DELIVERING THE WORKFORCE FOR THE FUTURE
Digital technology is disrupting entire industries and changing the way companies do business across all stages of the value chain: how they develop, market, produce, sell, and deliver products and services. Interactions and ways of working within organizations are being transformed, as are the ways they build, manage, and maintain relationships with customers. Millennials, many of who hold new expectations and aspirations regarding work, career, and life, are soon to become the dominant workforce segment, while economic pressures have forced many people to extend their working lives beyond traditional retirement ages.

Furthermore, it’s increasingly become a challenge for organizations to identify and acquire the skilled talent they need to deliver new business models because of a myriad of issues, including aging populations, technological skills shortages, and unpredictable political contexts. In the midst of this sea change, traditional jobs are being reconfigured and new skills are becoming critical to success, resulting in new requirements for the future workforce.

The rate and scale of change is increasing, with advances in artificial intelligence and machine learning impacting work in profound ways. Once the preserve of science fiction, the idea of machines impinging on traditionally human skill domains is a reality. Under certain conditions, machines can make better decisions than humans, interact in increasingly sophisticated ways, and even demonstrate a new level of creativity.

As companies transform their business models and strategies to realize the opportunities of the digital revolution, they are challenged with defining their workforce for the future. Three interrelated dimensions must be identified for the future workforce:

1. What skills are required?
2. What size of workforce is needed?
3. What shape should it take?

Here we introduce our point of view relating to skills, size, and shape, and provide an outline to guide business leaders as they progress from envisioning to delivering their future workforce.
Organizational role definition has been a workforce characteristic since Adam Smith demonstrated the productivity and economic benefits of designating specific roles to different activities in his hypothetical pin factory (*The Wealth of Nations*, 1776). In the digital era, we anticipate a significant shift from the traditional model — in which employees apply their skills within fixed roles defined through organizational hierarchy — to a more dynamic model, with talented individuals applying skills in multiple, project-based settings.

The traditional definition of a job is shifting. Consider an accountant and a data scientist. The accountant (representing a traditional job definition) has a specific set of accountabilities and outputs in any context. An accountant in a consumer goods company, broadly speaking, performs a very similar job to an accountant in a financial services organization. Now think of the data scientist, a job title that didn’t exist 10 years ago. We refer to the data scientist as a “job,” but the term actually encompasses the set of skills and knowledge that a person has, rather than the accountabilities and output the role produces. A data scientist working for the marketing department of a consumer goods company delivers a very different job compared to a data scientist working for the treasury department of a financial services organization. Both are called data scientists, but that is where the similarity ends. In the new digital era, this new breed of jobs, requiring multiple and diverse skills, will increasingly replace what we perceive as role specification.

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Anticipating the skills required for the future calls on us to consider the surrounding context. We see three related areas where the skills profiles will directly impact overall performance. There is a common theme: As technology becomes ever more modular and user friendly, and takes over transactional tasks, differentiated performance will be achieved through uniquely human skills.

- **Dynamism:** Given the speed of innovation, companies need to target talent not only with the specific technical skills required, but also with the capacity for adaptability and curiosity; commercial acumen to identify innovative application opportunities; and the communication skills to tell a compelling story.

- **Customer devotion:** Never before have customers been so well-informed and connected, leaving them with little tolerance for anything less than a stellar experience. With routine activities increasingly being automated, customers’ expectations are even higher when they need help with sophisticated and complex issues. By offering superior customer service — which requires an upgrade in capacity for problem-solving, personal accountability, and empathizing — organizations can protect against product and service commoditization.

- **Behavioral skills:** As organizations move from traditional silos and hierarchies with rigidly defined roles to flatter structures and more agile ways of working, skills previously associated with top performance will now become standard or even “the minimum requirement.” Relationship-building will be critical to navigate less formal organization structures, as will influencing skills and the ability to thrive amongst diversity as workforces extend beyond traditional internal boundaries (see next section) and comprise talent across multiple generations.

The digitization of the enterprise is unlikely to deliver competitive advantage unless it is accompanied by a corresponding “humanization.” The skills outlined here are not new, but their rise in importance is notable. What used to be a “nice to have” now becomes critical. Jobs that in the past could be delivered on the merit of technical excellence will no longer be relevant if the job holder does not possess these critical human skills. It may seem counterintuitive given technology’s pivotal role in everything we do today, but in many ways technology elevates behaviors and attitudes over technical skills. As we move toward higher levels of technological achievement, technology will be designed with humans at the center, making it more and more humane. In the future, work will be less about “using” technology (which implies a technical skill), and more about “interacting” with technology (which implies interpersonal skills). Put another way, technical skills become the “means to compete” and human skills become the “competitive advantage.”

