10 Principles of Workforce Transformation

How to raise the skills of your employees to meet your digital challenges.

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When you (or your board members) think about thriving in a digital world, you probably think first about technology. It’s evolving so fast that your business constantly has to adapt. But the greatest challenge is not the tech itself: It’s developing a knowledgeable, strategically adept, cognitively flexible, and proficient workforce. You want people who can command artificial intelligence, analyze data, invent and apply solutions on the fly, and slide effortlessly into new roles as needed. All the while, they should keep their skills sharp with mobile apps and online self-taught courses. Ideas should flow from all corners of the company, whether from full-time managers or a pool of gig workers who jump in when work heats up.

The demand for a more talented workforce goes beyond adapting to the new digital world. CEOs of fast-moving organizations—enterprises with bold strategies, innovative cultures, inclusive workforces, and great expectations—need highly skilled people. As a recent PwC report to the T20 summit meeting in May 2019 noted, workforce transformation is also closely linked to the productivity gains needed in both business and the public sector.

Unfortunately, in nearly every industry, the best talent is in perilously short supply. In PwC’s 22nd Annual Global CEO Survey, 79 percent of chief executives around the world said that a lack of key skills threatens their business growth. Retailers need interface designers who understand customer experience. Banks and insurance companies need data visualization experts. Energy, automotive, and industrial companies need team leaders who can manage interoperable platforms. Just about everyone is looking for employees adept in robotic
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Process automation, materials science, or simulations with machine learning that can predict outcomes and streamline processes. They also need people who can master softer skills, such as managing teams effectively, gaining trust, working across boundaries, or applying neuroscience findings to increase their own stature and influence.

Many business leaders realize that they can’t just hire the workforce they need. There aren’t enough prospective recruits, and the expense would be enormous. Instead, companies must upskill their existing employees or members of their communities. This means expanding people’s capabilities and employability, often using adult learning and training tools, to fulfill the talent needs of a rapidly changing economy.

Upskilling is part of the answer. But you also need to rethink your jobs: redesign the workflow, combine some positions, add others, and probably eliminate some. You need to be more creative in finding and onboarding people, including through acquisitions, partnerships, gig economy–style freelancing arrangements, and talent pools oriented to flex work. Finally, you must fill your enterprise with opportunities for continual self-renewal via modern learning strategies and digital technologies, so that becoming adept in new technologies is just part of everyday life.

A workforce transformation brings all these elements together, oriented specifically to your organization. Your initiative must be led directly by the CEO and the other top executives of the enterprise, because your company’s success depends on the ability and commitment of all your employees. In a successful
initiative, you’ll do more than approve a budget and hold the leaders accountable; you’ll take part in the learning efforts yourself, engage in teaching others, and use this transformation as a genuine opportunity to improve your own skills and those of your direct reports.

Because no two organizations have the same circumstances, there is no single recipe to follow. But together, the 10 principles below can help you ready your company’s workforce for the future.

**Energize the organization**

**1. Focus on a few concrete business outcomes**

Before you can articulate how your people need to change, you must know the results you expect them to deliver. Are you using digital technologies to improve your basic business model? Have you declared a new AI-enabled strategy and need your workforce to execute it? Are you seeking market growth through innovation? Do you want more profitability and productivity? Or are you trying to become more entrepreneurial and attentive to customers?

If you aim for all of these goals, you’ll achieve none. Pick one or two to prioritize now. With that clarity and focus established, you can define how you want your workforce to change (and set up the metrics described under principle number 10). For example, you might need employees to work with artificial intelligence (AI). This could lead you to set up an experimentation lab where people learn to build and test AI-based apps. Or you may need frontline employees to engage customers in a more compelling way. You might then establish coaching programs, support technologies, and incentives targeted to them. Articulate your vision in bold, clear terms to all constituents: employees, shareholders, customers, regulators, and citizens. Give employees, in particular, insight into the initial steps that they can take.

