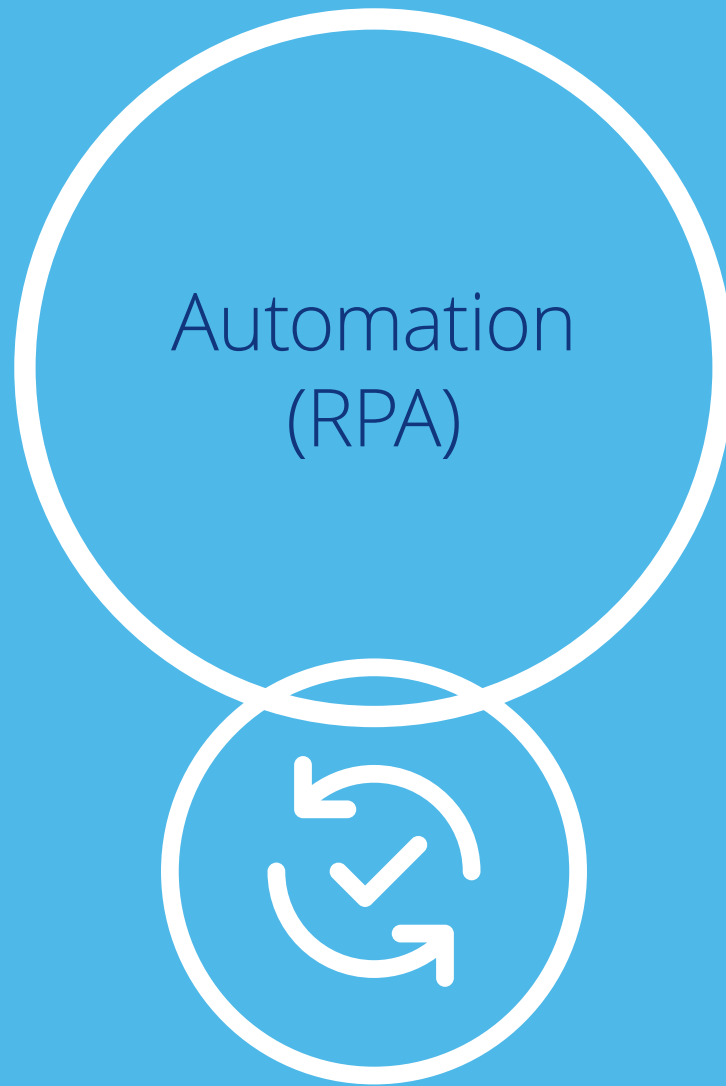
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The suite of technologies that mimic human behavior shows a great deal of promise in the workplace. A recent Deloitte survey on robotic process automation (RPA), which sets up software-based rules for certain repeatable tasks, reveals that more than 80 percent of organizations that are implementing or scaling RPA projects report having a happier workforce.<sup>1</sup>

In addition, more than 90 percent of respondents in the global survey believe that RPA has met or exceeded their expectations on productivity, compliance, and cost to implement. Still, many organizations are struggling to take these technologies to scale: The share of organizations able to achieve scale in their automation efforts in the previous 12 months before the survey had only risen by 1 percent.

As private companies consider how, when, and where to automate, they'll need to do more than create code for recurring processes. Experts who track trends in automation say organizations need to define the right operating models for their businesses, assess the potential risks that come with the deployment of automated tasks, and convince employees that automation can help enhance the value of work.

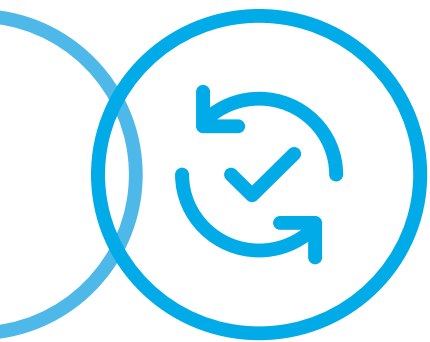
#### Issues

Companies may encounter a number of risks associated with automation, starting with issues at the data-gathering level, where organizations take the first steps in creating the algorithms that govern repetitive processes. Developers might have data that's incomplete or outdated. There could be insufficient data or flawed collection methods, creating a mismatch between the inputs needed to train algorithms and the data that's needed to make business decisions. Processing errors can emerge when high-paced algorithms spring into action. There are also issues with the bots—the automated programs making these processes possible—which may have been programmed with bias in ways that contravene laws or lead to discrimination as some organizations have found with automated hiring technology.<sup>2</sup>

Another issue private companies are facing is taking automated processes to scale. In Deloitte's global automation survey, just 4 percent of respondents say they have scaled beyond 50 robotic processes.

One of the main barriers to achieving scale is failing to define how teams will acquire the skills, capability, and capacity they need to transform processes across an organization. Yet another pitfall: failing to grasp how the complexity of an automation deployment differs from that of traditional IT systems. Consider a scenario in which a medium-complexity robotic process implementation takes up to 24 weeks—at which point a project might become economically unviable.<sup>3</sup>

Private organizations also face security challenges as they build automation tools. Software bots frequently require access to security credentials, users, systems, and existing applications. Mike Schor, partner, Internal Audit, Deloitte & Touche LLP, says teams need to assess their risk management capabilities as they incorporate automation into their operations. To do so, he suggests that organizations establish protocols that take risks, users, and the functionality of automated processes into account, and ask tough questions.



“Think of why you’re implementing this technology. It’s not just cost reduction.”

**David Wright**

Partner, Private Sector Robotic Process Automation Lead, Deloitte UK

“How is your organization going to monitor the risks?” Schor says. “Are you appropriately testing solutions before they go live? Who has user access? The benefits should not just be about efficiency. They should also be about effectiveness.”

**Opportunities**

Respondents in Deloitte UK’s global automation survey ranked productivity, improved customer experience, and increasing automation as the top three priorities for their organizations’ automation strategies.<sup>4</sup> Each area presents an opportunity for private companies to improve the value of work and ultimately provide a more meaningful experience for employees.

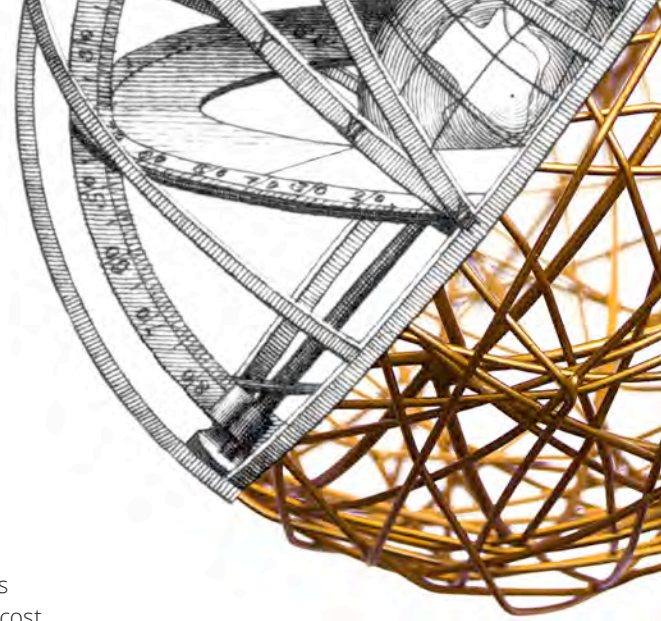
By reducing time-consuming, manual activities, organizations can focus on higher-value activities and help people become more productive through expanded horizons within their roles, says Deloitte UK’s David Wright, partner, Private Sector Robotic Process Automation Lead, in London. In

a similar fashion, private companies can elevate their customer service offerings—in industries such as banking or retail—when workers have the opportunity to carry out personalized, public-facing functions.

