



# THE EVOLUTIONARY CHANGE OF DIGITIZATION

Prepare your workforce  
for the automation age

The internet has dramatically changed the way companies operate. Massive data storage capacity, super-fast data transmission and mobility devices – along with slick application program interfaces – have left companies scrambling to adapt.

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*This article first appeared in Harvard Business Review.*

Today, innovations in digitization and robotization are quickly laying the foundation for another disruptive corporate transformation. For example, Anheuser-Busch, working with Uber (and Otto), just delivered 2,000 cases of Budweiser in a self-driving truck. Commerzbank has announced plans to digitize 80 percent of its processes within three years. We estimate that robotization, digitization, digital self-services, distributed digital advice and sales, and robo-advisors could result in a 60-70 percent reduction in the workforces of service providers, from financial services to telecom. Manufacturers have already seen reductions, albeit at lower levels. The pace of robot adoption may surprise us, just as the internet spread more quickly than many anticipated.

But companies will only be able to realize productivity gains from these new operating models if they skillfully manage the soft side of their automation transformation – the people in what will be a vastly different organization. As companies introduce software bots and digital self-service, and as they transform assembly lines, they must bring along their key employees, leaders, and customers as they redefine jobs, career paths, workforce management, and social contracts. Executives must think carefully about how to best match people and machines, bearing in mind that many of the decisions they make today will have a long-tail effect on workforce composition, productivity, and profits for years to come.

As workforces hollow out, the remaining employees will be highly specialized and experienced business/technology hybrids – a new breed of professional who can work in highly distributed environments and shift from managing people to managing experiences and technology. In the back-office, the lights will dim, as work is shifted to the customer or other parts of the value chain. In the middle office, risk and compliance management will largely watch bots that are not prone to human error or fraud, supported by sophisticated models to predict quality and

compliance issues. In the front office, automation based on predictive analytics will leave only managers who can control sophisticated robo-advisors trusted by customers. Salespeople will be disrupted as customers link with algorithmic bots to obtain products contextually presented at the (digital) point of need – often dominated by the global platforms that link retail, financial services, entertainment and communications in sticky ways.

Will this happen over night? No. Disruption rarely occurs as soon as expected. Freeways full of driverless cars and beer trucks are still far off, because of technological and regulatory limitations. But the inflection point always happens faster than expected. As always with technology adoption, there is an S-curve, already being scribbled by early adopters; when the inflection point is reached, expect sudden acceleration. So early preparation is needed.

## LESSONS FROM AUTOMAKERS

To figure out how to effectively integrate software robots and digitization, executives can take some cues from the automotive industry. After decades of introducing physical robots and automation, some automakers' factories require three to six months to launch an entirely new vehicle, while others need no more than a day. But the most automated carmakers are not necessarily the most efficient.

Instead, the nimblest factories have been pragmatic about integrating automation so that new processes can run smoothly, with continuous improvement – so that only the simplest, most repetitive processes are automated. Over the past two decades, leading automakers have automated their paint and body shops – where they see the greatest gains – but have also retained and retrained the people required to quickly redesign products and processes on more complex tasks.

### EXHIBIT 1: LESSONS FROM AUTOMAKERS

Automation is gaining ground but human workforce is still necessary

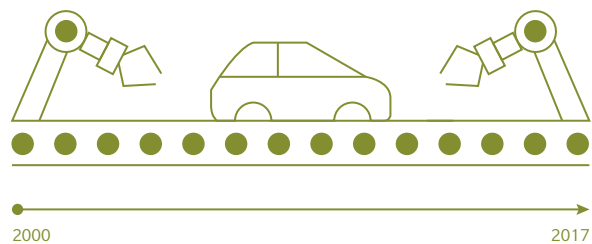
#### LESSON 1

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#### LESSON 2

Automakers have used automation gains to configure and fund increased customization. However, assembly lines are run by humans who build customized vehicles, choosing from as many as 55,000 parts.



Source: Oliver Wyman



Automakers have used automation gains to configure and fund increased customization; assembly lines are run by humans who build customized vehicles, choosing from as many as 55,000 parts. The lesson: Change needs to be evolutionary, even if the impact of automation is ultimately revolutionary. Do not throw away your core capability, until you are sure automation is better, faster, cheaper. As you prepare for the inflection point, be pragmatic about cost-benefit tradeoffs. Think about the overall organization in an automated world. Be mindful of the critical skills you need to retain, and the skills you need to build up. Take a full end-to-end view. Think both short term and long term. Build strategic advantage through the gains you achieve, beyond cost. (See Exhibit 1.)

## PARALLEL WORK STREAMS

The lessons to date on driving digitization and robotics suggest operating on a dual track. Strike the right balance between implementing short-term automation fixes and opportunities, while seeking solutions to problems that will determine success in the long run. It takes time for clients and employees to adapt to monumental change. Thus, it is as important to get long-term organizational change underway as it is to rapidly exploit near-term efficiency.

To that end, managers should develop a list of 10 to 15 processes that bots can quickly improve. Test and learn, both in the application of the right bots to the right problem, and how to redesign processes end-to-end to maximize results. Simultaneously test and learn on the soft side of automation. Blueprint the broader impact on roles, skills, controls, leadership, workforce and talent management, and social contracts.

By doing so, managers can move critical employees and clients closer to their longer term automation ambitions – which can be

funded at least in part with returns from the earlier automation of simpler tasks.

## MOLD THE ORGANIZATION

As more processes are digitized in every part of an organization, executives must think at a macro level about the entire enterprise, even as the organization is changing. How do you hire today for a diminished workforce 10 years out? When more and more of your people are replaced by bots, how do you lead, enforce quality control, and audit? The key to navigating through the coming automation age will be identifying and retaining (retraining) the employees who can make one transition after another.

Companies will experience huge changes as physical infrastructure disappears, offshore capabilities are repatriated, more services become self-service and virtual, and customers begin to interact more with robots. Automation will transform not just production, but operating models. Start early to shift the leadership mindset. Actively drive customer adoption by adjusting your pricing and loyalty incentives to encourage early adopters, while simultaneously having your own employees co-serve them with the same tools. Initially, customers should be allowed easy and seamless access to people as a fallback to self-service and other digital offerings. Assess the impact on your social contracts to both your employees and the communities you serve. Engage local stakeholders and unions early in discussions of how you can continue to give back to the community with a smaller workforce. Build a picture of the future state and work backwards.

There is time before the inflection point – time to prepare with purpose and pilots. Focus not just on the technology and analytics, the shiny object, but on people and a new form of leadership. ●