Don’t be afraid to restructure or combine roles if that’s what is needed. In studying the effect of automation, PwC economists John Hawksworth and Yuval Fertig concluded that for many roles, some tasks will become more valuable and other tasks will be eliminated. In fields such as construction and manufacturing, jobs may need to be structured very differently. Today’s specialized skills, including programming and analytics, could become as common
in the new world as working with a spreadsheet or word-processing program is now.

One large chain retailer voiced its chosen outcome: to attract more shoppers into brick-and-mortar stores by delivering a great experience there, not just online. It already had a presence in many urban and suburban neighborhoods. To accomplish its goal, it tried to reinvent its in-store ambiance. Though customers often saw it as a convenience store, it would become as casually welcoming as a coffee bar. The executive team translated this aspiration into specific actions and outcomes. They would install easy-to-use and attractive self-checkout kiosks. The store design, while remaining efficient and resistant to shoplifting, would be lighter, airier, and more open. Managers assessed and coached employees differently, helping them learn to talk to customers in a friendlier and more authentic way. Articulating the business outcome helped the retailer’s leaders define and crisply communicate how the workforce needed to change.

2. Foster emotional commitment
To participate wholeheartedly in a transformation of this sort, employees need more than a strategic direction and incentives. They need to be excited about the future and inspired to opt in. You have to speak to their emotions — in particular, to their deep wish to see a connection between their own activities and the larger purpose of the enterprise.

Jon R. Katzenbach, founder of PwC’s Katzenbach Center (its global institute on organizational culture and leadership), suggests that many business leaders and managers avoid addressing emotional commitment directly because it’s hard to know what people are feeling, and especially difficult to manage emotions at the scale of hundreds or thousands of people. Also, most leaders are rational — we count on them to be! — and thus might have a blind spot in assessing how people will react emotionally to any type of change. But it is possible for any leader, no matter how cerebral in temperament, to foster positive emotions on an organization-wide level.

What excites and motivates your employees? Why, besides a paycheck, do they keep coming to work? Chances are, many believe in what the company stands for, identify with its mission, and are proud to be part of it. At a pet
food manufacturer, employees see their role as enhancing the quality of life for beloved companions. At a financial advisory firm, employees know they help people retire safely and securely. A convincing story about the value of the company’s contribution to the world is a powerful starting point for any type of emotional engagement.

You also need to recognize how fear, anxiety, and fatigue can escalate when people don’t feel engaged. Even when people are willing to change, you risk sapping their energy as their work demands shift. That’s why many companies include flexibility and well-being programs as part of their long-term workforce transformations.

If you’re a top leader, your personal behaviors are critically important. Involve HR and other internal professionals, but you must be the most visible, excited champion, articulating the case for change, defending what it requires, and participating wholeheartedly. When your employees see you “walking the walk,” they’re more likely to follow suit. Foster commitment through what Dan Cable, professor of organizational behavior at the London Business School, calls “emotions projection”: visibly demonstrating authentic feelings, for example, in the way you talk and listen. “Try talking with them first about themselves,” writes transformation expert and PwC partner David Lancefield, “not about the business and the challenge. Showing empathy goes a long way.”

Demonstrate commitment by building your own skills. At Danaher, one of the most consistently successful industrial companies, with a long track record of well-integrated acquisitions, the top 25 leaders (including the CEO) spend two weeks or more every year leading in-depth training sessions, which always include visible efforts to improve their own prowess. In PwC’s own case, the U.S. chairman and COO were champions of a gamification-style upskilling effort, displaying online the “digital acumen” badges that signify completion of the training. As word got around the enterprise, employees were inspired to fully engage as well.

3. Design a compelling experience
Before you impose your workforce transformation plan on people, consider what it will feel like to be caught up in it. A good employee experience (EX) will
make your company well liked, but that’s not the only benefit. It will give people the cognitive support they need to conduct their jobs with confidence and excellence.