“You reskill people away from some transactional tasks and free them up so they can then start thinking about transformation within the organization,” Wright says.

According to Schor, private companies can tap the potential of automation to achieve scale through activities such as the processing of large sample sets. Another advantage for fast-growth private companies compared to their larger counterparts: They may not have to contend with legacy software structures and therefore can put automated solutions into practice without reinventing entire systems.





"Companies should be building with these technologies and considerations in mind up front as opposed to building a manual process and then trying to retrofit them," Schor says.

Wright says the opportunity to build automation solutions from scratch also comes with responsibility.

"Think of why you're implementing this technology," Wright says. "It's not just cost reduction. It's about accuracy and control, better turnaround times, better customer service, and employee satisfaction. Think about what you want and design your program around delivering those benefits."

#### Questions to consider

- Has your company performed a high-level review across the organization for potential opportunities for automation?
- What are the security risks related to errors, access, and monitoring that could affect your organization's automation investments?
- How have you prepared your teams for RPA implementation across the organization?
- Have you identified tasks that are repetitive versus those consisting of complex logic that require human judgment?

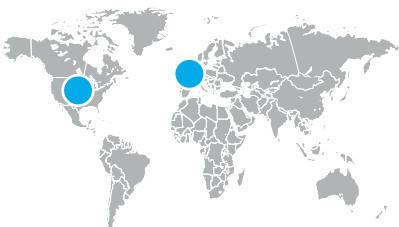
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A basic rule of emergency preparedness is having a plan to respond to disasters. Often, the dangers seem abstract until they have a personal impact. Few people, for instance, would imagine a meteor speeding toward them from the sky. Yet that's precisely what happened in central Russia in 2013, when a meteor blast prompted a massive shockwave that injured around 1,500 people, causing more than \$30 million in damage in the process.<sup>1</sup>

For most private companies, the common risks aren't cosmic but rather cyber in nature—seemingly distant threats that can nonetheless produce harmful results.

In 2017, researchers discovered more than 120 million new malware programs, the equivalent of 231 new strains of malware per minute.<sup>2</sup> And it's hard to find qualified talent to help companies protect against the threats. More than 300,000 US cybersecurity jobs are currently unfilled, according to one estimate, along with another 350,000 in Europe. A separate report forecasts a global shortage of 1.8 million cybersecurity workers by 2022.<sup>3</sup> The skills gap causes increased workload on existing staff and means organizations spend time on incident response when they could otherwise be focusing on other strategic pursuits. If private companies want to stay ahead of cyber pressures, they'll need to move beyond basic acknowledgement of the dangers and build resources to actively prepare for such threats.

#### Issues

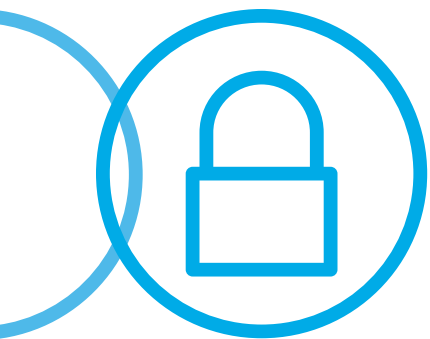
While mid sized firms have boosted spending on security solutions and hired or contracted cybersecurity specialists to address risks in recent years,<sup>4</sup> only about half of respondents in Deloitte's recent Global CIO survey say they view security and data privacy as a strategic investment.<sup>5</sup> One manifestation of this challenge is the lack of a dedicated information security officer to track cyber threats and mitigate the potential damage to the organization, says Rocco Galletto, partner, Deloitte Cyber Vigilant Practice in Toronto.

The absence of strategic direction from the top can create cracks throughout an organization. Galletto points to gaps in training and protocols that can result in employees inadvertently clicking on malicious links, accessing websites affected with viruses, or responding to seemingly harmless requests that are actually spear-phishing attempts. "User awareness training can be a good countermeasure to know what's legitimate, how to identify certain attributes within an email, or whether you should open or click on a link," Galletto says.

Peter Wirnsperger, partner, Deloitte Cyber Risk Services in Hamburg, Germany, agrees. "We can apply every technology that we can want, but if the human firewall is not following the rules, we still have a problem, and even the best technology can't protect us."

Another concern for private companies in the global environment is the enactment of complex new rules around data security and privacy. The European Union's General Data Protection Regulation (GDPR), which imposes comprehensive digital privacy controls on organizations and their ecosystems, is one example.<sup>6</sup> The GDPR went into effect in May 2018. Failing to protect consumer information carries significant fines—up to 20 million euros, or 4 percent of annual global revenue, whichever is higher.<sup>7</sup>

The EU regulation presents an interesting dynamic for private companies that may not have been accustomed to some of the compliance-related duties of companies in more heavily regulated industries such as banking, Wirnsperger says.



“If somebody’s making a hole, the boat will sink.”

**Peter Wirnsperger**

Partner, Deloitte Cyber Risk Services in Hamburg, Germany

A 2018 Deloitte poll taken shortly after the GDPR went into effect showed that only 34.5 percent of nearly 500 professionals surveyed said their organizations could demonstrate compliance with the data privacy rules.<sup>8</sup>

“In addition, some companies may say that other security-related regulations don’t apply to them,” Wirnsperger says. “There’s the need to be a good corporate citizen and the need to be a good manager, yet companies have been working without making many of these security investments. When people actually start to think about regulations, they realize that they’ll have to improve things.”

One of the key provisions of GDPR is around the management of customer data, such as the right to opt out of online tracking, regardless of where the consumers are from. Privacy rules are also establishing new parameters for the use of customer data in other regions such as Canada, where an anti-spam law generally blocks companies from sending email promotions without prior consent from the intended recipient.<sup>9</sup>

Actions on the consumer side comprise another area of concern for company leaders. Case in point: a 2017 Deloitte survey found that 91 percent of US consumers accept mobile user agreements without reading them, with the figure climbing to 97 percent among 18- to 34-year-olds.<sup>10</sup> Galletto says private companies need a global understanding of rules as well as consumer behaviors and their effects on a borderless marketplace.

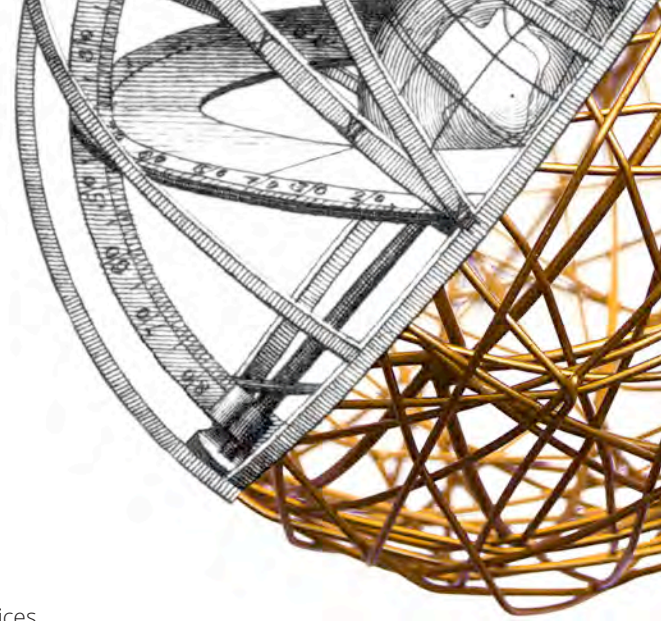
“It’s important to have someone who at least understands what information the organization is collecting about users, understanding the sensitivity of the information that they’re holding,” he says.

