THE FUTURE OF WORK

A CAHRS White Paper | June 2020 | prepared by Brianna Le, Dimitra Mourikes and Sudip Roy

Executive Summary

A host of technological, sociodemographic, and economic shifts are shaping the future of work. For example, technological advancement presents crucial implications for work and workers, and sociodemographic and economic changes have the potential to radically alter the social contract between employers and employees. These changes will have a significant impact on the way work is done in the future, the skills and capabilities required in the future workforce to meet these changing needs, and critical ways in which organizations must be redesigned to prepare for a new future. This report will summarize key trends that companies should be aware of when thinking about and preparing for the future of work as well as highlight key imperatives and skills that HR should focus on to prepare the workforce of tomorrow. These trends emerged from a review of several research-based consulting reports, and findings from organizations such as the International Labor Organization, World Economic Forum, and Cornell's Center for Advanced Human Resource Studies (CAHRS). More specifically, the report will propose a new framework that combines macro-level themes (i.e. external factors that will shape the nature of work in the future, specifically technology, demographic changes, globalization, and economic changes); micro-level trends (i.e. changes expected at work at an organizational level, specifically the changing social contract, implications of technology on work and workers; and the need to redesign tomorrow's organization), and implications for the Human Resources function.

Introduction

The future of work is expected to be very different from the current state. Multiple forces of change will affect multiple dimensions of work: the work itself, who does the work, and how work is done[i]. Yet most literature on the topic focuses on technological changes, digital disruption, and Artificial Intelligence (AI).While these certainly are significant factors that shape the future of work, they are far from being the only ones. This report presents a new three-level framework to think about the future of work. Consumers of this report will find three advantages to adopting the CAHRS model to prepare for the future. First, it is comprehensive, and expands discussion of the future of work from mere technological change to other factors and domains. Second, it is adaptable. The framework can be used as an effective "substrate" to be subsequently layered with implications for HR leaders, business leaders, disability experts, diversity groups, and other stakeholders. Third, the framework is robust. Due to its comprehensive and cross-disciplinary applicability, it helps leaders in organizations to prepare for the future of work from multiple perspectives.
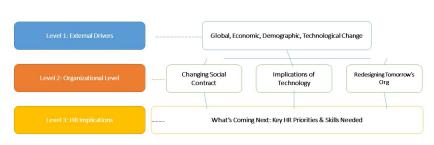
Overview of Research Process and Framework

A review was conducted across recent literature on the future of work. This includes research-backed consulting reports and pieces published by several organizations such as the International Labor Organization (ILO), World Economic Forum (WEF), and the Center for Advanced Human Resource Studies (CAHRS). Following the identification of common themes across the multiple sources, a frequency count was conducted to extract the most salient themes. These were later clustered into different categories (see below). For a more detailed description of the research process employed, see the Appendix on page 23.

The proposed framework is a matrix-model, with three levels of analysis, and three thematic domains.

Three levels: The macro-level discusses the external factors that will shape the nature of work in the future. These are technological changes, demographic changes, globalization, and economic change. The micro-level considers the implications of these macro-factors on the organization. The HR-level summarizes how these changes will bear implications for the Human Resources function. This includes key imperatives that HR should focus on to prepare the workforce of tomorrow as well as the need to assess whether the function has the requisite skills to rise up to the challenge.

Three thematic domains: The model identifies three thematic clusters wherein implications for the future of work are discussed. These are The Changing Social Contract (i.e. gig economy, diversity & inclusion, rewards & benefits), The Implications of Technology on Work and Workers (i.e. automation, re-skilling, rethinking capability), and Redesigning Tomorrow's Organization (i.e. talent mobility, flexible work, collaboration & organizational design).

The report will first discuss the external drivers that affect the future of work on a global scale (macro-level factors) then the three thematic domains that explore the implications of the broader trends on the future of work at an organizational level (micro-level factors), and conclude with the key implications for the HR function.

I. EXTERNAL DRIVERS OF CHANGE

Globally, several trends drive changes at an economy- and organization-wide scale, and affect the nature, scale, and design of the future of the work. This report explores four of them - Technology, Demographics, Globalization, and Economic Changes.

Technology

The evolution of technology and jobs has been the subject of much fraught public discussion. On a higher level, there is a growing concern about the impact of new technologies on the labor market. Technological advances place a higher demand for workers with higher skills. On the other side, jobs will be reduced for workers on the lower skilled end of the continuum leading to a surplus of workers with lower skills. This may cause increased competition among lower skilled workers as a result of fewer positions, which could reduce incomes in that sector of the labor market [ii].On the other hand, technology may help raise economic output, boost wealth, and offer people the potential for higher living standards, improved working conditions, and greater economic security. Literature surrounding how technology will drive the change in work reflects two major trends: rapid technological advances are occurring and the effects of emerging technology on job growth.