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The increasing importance of scarce, higher order, critical skills that can be implemented in multiple project-based settings combined with innovative new technologies that allow companies to reliably engage with talent beyond the immediate organization gives rise to a new trend: the extended talent ecosystem. This trend is driven by a number of converging factors, including the scarcity of skilled talent, cost imperatives, flatter organization structures, changing generational expectations, and technology platforms that seamlessly link talent to tasks.

Organizations have traditionally focused on one battleground for winning the war for talent: the internal workforce comprised of direct employees. The workforce for the future will have a markedly different shape. Rather than managing only the internal workforce, the best companies will establish and manage an extended talent ecosystem, comprising multiple talent pools and spanning multiple generations. This ecosystem will provide premium access to the latest skills, ideas, and experiences, allowing companies to adapt quickly to changes in their external environment while effectively managing their fixed costs. To be effective, all four talent pools of this extended talent ecosystem need to be treated and managed with the same emphasis, meaning that HR strategies need to systematically cover all four talent pools, not only the internal workforce.

The challenge that companies face is managing multiple talent pools in an integrated way.
Extended talent pools afford significant benefits: the ability to quickly acquire new capabilities; flexibility in the face of rapid change; and cost efficiency, with improved alignment of manpower costs to business cycles. The challenge that companies face is to manage multiple talent pools in an integrated way, systematically covering all aspects of the HR value chain, but with differentiated strategies across the lifecycle for each talent pool.

In the context of tough competition for scarce resources, it will be insufficient for organizations to interact in a transactional way. Instead, they must build compelling cases to access, attract, and engage talent from each potential talent pool. The traditional definition of “people strategy” will expand to cover employees and associates across the company’s active talent ecosystem. HR policies will be redefined and adjusted per talent pool so that companies can proactively engage with workers in any of their talent pools and optimize how they source, develop, and utilize talent.

<table>
<thead>
<tr>
<th>Talent pool</th>
<th>Description</th>
<th>Example</th>
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</thead>
<tbody>
<tr>
<td>Internal Workforce</td>
<td>Directly employing permanent talent will continue to provide the majority of the workforce, but will be supplemented by members from extended talent pools.</td>
<td>A company-owned diagnostics center co-locating within and jointly run by a hospital, which encourages cross-pollination of talent across partners.</td>
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<tr>
<td>Partnerships</td>
<td>Sourcing talent through partnerships will increase in importance, as industries and capability barriers blur and organizations seek a broader set of capabilities to stay competitive.</td>
<td>The ever-increasing use of freelance application developers by companies competing in the fast-evolving mobile-first marketplace.</td>
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<tr>
<td>Freelance</td>
<td>Sourcing talent through the freelance market will increase, as social trends like individualization impact the perception of work and large segments of the workforce prefer to work more flexibly and on projects that align to their skills and interests.</td>
<td>Crowdsource testing is an emerging trend in software testing, replacing hired professionals or consultants.</td>
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<tr>
<td>Crowdsourced</td>
<td>Crowdsourcing talent will increase, especially where the “wisdom of the crowd” generates more creative, innovative, and faster solutions.</td>
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THE CHANGING SIZE OF THE WORKFORCE

Doomsday prophecies of wholesale “technological redundancy” have characterized periods of discontinuous change since the time of Aristotle and have been famously referenced through the ages by Elizabeth I, Ricardo, Marx, and Keynes, among others. While critics of such views point to the relentless increase in the overall workforce — +320% in the US since 1930, when Keynes projected the “Economic Possibilities for Our Grandchildren” — concerns persist, as evidenced by a 2016 European Parliament motion: “The development of robotics and AI may result in a large part of the work now done by humans being taken over by robots, so raising concerns about the future of employment and the viability of social security systems.”

Anticipating future workforce size requires not only an understanding of potential automation opportunities, but also the strategic opportunities for value generation through redeployment. Take the recent example of a global fast-food restaurant where the main transactional human activities were replaced with digital interfaces. Rather than eliminating the jobs of the former order takers and payment processors, the company redeployed these people to provide more value-added services like at-table service, on-demand production, and enhanced customer service.