**Opportunities**

One way to raise awareness of cybersecurity threats is by bringing real-time, security-focused training opportunities to the workplace. Companies can conduct simulated phishing campaigns to track how employees respond to supervised intrusion attempts. “You’re teaching in the moment, educating users, and reminding them about confidential information versus publicly available information,” Galletto says.

Companies can also encourage habits that minimize risks. Cyber-related education tips posted daily on a company Intranet site reminding users not to click on certain links, or reminders on clues about phishing techniques such as misspellings or tone that doesn’t fit company style are other ways to raise awareness, Galletto says.

In scenarios where third-party vendors have access to private company data, another opportunity is formalizing security procedures for suppliers. Just like quality control standards for original equipment manufacturers, providers of services to private companies also need established rules to assure how they’ll handle proprietary data.



"Many industries have started third-party insurance programs," Wirnsperger says. "You have to build trust and ensure that everybody obeys the rules." He uses a seaborne example: "Everybody is in the same boat. If somebody is not rowing, the boat slows down. If somebody's making a hole, the boat will sink."

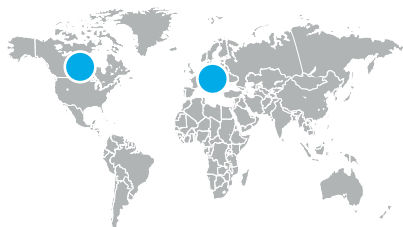
Another consideration for private companies is including managed services for their cybersecurity needs. That requires an assessment of potential problem areas and a careful examination of a company's operating model to see if there are structural changes that can make the organization more secure.

"Identify the critical assets your business relies on," Wirnsperger says. "It's important to have a truthful assessment to find the best way to protect your assets over the long term."

### Questions to consider

- Has your company completed an analysis of data security vulnerabilities across your business and taken steps to address them?
- Do you have a plan of action in the event of a cyber-related incident?
- How can you manage the talent shortage to recruit, build, and retain a team with security expertise?
- How might a managed security services model help meet some of your data security needs?
- What processes do you have in place to promote employee awareness of how to access proprietary information and customer data, as well as restrictions on sharing this information?
- Is your company well prepared to comply with both domestic regulations and global information security and privacy rules that might affect your business?

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# Finance transformation



Today, private company CFOs need 360-degree awareness. They're charged with keeping pace with the financial implications of the blistering rate of change affecting virtually every industry, while at the same time diverting a good part of their attention to considering a future that could look drastically different than the present.

Fortunately, digital technologies such as cloud computing and robotic process automation (RPA) are helping with the first part. But the disruption is far from over—in fact, it's probably just begun—and many private company finance chiefs are struggling to find the right mix of technology and talent that will position them as strategic partners to ownership and their C-suite counterparts.

### Issues

Businesses expect more than ever from their finance departments, both in terms of reporting and strategic input, but many are coming up short when it comes to delivering real-time insights to help the strategic planning process.

Today, new digital platforms and applications are enabling leading firms to automate many accounting processes that once proved time-consuming and costly. But many private companies are hesitant to adopt such solutions because of the up-front costs involved, even though their current processes might not be supporting the business in the ways now required. In other cases, there may be a lack of understanding of transformative solutions enabled by innovations such as

robotic process automation and blockchain. Companies can end up playing an endless game of catch-up rather than setting priorities.

"The cost of the traditional finance function is still quite heavy, and spending is mostly reactive," says Damien Bones, a partner in Deloitte Private's commercial advisory practice in Sydney. "Finance needs not only to streamline, but also start viewing operational challenges through a forward-focused lens."

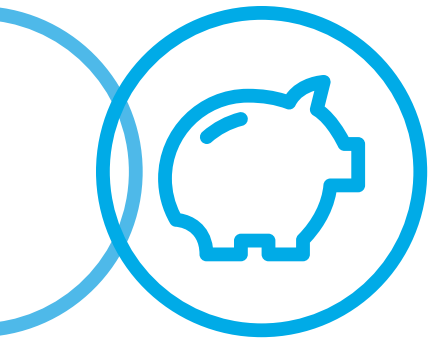
Then there's the role that finance has typically played within private organizations, and how it's evolving in response to rapid changes in the business environment. Steady economic growth and the pace of technological change has prompted business owners and CEOs to increasingly look to their finance chiefs for guidance with major decisions.

In this, finance chiefs are now being asked to wear "four faces."<sup>1</sup> They still need to serve the two traditional roles of steward, protecting the assets of the organization by minimizing risk and managing the company's financials, and operator, running a tight finance operation that is efficient and

effective. But now private company owners and others in the C suite are increasingly relying on them as strategists, helping to shape overall strategy and direction, and catalysts, instilling a financial approach and mindset throughout the organization to help other parts of the business perform better.

That, in turn, is forcing a rethink of the types of skills that are now required within the function. But labor and skills shortages continue to plague many finance leaders, as evidenced by Deloitte's quarterly CFO Signals surveys conducted around the globe. Labor shortages top the list of domestic concerns among 67 percent of Japanese finance chiefs, and US CFOs call the issue their top internal risk. Meanwhile, 44 percent of CFOs in the United Kingdom report that recruitment difficulties or skills shortages have increased.<sup>2</sup>

"A lot of private companies are asking themselves: How do we support the needs of the business without necessarily going for a traditional finance- or accounting-related person?" Bones says. "Because that doesn't quite make sense any longer, from either a supply or demand perspective."



“This could revolutionize a lot of industries.”

**Anthony Day**

Chief operating officer of the Deloitte EMEA Blockchain Lab in Dublin, Ireland

**Opportunities**

Rather than upgrade to an expensive, all-in-one technology solution, private businesses should consider products that fit their scale, says Bones. Cost-effective but powerful cloud-based finance software options are available to companies with less than \$25 million in annual revenue. These solutions can automate traditional accounting services, such as time-consuming month-end related activities. Companies with multiple business units can spread the rewards from an initial investment even further.