EX design involves many factors. These include the user interface of desktop and phone apps; the physical workspace (including the flexibility and movability of walls, and the availability of spaces for working collaboratively and concentrating alone); workload and flexibility (with a reasonable work-life balance); and the design and range of learning and development opportunities. Another factor is the way people treat one another, reinforced by the enterprise’s culture and operational approaches. The most compelling learning experiences are intensively social, involving small groups that meet to develop capabilities together, whose members may stay in touch informally for years.

People regularly tell survey takers they would favor an employer who gave them a more intrinsically rewarding job, with greater control over how they work. Design your EX accordingly, especially for learning new skills. Provide self-paced, mobile-friendly modules that can be accessed from anywhere. Use gamification such as online simulations and challenges so that people can participate in simulated real-world business events and learn why their choices worked or didn’t work. Most importantly, listen to what employees say as you design these systems. Don’t assume you know how they learn; offer varied forms of learning, personalized for different individuals.

Our own efforts to raise skills at PwC include many innovative EX-related ideas. We selected an “opt-in” approach, in which we invite employees to voluntarily gain new skills, rather than a mandatory compliance-driven initiative. All employees have access to a digital fitness app, offering self-administered courses that they can take at their own pace. We supplement these courses with Q&A-style “learning bursts,” virtual game show–style community events, and an immersive in-person training program called the Digital Academy. There is also a crowdsourcing platform where people can share bots and apps they have created, and receive points when others use them.

As our staff graduate from these academies, they apply their newly acquired skills in their day-to-day work, so the skills are more likely to stick. Some people emerge ready to build a bot or create an AI model; others are now savvy enough
to apply what their peers have created. The employee creations tend to be productivity enhancers, so that the act of using them (and further improving them) becomes part of the employee experience.

**Invest in your people**

4. **Start with the highest-impact roles**

Although a workforce transformation will ultimately reach across the entire organization, some people’s roles and skill sets are critical to achieving the highest-priority business outcomes right away. That’s the population to focus on first.

People with some immediately important skills may already be working in your organization; you need to find and reassign them. Other skills may be new and unfamiliar; you need to recruit for them or upskill your existing staff. Look for people whose temperament and training would lead them to succeed in the new organization, even if their experience isn’t directly relevant in a traditional sense.

Early successes will build your effort’s reputation and make it easier for subsequent advances. Laurent Probst and Christian Scharff, in “A strategist’s guide to upskilling,” put it this way: “In any given year, only 10 percent of a company’s workforce is immediately at risk [of losing their jobs to automation]. If you target that group and successfully move them into new roles, you create a track record and garner further support. Within five years, moving at the same pace, you can reach close to half of the employees in a company.”

One pharmacy chain recently needed to invest in its workforce but had limited funding. Its new strategy called for employees who could deliver better customer experience — a change from the older priorities, which emphasized operational excellence. Although the entire workforce needed to adapt, two roles were most essential: pharmacists and store managers. Pharmacists needed to be trained in new systems and operational procedures that would free up time for patients, and they needed to be coached on better patient engagement. Store managers, who were responsible for hiring, training, and motivating employees, needed to learn how to model and teach exceptional customer service. By concentrating on these two essential roles, the drugstore chain saw a stronger, swifter return on investment than if they’d tried to transform everyone at once.
Within two years, the retailer observed significant increases in its customer experience scores.

5. Change behavior first
What people do changes what they know. Therefore, any workforce transformation effort must explicitly design and instill new behaviors. The skills and knowledge will follow.

It takes thought and time to create behavior change; change doesn’t sink in when learning is confined to a training course. For example, to acquire skills in predictive maintenance — a form of artificial intelligence that can anticipate and prevent possible breakdowns — factory workers need to learn by doing. The factory worker might thus get involved in installing sensors, developing a computer model that makes sense of the data, and honing some interpretive skills: explaining his or her own conclusions about the data, and considering others’ ideas.