The introduction of digital technology means that many companies will get existing jobs done with fewer people. The freeing up of resources will lead companies to re-evaluate the services they offer to their clients. What in the past was considered “premium” will become “standard.” Of course, there will be opportunities to cut costs, but in a market where digital technologies will drive up both quality and customer expectations, it will be crucial that companies ensure that their broader business strategy is well articulated before they try to realize any savings. Companies must first articulate their digital strategy and build capacity to deliver the digital systems (to convert legacy systems and create new digital capabilities); next, they must ensure the resources are in place to deliver differentiated customer service; only then can they safely consider reducing headcount.

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Given the anticipated scarcity of skills and the need to make workforce management an integral part of business strategy, Mercer, the leading company in HR consulting, and Oliver Wyman, a premier management consulting company, have partnered to support business leaders and HR functions with an integrated approach. We believe that business leaders should consider the following four questions when addressing the implications that the digital revolution will have on their workforce:

- What changes are impacting my workforce?
- What will my future workforce look like?
- What strategies are needed to bridge from the current to the future?
- How do we deliver the workforce transformation?

**MERCER AND OLIVER WYMAN’S APPROACH TO WORKFORCE TRANSFORMATION**

1. **Set the vision and prepare change**
   - What changes are impacting my workforce?
     - Identify the trends impacting the workforce
     - Assess the impacts across the value chain
     - Align leadership around the future workforce vision

2. **Map the current and forecast the future workforce**
   - What will my future workforce look like?
     - Model and project the size and shape of the future workforce under different scenarios
     - Identify future talent gaps
     - Evaluate and select the options for addressing the gaps

3. **Determine and design workforce strategies**
   - What strategies are needed to bridge from the current to the future?
     - Specify the strategies for delivering the future workforce
     - Implement technology platforms to enable the automation of work and access to external talent pools

4. **Deliver the transformation**
   - How do we deliver the workforce transformation?
     - Establish transformation governance
     - Roll out enabling technical platforms
     - Manage the transformation
An outline of each phase is provided in the table below:

<table>
<thead>
<tr>
<th>Key characteristics of our approach</th>
<th>1. Set the vision and prepare change</th>
<th>2. Map the current and forecast the future workforce</th>
<th>3. Determine and design workforce strategies</th>
<th>4. Deliver the transformation</th>
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<td>Co-creational, iterative development to build alignment through involvement</td>
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<td>Mapping of current workforce according to key segments/job families</td>
<td>Identification of optimal approaches for engaging with different talent pools</td>
<td>Step-by-step deployment of the transformation roadmap to (1) build momentum through demonstration of impact and (2) enable continuous adaptation through feedback loops</td>
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<td>Quantification of future talent demand and supply gaps</td>
<td>Compelling employee brand/employee value propositions</td>
<td>Change management with dual focus on technical and “social” elements</td>
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<td>Structured evaluation of strategies to close the gaps, leveraging internal and external talent pools</td>
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<td>Deep industry insight: external insight on impacts of trends across value chains and through business, technology, and HR lenses</td>
<td>Industry-specific job family catalogs</td>
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<td>Clear articulation of the major trends impacting the value chains</td>
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<td>Framework to assess change readiness</td>
<td>Workforce simulation model</td>
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<td>Leadership alignment on strategies for bridging the gaps</td>
<td>Top-down qualitative view of the future workforce</td>
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<td>Blended consulting expertise spanning business strategy, organization effectiveness, HR management, digital technology</td>
<td>Frameworks for evaluating strategic options and accessing extended talent pools</td>
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<td>Specific strategies developed for accessing and managing talent across each talent pool</td>
<td>Proprietary digital platforms and third-party relationships with global technology leaders</td>
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<td>Detailed data and insights on external talent pools</td>
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<td>Enabling technology identified and in place</td>
<td>Smart project management office (PMO) approach (more than monitoring and status reporting) that includes active contribution to content development and problem-solving</td>
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<td>Tools for analyzing the internal talent pool</td>
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<td>Clear transformation roadmap</td>
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Developing and implementing a workforce strategy that will ensure access to critical skills will be one key, if not the determining factor, for business models to succeed and workforces to thrive in the future. To build and implement this workforce, HR, Business, and Strategy functions must partner and work together in an integrated fashion. Finally, workforce management will become a critical and integrated component of business strategy. For many companies, the path toward this future will require a fundamental transformation in the way they think about strategy, business models, HR, and their most critical resource — their staff. Ironically, with more digitization and technology, human beings and human skills will play an even greater role in helping organizations succeed sustainably.

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