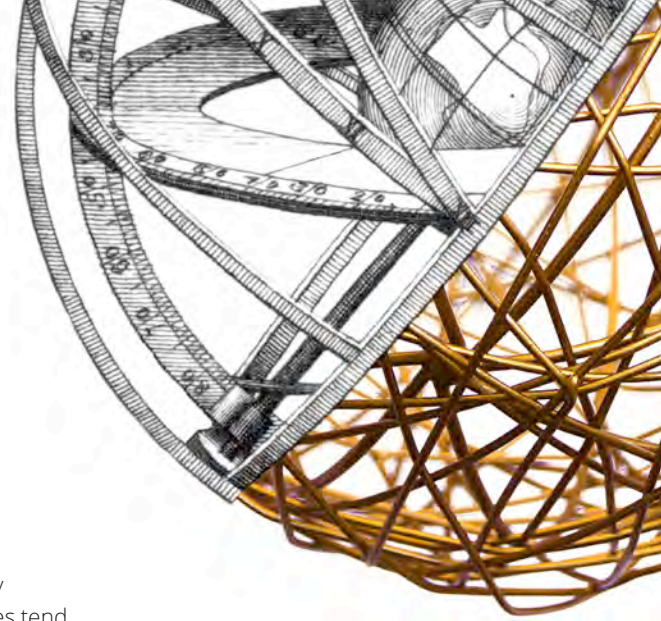
To be sure, some more advanced technology solutions may be worth the extra expenditure, particularly when finance is being asked to deliver deeper insights into the performance of the business. Cognitive tools are now available that can analyze dozens of complex financial models in a few minutes. They can spot a single variance in a billion transactions. And they can be used in audits to eliminate risks associated with sampling. This is an area undergoing rapid development, but many finance chiefs at private companies are caught up in day-to-day challenges and haven't had the time to explore the efficiencies a cognitive future could deliver.<sup>3</sup> In a recent *CFO Signals* survey, only 42 percent of those polled said their teams are familiar with cognitive solutions, but 2019 will likely see that number continue to rise.<sup>4</sup>

Blockchain is another technology that may not be well understood by private companies. Many still are unable to distinguish between blockchain and the cryptocurrencies that rely on the shared-ledger technology. They don't understand how a shared-ledger platform enabled by blockchain could eradicate errors, strengthen transparency and trust, and redefine how they engage with their customers and suppliers. Through the blockchain, for instance, a livestock company could produce a “digital twin” of every head of cattle sold, complete with information on its genetic data, its veterinarian history, and the quality of feed stock it was fed. This increases the depth and breadth of data that can be collated to increase transparency, comply with ever-changing regulation, or add value to finished goods.

“The potential of blockchain is enormous,” says Anthony Day, chief operating officer of the Deloitte EMEA Blockchain Lab in Dublin, Ireland. “We're talking about creating immutable records that can't be tampered with and which can digitize and increase automation for nearly every transaction performed by finance today. This could revolutionize a lot of industries.”

Day says the key for private companies looking to unpack blockchain is to consider the problems they're trying to solve with it. Blockchain is primarily a platform technology, and the platform needs to be built, which can be expensive.





In some cases, an existing platform may already exist, or several companies in the same industry may be interested in joining forces to create one. In other cases, private companies may not have the scale or business imperative to make it worth such an investment at this time, Day says. Blockchain is as much a technology for multiple companies, even traditional competitors, to work with as much as it is for individual companies to enhance their own technology infrastructure.

There are questions private company CFOs need to be asking themselves in virtually every aspect of their role: “What is our winning aspiration? Where will we play, and how will we win?” Because sooner rather

than later they’re going to be asked by others, Bones says. “Private companies tend to have less crowded C suites, so the CFO becomes the go-to person for the business owner or CEO when it comes to considering any business move that’s critical to the business.”

That will mean placing the right people around them—think analysts instead of data entry clerks, as well as developing a core of those with “soft skills” who can communicate with internal and external stakeholders as well as they crunch the numbers. “The finance staffers of tomorrow are the ones who can get along with and partner with the rest of the business,” Bones says.

### Questions to consider

- Has your company done all it can to automate traditional accounting tasks, so you can focus on adding greater value to the business?
- Is your finance organization operating as a partner with your business units and providing insights to drive decision making?
- Have you considered digital finance solutions that align with your company’s scale and ambitions?
- Have you evaluated how blockchain might transform your industry and the ways in which you might take advantage of it?
- Do you have the right mix of talent to accommodate new technologies and start delivering forward-looking insights?

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# Future of work



The robots aren't just coming—they're already here. Walk into one bank's branch on Fifth Avenue in New York City, and you will be greeted by a humanoid robot named Pepper, who at various turns will offer you a credit card, help you complete an application, and even take a selfie with you.<sup>1</sup> As machines increasingly take on tasks once performed by humans, many private companies are grappling with what it will mean for their workforces going forward.

Automation and artificial intelligence are among the potential shifts that could change the nature of work in every sector of the economy. Most see a future—possibly a very near future—in which robots and humans are working side by side. It's an evolution likely to be driven by tech-savvy millennials, who are already shaping new consumption behaviors. And it's one that will likely alter historical expectations about the nature of work, with the emerging gig economy as one prominent example. Talent development and workforce diversity also will likely take on more urgency, as will finding the right workspaces to accommodate these changes.

### Issues

Around the world, many who want to work aren't having any difficulty finding jobs. Decades-low unemployment in many developed markets is a challenge for employers trying to keep pace with demand for their products and services. In a Deloitte Private global survey of 1,900 executives from private companies, the ability to hire and retain employees was listed as one of the top risks to their company's growth.<sup>2</sup>

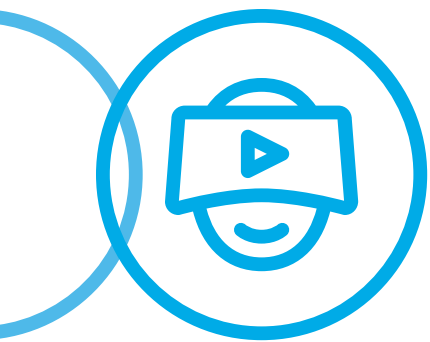
Yet, with the speed of change and the amount of technology-driven disruption

companies are facing these days, they risk hiring workers with skill sets they might not need for long. New research by the Organisation for Economic Cooperation and Development (OECD) suggests that one out of every seven jobs across its 32 member countries is at high risk of being automated, but one out of three may experience significant changes in how they are carried out.<sup>3</sup> For its part, the World Economic Forum projects that robots will eliminate 75 million jobs over the next five years, but create 133 million new ones.<sup>4</sup>

Organizations recognize that if they add the wrong kind of talent, they might meet near-term needs but will find themselves back in the same position in the future, says Philippe Burger, leader of Deloitte's Human Capital practice in France. Not only are such decisions costly, but there are also significant reputational ramifications involved with being perceived as a "job-destroying company," Burger says. "Companies that don't effectively manage the interaction between workers and machines and the social impact of any workforce changes could very well face a significant backlash."

It's not just customers that private companies need to impress in that respect. Millennials, who are forecast to make up almost 50 percent of the global workforce by 2020, are keenly attuned to corporate social responsibility and are more interested in working for those who share their values.<sup>5</sup> They also tend to seek diverse colleagues, flexible work arrangements, and ongoing opportunities to learn new skills, according to the 2018 Deloitte Millennial Survey of more than 10,000 millennials across 36 countries.<sup>6</sup> As the generation that changes job most frequently and is opting out of the traditional workforce by participating in the gig economy, many millennials don't stay with the same employer for longer than a few years, Burger says.<sup>7</sup>

Private companies can have a hard time competing for younger, skilled talent, in part because many are family-owned businesses that put a premium on heritage and loyalty. Many also lack the brand-name recognition of large, multinational corporations. Burger adds that it's easier than ever for job candidates to research potential employers in the private sphere, including whether they have diverse workforces and are considered good corporate citizens.