Embed new behaviors in everyday business activity. The book *Fit for Growth: A Guide to Strategic Cost Cutting, Restructuring, and Renewal*, by Vinay Couto, John Plansky, and Deniz Caglar, describes a North American energy company that did this. Top leaders identified four critical behaviors they wanted to see throughout the company. These were exhibiting a “can-do mind-set” when executing strategy, having an enterprise-wide perspective when making decisions, demonstrating accountability, and continually developing the company’s people. Then they translated these into day-to-day actions, and included the behaviors in performance reviews.

Try digital twin–style simulations of business realities, virtual reality programs that reproduce a complex environment, or augmented reality systems (in which sensors and other devices are embedded in the environment and interact with people directly). Implementing these virtual systems carries less risk and cost than changing real-world systems. Just as airlines use flight simulators to train novice pilots, companies can allow a novice manager or employee to see how different strategies might play out over time, without jeopardy. Not only can employees better understand their possible decisions with this approach, but they also learn the behaviors needed to implement them.
Build repetition into the learning experience. Adults need periodic opportunities to practice and refine their techniques so that the learning sticks. In psychology, this principle is known as **neuroplasticity**. When people continually behave in a particular way, the brain neurons adjust accordingly, so that this behavior becomes easier and easier, until it is second nature.

Personalize your learning. Adjust the pace of training, the interplay of practice and reflection, and the measurement of outcomes to account for different roles, experience levels, and personal preferences. Mid-career finance professionals will need a different program than will retail store associates or corporate marketing staff. It’s not just the content that varies, but the means of delivery: A facilitated classroom, a discussion guide for supervisors to share on the job, a digital app, or (ideally) a mutually reinforcing combination of these methods are all possible.

### 6. Promote citizen-led innovation

When it comes to behavior change, top-down mandates often fail. That’s especially likely with today’s employees, who want and expect to be active participants in any change that affects them. These individuals are the closest to your customers and to the day-to-day execution of the business; they know what needs fixing and how to change it. People on your staff will come up with insights and opportunities that you might never have thought of.

But they need an invitation to do so, and a high level of support. Encourage grassroots efforts to help foster their investment in the change. Encourage them to experiment with their own ideas for innovations and new ways of working. The venues could include online forums, idea laboratories where people work together on software development, or activities that employees themselves suggest.

At PwC, we call this approach “citizen-led innovation.” Leadership sets the direction, and the organization’s citizens — empowered employees — take it from there. They choose what digital apps to work on, build solutions, test them, and post them to PwC’s Digital Lab for other employees to download and use. The users provide feedback and ratings, and the higher-quality offerings then rise to the top. Examples include bots and apps for conducting rapid
high-value analysis; for streamlining common tasks such as reserving rooms or entering timesheet data; for converting data from spreadsheets to more sophisticated dynamic dashboards; and for rearranging work to bring critical issues to the surface. We see an inspiring level of enthusiasm and emotional commitment, and have generated more than 1,500 active digital solutions in just under one year.

Manage and sustain the change

7. Plan and commit to a comprehensive journey

Workforce transformation does not just happen in a few pockets, but at scale throughout your enterprise. A full initiative might take three years or more, rolling out in stages, building the organization’s capabilities along the way. The initiative should be planned, prepared for, and resourced accordingly. Though the time and expense may seem daunting, the payoff will be worth it, especially if you manage expectations appropriately.

Don’t try to anticipate everything that will happen. Any initiative of this sort is full of uncertainty. But you can set a direction, put a group in charge, and plot how your efforts will scale gradually through the entire company — and perhaps your value chain as well. There will be quick wins along the way, and you will start seeing returns on investment rapidly. But don’t abandon the transformation after the first year’s success. Be prepared from the start to invest in long-term success, and to let each stage of activity build on the success of the previous stage.

The pharmacy chain mentioned under principle number four planned for a comprehensive journey to transform its workforce to a more customer-centric one. It started with a four-month communications launch. Leaders at each level in the hierarchy educated their teams on the vision, plan, and expectations. Top leadership actively participated in these education efforts.