“A lot of private companies could benefit from thinking about how existing skills might apply in the future.”

**Philippe Burger**

Leader of Deloitte’s Human Capital practice in France

“There is much more transparency now than in the past,” Burger says. “People can see what’s happening inside and outside an organization. It’s very difficult to behave differently within an organization than what you claim on the outside. Now, more than ever, it has to be consistent.”

Finally, as the nature of work changes, so are the physical spaces where that work is performed. The office environment could be in for some big changes that go beyond the likely contraction of space required as more processes are automated and more people work remotely.<sup>8</sup> Internet-enabled devices and IoT technology are giving rise to a new wave of smart buildings that help companies better manage their energy usage and alleviate security concerns.<sup>9</sup> In addition, as companies become more aware of the relationship between workers and work, there is an increased focus on areas such as wellbeing, sustainability, and productivity. Many companies are addressing footprint optimization strategies, along with workplace design, as tools to leverage their real estate and workplace investment toward the employee value proposition in the war for talent.

“Already, technologies such as the cloud are enabling employees to work anywhere at any time,” says Sheila Botting, National Real Estate Leader for Deloitte Canada. “Within the future of work, emerging technologies are going to push that further by fundamentally changing the physical environment for businesses. As a result, trying to get ahead of those trends and ‘future proofing’ real estate decisions are among the big challenges companies are facing.”

**Opportunities**

One way to hunt for the relevant and transferable skills is to keep track of which

ones are in demand. Burger’s group recently analyzed 15 million job postings over the past year, to find out which skills were in the greatest demand and which ones were fading. “With the availability of data these days, you can track the trend lines on skills falling in and out of favor,” he says. “You can also start to build the bridges between one competency and another.”

One French company needing workers to build power transmission towers recently turned to an unlikely place when they ran into an acute shortage of welders: the domestic lace industry. One of the casualties of globalization, lace makers in France have nearly all gone out of business due to competition from emerging market countries with cheaper labor.<sup>10</sup> “Lace manufacturing and welding are both high-precision jobs,” Burger says. “Instead of trying to find welders, they started hiring lace workers and training them to do the work. A lot of private companies could benefit from thinking about how existing skills might apply in the future.”

If they aren’t already doing so, private companies also need to start getting ahead of demographic trends that will reshape the workforce in the years to come. In the United States, for instance, current census projections predict that women may well be the dominant source of economic growth in the future.<sup>11</sup> People are also living a lot longer, prompting many workers to put off retirement and stay at their jobs.<sup>12</sup>

These trends represent opportunities to generate new insights and aid the transfer of information from one generation to the next, particularly at private companies whose management teams may not have changed much over the years, Burger says. “Instead of considering employees by age,

tenure, or geography, we're encouraging the companies we work with to see them as a collection of skills and knowledge that when brought together can generate new ideas."

That also means treating workers fairly when it comes to compensation and promotions. Human capital departments are becoming more sophisticated in their use of employee data to identify patterns of gender and racial bias, disparities in compensation and rewards, and bias in hiring and promotion.<sup>13</sup> Others are strengthening their social impact by requiring that their suppliers and other business partners provide metrics for diversity within their organizations.

When trying to manage the real estate footprint, Botting says companies need

to prioritize scalability. She believes many private companies can learn from the example of banks and retailers that have scaled their office footprint toward availability and technical capability and workforce requirements.<sup>14</sup> "Private companies may enjoy a real advantage here, as they're typically nimble and can change course pretty quickly as their needs evolve," Botting says.

Coworking space, also known as "Space as a Service," might be another attractive option. Even larger companies are turning to coworking solutions to maintain flexibility, keep their costs down, and make use of an expanding pool of on-demand workers in the gig economy. Many are discovering other benefits to such facilities, including

opportunities to connect with start-ups and growing businesses that could be good candidates for business partnering, as well as identify job candidates. They are also learning to watch out for potential issues with extending their enterprises into these spaces, including privacy and cyber risks from using shared networks.<sup>15</sup>

"Managing the long-term footprint of the business is increasingly important," says Botting, who believes every private company should work in close concert with a chief innovation officer in projecting future real estate needs. "Private companies, which aren't up against quarterly demands to hit their numbers, should have more time to manage this challenge and get ahead of some of these workplace-disrupting trends."

### Questions to consider

- Has your company allocated enough time in the strategic planning process to assess how emerging technologies will reshape your workforce needs?
- Do you have a collection of skills in your workforce that can adapt as technology reshapes the nature of work?
- Have you considered nonconventional candidates with similar skills (e.g., onshore, offshore, part-time, contract) to staff job openings challenged by labor shortages?
- What are the implications of these changes for your organizational models?
- What is your company doing to ensure that your workforce and future leaders are representative of your customer base and the population at large?
- How can diverse and inclusive workforce teams help to solve business challenges?
- Have you considered the social impacts of these upcoming changes and the best way to transition to the future of work?

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Despite a year in which trade conflicts have dominated the headlines, globalization is still marching ahead, but on a slightly different path. Before, globalization was trade-based and led by Western powers. Now, globalization is being driven by digital technology and is increasingly led by emerging economies in Asia.<sup>1</sup>

As a result, private companies are participating in the global economy more than ever and learning to address the myriad issues that come from operating with extended range, such as geopolitical pressures, local and regional regulations, and widely diverse labor pools.

#### Issues

For all its benefits—access to new, fast-growing markets and lower costs often chief among them—globalization has made private companies more vulnerable to the domestic policies of other countries. The escalation of trade tariffs between the United States and China is a case in point. Even small and mid-sized American companies that have shifted manufacturing back to US factories report being hurt by the latest round of tariffs, as the supply of components made elsewhere is being put at risk by new trade barriers.<sup>2</sup> Then there's Great Britain's decision to leave the European Union; "Brexit" has created a lot of uncertainty around how trade will be conducted in the future between the UK and other members of the economic bloc.

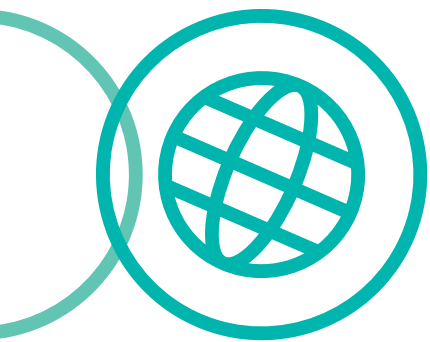
But the speed of change driven by technology means companies focused only on their domestic market might not last long. Competition can come from anywhere and at any time, and what looks like an established competitive advantage today could be erased tomorrow.

"Everything is so interconnected these days due to globalization," says Willo Renehan, a tax partner for the Deloitte private markets team in London. "There is just so much uncertainty and there is a real risk of being left behind if companies let it paralyze them. The level of disruption is fast and getting faster. If you have a good idea, you need to get out there quickly and get your markers in the ground to fend off competition that is increasingly coming out of nowhere."

Not all overseas ambitions are being driven by internal conversations. In a lot of cases they are being prompted by customer demands. One software-as-a-service company in Melbourne, Australia, was approached by one of its biggest corporate clients about providing the same service in Europe and Asia. "The customer is literally dragging them into the global construct," says Mark Allsop, a partner at Deloitte Private in Melbourne.

That doesn't mean that entering the global marketplace will be easy, Allsop says. A lot of smaller, private companies he works with lack the experience and internal capabilities to manage an overseas expansion. There are many decisions to be made, including where to go, whether to expand across borders organically or through acquisition or partnership, and what kind of operation will be needed on the ground to get up and running. Private companies might also lack the brand recognition to attract locally sourced talent.

Then there are the regulatory hurdles, which add another layer of complexity. "Private companies may not have the systems and structures in place, or the balance sheet strength, to do everything their customers are asking them to," Allsop says. "They have to make some difficult choices around what they're able to do and they have to say 'no' to, and that can be a bit of a risk."



“Globalization is definitely continuing, and in some ways, the latest trade disputes are driving the global agenda.”

**Willo Renehan**  
Partner, Deloitte UK

Another issue is lack of trust. In the past, private companies could take their time building relationships with their suppliers and other partners, initially giving them a little business to see how they handle it before expanding the relationship. But to fully exploit the opportunities presented by globalization, private companies need to extend their trust more quickly—and maybe before they’re completely ready to do so. “It’s a tricky business,” Allsop says. “We hear the horror stories of the things that have gone wrong, but it’s harder to find the stories of when things have gone really well.”

#### Opportunities

Despite the recent run of protectionist trade policies, globalization remains alive and well. The digitalization of the global economy and advances in cloud computing in particular, have made it far easier for even small and growing companies to learn about other markets and access them at a fraction of the cost.

Consider an Australian fast-moving consumer goods maker who was able to quickly transition from the domestic market to serving other markets in Asia. Its products are designed in Singapore, manufactured in various parts of Asia through the help of an outside contractor, and supported by a large pool of contingent employees working out of a coworking space in Melbourne. That interconnectedness makes scaling up much easier to manage than it used to be.

In some ways, new barriers to trade are creating new opportunities for private companies looking to make the leap into global markets. The US-China trade conflict is opening doors to suppliers in Australia looking to enter the Chinese market at a time when the value of the Australian dollar is quite low, Allsop says. Renehan says many businesses in the United Kingdom are now looking to set up offices in other countries amidst the uncertainty caused by the Brexit negotiations.

“People are talking about Amsterdam, Paris, and Frankfurt,” Renehan says. “They’re looking to get people on the ground in those markets, just the bare minimum to start. Likewise, we’re starting to see companies based elsewhere in the EU having to establish in the United Kingdom because otherwise they wouldn’t be able to operate here. Globalization is definitely continuing, and in some ways, the latest trade disputes are driving the global agenda. We’re seeing a spike in investments.”

Of course, choosing the right location is critical. Private companies need to think through many dimensions involved, from the tax and legal environment, to the local and regional economies, and even political stability.<sup>3</sup> Securing and managing talent in foreign markets is also pivotal to successful forays. Job profiles and hiring criteria need to satisfy both global standards and local realities. Employees in foreign jurisdictions might also have different perspectives on how to be effective and what the right compensation and incentives look like.<sup>4</sup>



In this, private companies need to apply the same data-driven focus they apply to managing variables such as labor costs. Rather than conquer a new territory under their own banner, it might make more sense in some cases to line up a channel partner in the target market. These kinds of decisions need to be approached in a calculated way, by first defining the investment, then choosing the structure it should take, and then evaluating what other options might or might not be available in the future if conditions change.<sup>5</sup>

These are good questions to ask even for established businesses in international markets. As we've seen, supply chains can be put at risk at only a moment's notice in the current environment. Private companies need to understand where their raw materials, parts, tools, fuel, and other inputs are coming from, and how reliable their supply is likely to remain. Globalization means that businesses can't overlook that value chain.<sup>6</sup>

The lack of corporate bureaucracy at many private companies can tend to be an advantage in working out issues that arise across these dimensions. Large, public companies that are subject to shareholders and risk-averse corporate boards tend to be less willing to make investments during times of heightened uncertainty.

"Private companies typically can be more nimble, can spot issues and work around them more quickly," Renehan says. "There's greater appetite for risk-taking and an overall sense that if an investment doesn't work out, they'll just tweak it to see if they can make something out of it."

### Questions to consider

- How might global trade disputes impact your business in the coming year and what will you do about it?
- Does your company have the expertise in-house to understand the regulatory, legal, and other complexities involved with entering a new international market?
- Are any customers likely to ask your company to support them in new international markets in the coming year, and will you be ready?
- Have you considered expanding internationally with the help of a channel partner?
- What are you doing to source talent from other countries, and do you understand all the dimensions you'll need to master to manage them effectively?

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Private companies have always had to manage increasing complexity as they grow, but the pace of change today means they need to be more sophisticated in terms of corporate governance. Some of this is being driven by increasing regulatory requirements across the globe, as well as risks being introduced by technology and the sharing of information.

But at a broader level, with new risks, whether regulatory, geopolitical, competitive, or marketplace to name a few, boards may need to be more engaged in the business than in the past. With this increasing need for additional perspective about strategic choices and related disruptive risks, some private companies are bringing in outside perspectives, adopting a more holistic view of strategic risks facing the business, and engaging in regular discussions about disruption and how they plan to drive or at least get ahead of large competitive shifts in the future.

### Issues

Governance at private companies runs a wide spectrum. At one extreme are private equity-backed businesses with oversight and more stringent reporting requirements and accountability imposed by the owner investors; while at the other extreme, there are smaller, start-up businesses that may not have a formal governing body. But no matter their governance orientation, most private companies are dealing with new challenges related to technology disruption and competitive threats to their business models.

“Private companies are being challenged by the rapid advance of technology and how it’s disrupting business as we know it,” says Maureen Bujno, a managing director with Deloitte LLP’s Center for Board Effectiveness. “So, when it comes to managing strategic risks, technology is near the top of everyone’s lists right now.”

Technology also increasingly represents a compliance risk. In Europe, the General Data Protection Regulation (GDPR) took effect in May 2018, mandating that any company that does business in the European Union and the European Economic Area have appropriate technical and organizational measures to protect personal data and privacy.<sup>1</sup> The Chinese government recently went a step further. New national standards include more onerous requirements for how personal data is collected, stored, and shared. And, if enacted, new legislation proposed in the United States could result in prison terms up to 20 years for executives who violate privacy and cybersecurity standards.<sup>2</sup>

Svetlana Gandjova, a partner with Deloitte’s financial advisory practice in Vienna, says the threat of reputational harm posed by such laws is prompting private company boards to strengthen their compliance capabilities and think more strategically about managing risks. “In Europe, private company governance structures are driven mostly by laws,” Gandjova says. “The pressure is often coming from large corporations that are their clients or suppliers and require more robust compliance programs (e.g., anticorruption and antitrust commitments, fight against child labor, environmental compliance). It’s motivating companies to implement stronger governance processes. They simply can’t risk the reputational damage attached to being noncompliant.”

Talent represents another area requiring board attention. Workforce needs are changing dramatically as new technologies take root, and private companies that aren’t thinking strategically about what skills they will require in the future could limit their growth potential. In addition, private companies increasingly need business leaders who are knowledgeable about international business practices and customs as companies continue to expand globally.



“Private company boards need to be engaged in terms of dealing with the heightened potential for disruption.”