The company also invested significantly in a three-year training program for pharmacists and retail store managers. The first year focused on rebuilding basic skills, the second on customer experience, and the third on performance leadership. This plan involved pulling highly compensated employees out of the stores for several days a year — a serious, sustained investment in the company’s
future. And the commitment and perseverance paid off. Within two years, the retailer experienced significant improvements in its employee engagement and customer satisfaction scores.

8. Engage with cultural influencers

Workforce transformation always involves cultural change. A survey by Strategy&, PwC’s strategy consulting group, of more than 2,200 executives and managers about change management programs showed that companies were more than twice as likely to deliver sustainable change when they brought any existing transformation into alignment with their culture.

The culture of a company, as defined by Jon R. Katzenbach, James Thomas, and Gretchen Anderson in their book, The Critical Few: Energize Your Company’s Culture by Choosing What Really Matters, is “the self-sustaining patterns of behaving, feeling, thinking, and believing that determine how things are done within an organization.” Culture manifests itself in the way people act and talk. You can’t succeed if you ignore your organization’s culture, and yet you can’t pin it down or shape it through the formal efforts of ordinary organizational programs. You have to work with your culture as it is, not as you think it should be.

Cultural alignment is especially important for a workforce transformation. Employees may be concerned about their livelihood; they may think of upskilling as another crazy management fad that will be abandoned in six months. And they may not believe that they can learn new skills well enough or quickly enough to compete. Those around them may be reinforcing that message with deceptive cultural signals, such as “we’re not good enough to change.” Those signals can and should be replaced with new messages such as “we know how to develop the capabilities we need.”

Perhaps the most important resource is the group of people who are most ready to change. Katzenbach, Thomas, and Anderson call them “authentic informal leaders.” They can be found at any level of the hierarchy. These people are already acquiring new skills, using all the tools and opportunities available to them, and demonstrating the value of workforce transformation by example. They can help you understand how employees feel and how to reach them. They are influential not because of their position, but because of their capability,
energy, and commitment. If 5 or 10 percent of your workforce falls into this category, that is probably enough to make a difference.

In PwC’s upskilling effort, these individuals were known as “digital accelerators.” As PwC’s chief people officer Mike Fenlon and digital talent leader Sarah McEneaney noted in a recent *Harvard Business Review* article, they volunteered to “rapidly deepen their skills in digital specialties, such as data, automation, AI, and digital storytelling, by learning a variety of self-service tools and coding languages and applying these skills across our business.” Time was allotted for them to focus on this new role, and to help them support learning among their peers. They nominated themselves and were selected for their digital skills, naturally, but also for their social acumen and influence, and their passion for helping others succeed. That’s what made them true authentic informal leaders.

9. Include everyone but the unwilling

Any comprehensive workforce transformation must be designed to accommodate the full diversity of people, from a variety of backgrounds, in most large organizations today. To be an inclusive organization does not mean just avoiding bias related to demographic and identity factors (such as gender, age, race, ethnic and socioeconomic background, religion, and sexual orientation). It means embracing the wide range of experience, perspectives, and goals that people bring to work. It may also mean establishing a heterogeneous structure, mixing full-time, part-time, and contract/gig workers; remote workers all around the world; and outsourced staff employed by other companies — all as part of your organization’s culture. Companies that live the values of inclusion are more likely to recruit and retain highly skilled people, and to benefit from their full complement of skills.

You can expect a diverse range of responses to the initiative itself. The willing and able are your allies; they will recognize the value of this effort and may influence others to join with them. The “unable” employees — those who feel that they can’t learn the skills of a digital age — can be reached if you convince them to explore options they may not have considered. When they see what is possible for them, they can become highly enthusiastic, eager for the opportunity to learn.
It’s the unwilling employees — those who covertly or overtly resist change — who need the most attention. These people tend to hold what Stanford University professor Carol Dweck calls the fixed mind-set: the belief that adults’ intelligence and capabilities are essentially stable. People who believe this may fear that only a few innately smart people can rise to the challenge of adult learning or acquire the requisite technological skills.