**Maureen Bujno**

Managing director with Deloitte LLP’s Center for Board Effectiveness

When it comes to improving governance models, family-owned businesses can prove particularly slow to evolve because of family members who remain invested in the business but may no longer be actively involved. This makes it difficult not only to get ahead of forces shaping the competitive environment, but also to cultivate the next generation of leaders.

**Opportunities**

At a time of such transformational change, any business can be the one driving disruption in a certain industry. But that doesn’t just happen organically, Bujno says. Private company leaders should carve out time to identify big shifts in their markets and role-play different scenarios in which an unexpected source of competition, or other risk, upends a core business. They also should confirm that any new technology-fueled initiatives have an explicit goal in mind, such as solving a current problem or targeting a new market segment.

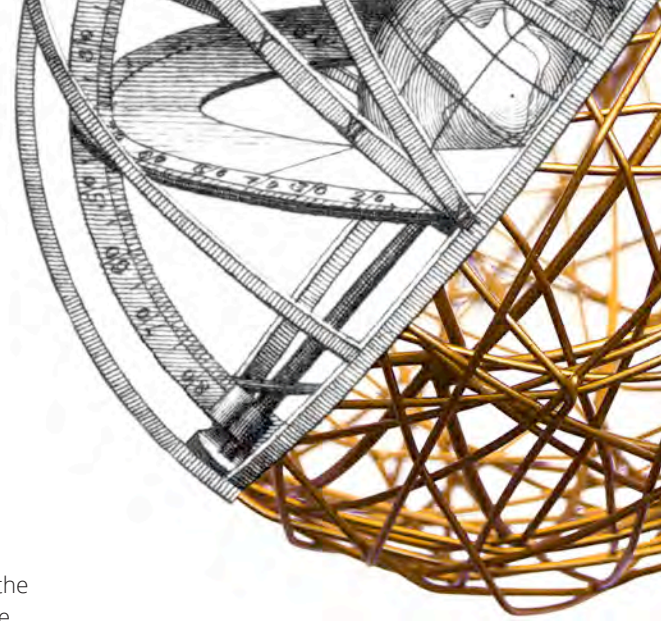
“One of the key things I’ve seen is a shift around strategy and an awareness that private company boards need to be engaged in terms of dealing with the heightened potential for disruption,” Bujno says. Bujno says engaged private company boards exhibit several key attributes. Board members have a good understanding of the business and a practical mix of skills and experiences, which may require a need for independent board members. This last point is especially critical today due to the pace of change. Independent board members can bring knowledge, expertise, and skills that CEOs and senior management may not have. They may also have firsthand experience from working with other organizations facing difficult challenges.

And they are far more likely to constructively challenge the views of other directors.

“Independent board members often provide objective and valuable insights about what they’ve seen happening in other industries, and those insights can help businesses decide whether they want to be driving disruption or staying ahead of it,” Bujno says. “Having an outside perspective may be particularly important to controlled entities where they just have insiders in charge and certain skills and experiences may not be resident.”

Risk management is one area in which private companies have historically lagged but are making strides to close the gap. In the past, risks were independently managed by each business unit and this decentralization lent itself to an organizational lack of awareness and sharing of information. Today, top strategic risks are regularly communicated to the board at regular intervals. Private companies are also incorporating risk monitoring, measuring, and reporting at an enterprise-wide level.

Private company boards are seeing the benefits of increased focus on managing risks and implementing compliance programs. On one side there is less regulatory exposure for the boards and on the other side is strengthening brand and reputation of the companies. As recently as five years ago, many companies might have had just one person from the legal department covering some compliance aspects. “Now there are dedicated teams focused solely on compliance,” says Gandjova, adding that some of the change is being driven by generational transfers at family-owned companies.



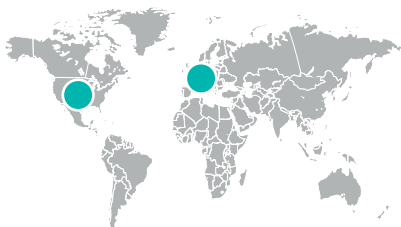
Effective succession planning can help ensure that the culture change created by such efforts aren't wasted in the future. Succession planning remains a governance challenge for many private companies and particularly for family businesses. But Bujno says succession planning is increasingly important because it forces company leaders to agree on a shared vision for the future of the business.

"Succession planning needs to be on the board agenda, and not just for the role of CEO but for the broader talent needs of the organization," Bujno says. She said succession discussions often leave out key individuals that could create leadership gaps if they suddenly departed. She recommends private company boards review their organizational charts at least once a year to consider such key posts, understand the current development programs, and identify those who could step in to certain roles internally, if need be.

#### Questions to consider

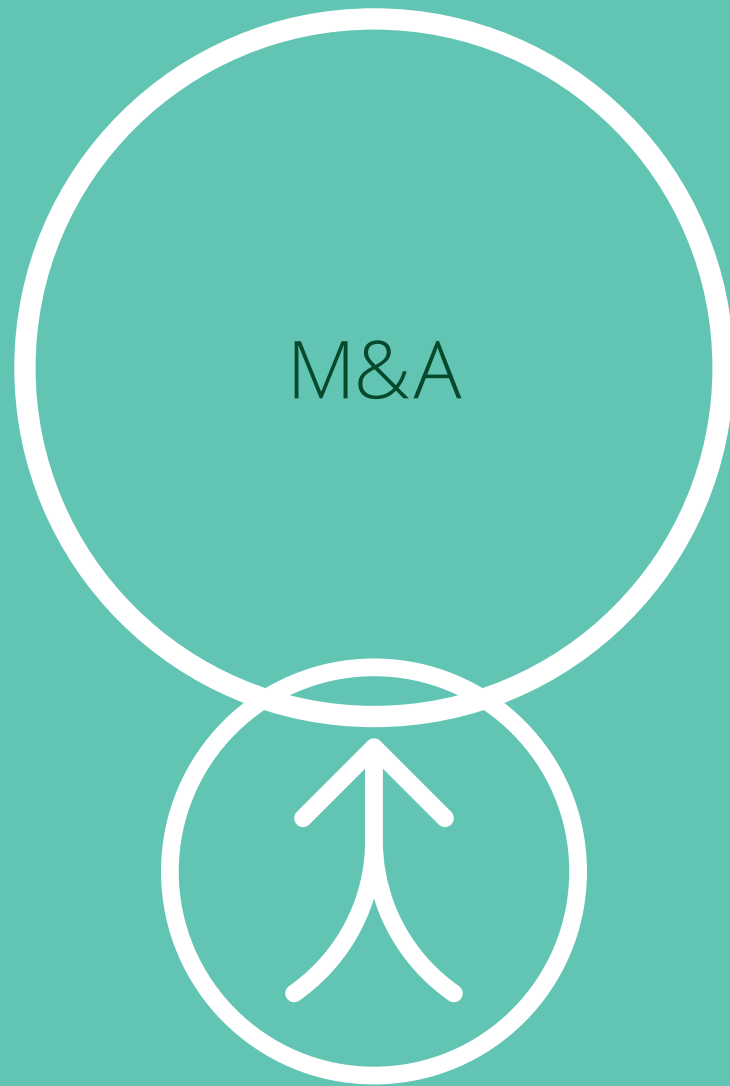
- Does your company have a formal board in place or at least a dedicated team to consider strategic risks to your business?
- Does your board or governance team have access to independent perspectives on the biggest challenges your business is facing?
- Are you still managing risk from the standpoint of individual business units or are you taking a more holistic, enterprise-wide approach?
- What is your workforce going to look like in the future and how is that going to impact your business?
- Is your board involved in planning to address disruption?

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Global M&A transactions set a new record in the first nine months of 2018, recording a 37 percent increase over the same period of 2017.<sup>1</sup>

Companies seem to be rushing to reinvent themselves in an environment of disruptive technological change, and private companies are increasingly being targeted for their value, prompting big corporate buyers to focus on smaller takeovers.

Many private company owners are cashing out or at least considering it, but they face organizational hurdles in getting deals done. At the same time, buyers are putting greater emphasis on merger integration, with some even now turning to “digital diligence” to predict how acquired technologies will influence their returns.

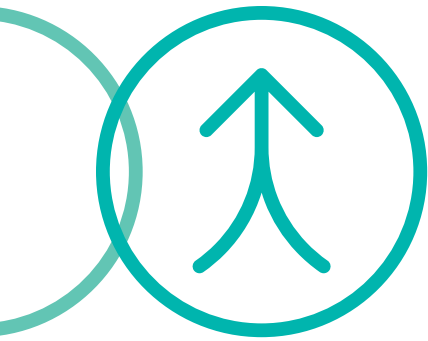
#### Issues

One of the issues prompting private business owners to think about a sale is a lack of potential successors. Just a few decades ago, many family-owned businesses enjoyed a natural transition in which someone from the next generation would take over, allowing for years of preparation to groom them and get them ready.

But these days younger family members have “amazing learning opportunities,” says Tara Hill, National Deloitte Private Deals & Private Equity Leader in Sydney. “They’ve been sent to great learning institutions. They’ve started careers of their own and suddenly they aren’t interested in taking over the family business. And that’s when the generation that owns and runs the business realizes it doesn’t have an exit strategy.”

What they do have, she says, is a lot of money wrapped up in the business. Increasingly, they’re looking to strategic or financial buyers to help provide them with liquidity. But many aren’t ready for the demands that will be placed on them in an outright sale or private equity investment in the business. Preparing the documentation required to support a transaction can take weeks for a fully staffed finance team, but many private companies run lean operations in this area and risk seeing a buyer lower their price or simply walk away if they can’t move fast enough.

“Time is the enemy of any company that’s for sale because it implies they have to continue to put up solid financial results for month after month,” says Jamie Lewin, a principal for Deloitte Corporate Finance LLC in Dallas, Texas. “One of the most important things that you do when you select an investor or someone to acquire the business, is to be able to move expeditiously to a closing. The key to doing that is facilitating the due diligence, and the inability to do so is almost always predicated on a lack of organized financial statements.”



“We’re talking about a huge supply-and-demand imbalance.”

**Jamie Lewin**

Principal for Deloitte Corporate Finance LLC in Dallas, Texas

Being focused on the near term is an additive for companies being acquired but it can prove costly to buyers if they lose sight of their long-term objectives. For acquisitive private companies, one major shortcoming is not viewing every M&A transaction as being part of a life cycle of due diligence, execution, and integration. The same executives charged with executing the acquisition may not have the requisite experience to handle post-close complexities such as capturing promised cost synergies; making the right investments to support the growth objectives of the combined end-state; and integrating legacy supply chains with minimal impacts to customers, partners, and employees.

**Opportunities**

Cash has been piling up at both strategic and financial buyers in recent years. Uncommitted capital at global private equity firms, for instance, is now listed at \$1.8 trillion.<sup>2</sup> Yet the flurry of merger activity in recent years has seen deals completed with many obvious targets, and surging transaction prices have prompted buyers to focus on smaller, privately held enterprises.

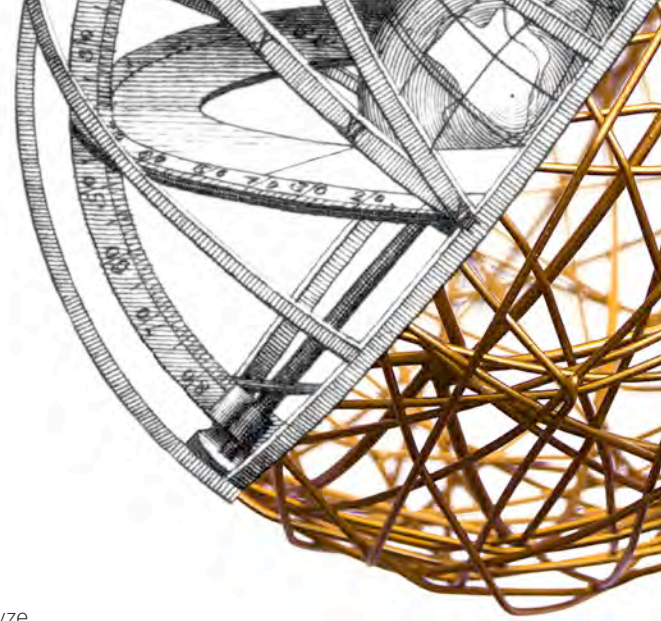
“We’re talking about a huge supply-and-demand imbalance that is currently benefiting private companies,” Lewin says. “You can do really well selling your business in this environment. Going public is a great way to finance growth going forward, but not nearly as good for providing liquidity to entrepreneurs.”

For acquirers, the cost of debt is still historically cheap across much of the globe despite the recent uptick in interest rates. Combined with strategic investments by private equity firms, cheap capital is giving acquisitive private companies plenty of ammunition for bolt-on deals or to buy out competitors.

Whether they’re on the buy side or the sell side, private companies need to consider who is going to manage the process, Hill says. “One of the first questions I tend to ask of private companies involved in a transaction is: ‘Have you got your team?’” Companies that have been around for decades tend to have been run by executives whose skills may not be a good match for today’s M&A environment. In some cases, they may need to make a change in the C suite to add individuals with transaction experience.

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"In big, public companies, there is usually a lot more rigor around who sits in those roles," Hill says. In some cases, a transaction may be just the thing ownership needs to make changes that were a long time coming, she says.

With speed at such a premium, many companies are starting to deploy digital tools to ensure a quick closing and smooth integration. Many finance chiefs, for example, are using virtual data rooms that can provide a secure online environment in which team members who are not colocated can review large amounts of data associated

with transactions. Natural language processing is helping deal teams analyze vast numbers of contracts and other documents in a highly automated fashion. Data visualization is helping tell the stories behind those numbers.<sup>3</sup>

In Deloitte's 2018 M&A trends report, 63 percent of the US-headquartered companies surveyed said they use tools other than spreadsheets to address a variety of M&A-related tasks, including streamlining integration and reducing costs. And of those who aren't, 62 percent have plans to do so.<sup>4</sup>

### Questions to consider

- Is a potential sale something your company is considering in the next five to 10 years? If so, would it make sense to accelerate those plans to take advantage of a strong M&A market for private companies?
- If you're acquisitive, do you maintain an active pipeline of opportunities both within your domestic market and outside of it?
- Is your management team ready for a potential transaction? Do you have the right people in your organization who know what to expect and how to deliver?
- Have you considered what a sale might mean for senior leaders of your management team?
- Do you have the outside relationships in place (e.g., legal, financing, tax) to support an acquisition during all stages of the transaction?
- Have you pursued digital tools to support due diligence and get to closing quicker?

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