To counter this belief, you may need to explicitly describe the “growth mind-set” research pioneered by Dweck and others, showing that nearly everyone, at any age, is capable of learning new things and improving his or her capabilities and intelligence. It generally takes planning, hard work, and help and mentoring from others, but those are all elements of your workforce transformation initiative. You can also point out that workforce transformation engenders a leaner, less bureaucratic, more fulfilling work environment, where people are moved into more productive roles.

If the unwilling persist in their skepticism, be compassionate but firm — especially if they are middle or senior managers responsible for leading teams. Hear them out: Do they have a point? For example, they may have seen other initiatives come and go without making an impact. But if these senior leaders still aren’t convinced after you address their concerns, then they are dangerous. At best, their tepid support sends a message to others that the transformation isn’t essential; at worst, they sow doubt and discord. Ask the tough but critical question: Are they a good fit for the new enterprise you’re building? You may need to shift them out of a leadership position or even separate them from the company.

10. Track results and course-correct
As a leader of workforce transformation, you need to ensure that all the effort will pay off. There are two basic ways to do this: Track the workforce transformation and intervene as needed to course-correct.

Tracking results can be difficult in workforce transformation, because value is sometimes hard to quantify and the benefits can be intangible. In their forthcoming report Fit to compete: Accelerating workforce transformation in digital financial services, PwC’s global financial-services workforce of the future team
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tackles this issue in a hypothetical scorecard for a bank’s upskilling initiative. It goes beyond financial metrics to include measures of skill building (such as survey results and instruction quality measures); knowledge gained (such as online learning community activity and numbers of downloads of apps); productivity (for example, savings in contractor spending), and business outcomes (such as launch data and scaling measures). There could also be metrics on brand health or social media commentary if those are affected by employees.

Your own measurements need to include actions (“Are we doing what we said we would do?”) as well as the results achieved through those actions (“Are we getting the results we expected to get?”). Include data collected from frontline employees on the behavior changes they see in themselves, their peers, and their supervisors.

Put a skills inventory in place that can help you continually track and analyze your progress. Our studies indicate that just one-third of companies today use any type of analytics to predict and monitor skills. Investment in skills monitoring can help you predict talent shortages and respond faster to changing business conditions.

Inevitably, you will translate these measures into incentives — giving people further reason to make a commitment to the initiative. Don’t include only financial incentives or promises of job security; also motivate people with opportunities to work on interesting projects or raise their skills. The pharmacy retailer mentioned earlier changed its incentives this way. Store managers had been given bonuses only on sales and profitability. After the change, a large portion of their bonus was based on customer experience scores and employee engagement.
If your measurement and tracking show that parts of the organization are not adopting the transformation, you need to intervene. With the data in hand, engage with the business leaders: Ask what help they need, and provide it. But also push them to follow the plan and make the transformation progress a part of your regular business review meetings.

**Taking the transformation to heart**
The winds of change are stronger than ever in enterprises today. It is a good bet that just about every organization will need to transform its workforce during the next few years. This type of initiative is big, complex, and time consuming. And by no means is success guaranteed. You may experience the undertaking as a burden, not a choice.

But you can also see it as a chance to think differently about your aspirations as an employer. The people who work for your enterprise are there transactionally, to be sure; you are paying for their time. But your enterprise’s success depends on their investment of not only time but also creativity and interest. In return, you can give them the opportunity to become proficient — on your behalf and theirs. As we’ve seen in our own business, a sincere workforce transformation initiative leads people to regard their company, their work, and themselves more positively. Technological automation, which has been seen as a detriment to humanity, becomes a vehicle for advancing it. If you can focus on the right path, your business and your people will be well prepared to face the future.