Rapid Technological Advances are Occurring

Technological advances will most certainly accelerate in the next 10 to 15 years with synergies across technologies, generating advances in research and development, production, processes, and the nature of products and services. Digital and technological innovation are reshaping every industry. They promise benefits like more than 30% reduced costs, improved quality, faster processes, enhanced customer experience, increased flexibility, and data-driven insights [iii]. Moreover, early adopters of technology drive higher revenue and create more jobs [iii]. Disruptions through technological breakthroughs and rapid adoption of new technologies will lead businesses to respond through faster and more accurate adaptation to rapid reinvention. However, it will also bring job loss and skill obsolescence for workers. This will create the need for workers to adapt to new models of work and organization, leading to wide-ranging changes to the jobs, tasks, and skills required.
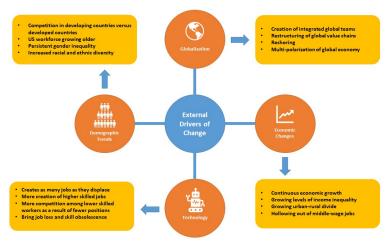
Technology and Job Growth

Technological change is accelerating, and yet unemployment rates are the lowest in half a century. Where new technologies take effect, they generally create as many jobs as they displace [iv]. Technology has replaced some tasks and jobs but has created far more for higher skilled jobs [iv]. In the medium term, a number of lower skilled current occupations in the United States are forecast to shrink or fully disappear due to technological change. With the creation of higher skilled jobs as lower skilled jobs disappear, the need for reskilling and retraining will become critical topics. Technological advancement is a major driver of new employment opportunities, in particular those connected to digital technologies. These advances offer a wide range of new and diverse forms of employment, which allow for greater flexibility, particularly for young people with disabilities or care responsibilities.

Demographic Trends

The world population is predicted to increase from 7.3 billion in 2015 to 9.7 billion by 2050 [v]. In the next ten years, 86 percent of young people entering the labor market will come from emerging and developing countries where there are already a limited number of jobs available, and as a result, competition will remain high [vi].This differs for those in developed countries such as the U.S., where the workforce continues to shrink due to a significant aging population and rising levels of educational attainment among young people. Overall, slow labor force growth has led to a more evenly distributed workforce by age, sex, and race/ethnicity, and encourages employers to increase the participation rates of women, older workers, and those with disabilities [vii].

External Drivers of Change

- Competition in developing countries versus developed countries
- US workforce growing older
- Persistent gender inequality
- Increased racial and ethnic diversity

Globalization
- Creation of integrated global teams
- Restructuring of global value chains
- Reshoring
- Multi-polarization of global economy

Demographic Trends

Economic Changes
- Continuous economic growth
- Growing levels of income inequality
- Growing urban-rural divide
- Hollowing out of middle-wage jobs

Technology
- Creates as many jobs as they displace
- More creation of higher skilled jobs
- More competition among lower skilled workers as a result of fewer positions
- Bring job loss and skill obsolescence

Age

As the baby boomer generation ages, the U.S. workforce has been growing older as well. In fact, by 2025, the number of Americans over the age of 60 is projected to increase by 70% [viii]. However, as more Millennials continue to enter the labor force, they bring with them a desire for a new value system where their social contract with employers stretches beyond a paycheck for a certain number of hours worked. In the coming years, this change in demographics is expected to reinvent the workplace.

Gender
Women continue to increase their presence in the global workforce, thus helping mitigate some of the fall in the overall labor force participation. However, persistent gender inequality issues continue to disadvantage women through both their pay and working conditions. A significant proportion of female workers are found in the informal economy in positions ranging from self-employed entrepreneurs to domestic workers. While the spectrum is wide, they tend to be in more vulnerable and lower-paid jobs when compared to males [ix]. In the U.S. specifically, the majority (56%) of the jobs that are projected to be disrupted by 2026 belong to women; however, this can be reduced through reskilling efforts [x].

Race and Ethnic Diversity
The U.S. workforce is increasingly becoming more racially and ethnically diverse, as certain minority groups and immigrants who have been historically shut down in the past now have higher participation rates. While Hispanics and Asians specifically are the fastest-growing groups in the labor force, Hispanic workers are also most at risk of having their jobs displaced, followed by African Americans [xi]. Overall, as this decade progresses, both migration and immigration will also impact the workforce and economic development as a whole.

Globalization
Since the Age of Discovery and colonialism in the 15th century, globalization has been upending the status quo for centuries. Globalization has accelerated in recent decades, thanks to trade liberalization, emerging market growth, inexpensive/rapid communication, and informal transmission enabled by the IT revolution. The new era of economic globalization – marked by growing trade in intermediate goods and services, expanding capital flows, rapid transfer of knowledge and technologies, and mobile populations – has disrupted existing business models by creating new competitors, reordering supply chains, and lowering price points. The next waves – including the emergence of Africa and a more multipolar world –will increase complexity and require flexible business models to respond to global shifts

[xii]. Of course, recent disruptions to trade have the potential to slow or even reverse this economic globalization, if left unresolved.

Integrated Global Teams

A combination of technology and policy decisions has fostered the inclusion of millions of people in a single global system of production and exchange. This has led to the disintegration and dispersal of the temporal and spatial organization of work through, for example, the breaking up of enterprises to focus on the most profitable core activities and outsource the rest [xiii], or the assembly of teams "in the cloud" to do sales, customer support, and many other tasks [viii]. The effectiveness of truly integrated global teams is facilitated by several factors. Information is more abundant, richer, and more available to everyone. Work can be accomplished from anywhere, and new media enables increasingly seamless global and real-time communication. This has led to faster ideation and product development, more diverse go-to-market strategies, and shorter product/strategy durations.

Restructuring of Global Value Chains and Reshoring

The introduction and development of new technology, including robotics and automation, can make labor costs less relevant to production, and consequently offshoring less attractive. Additionally, rising labor costs in producer countries has the potential to displace a large number of workers in labor-intensive industries, such as apparel, footwear, and electronics assembly, and trigger a reshoring of global production back towards industrialized economies [xiv]. There isn't much evidence of this yet. For one, wage increases in developing countries are compensated to some extent by productivity increases. Also, the high capital investment in automation technology at the onset, combined with the ambiguous benefits of this technology over conventional alternatives (for example, interactive voice response [IVR] technology versus human interaction in call centers may encourage the existing processes to continue. However, the arguments for reshoring are compelling. These include reduced transport costs and delivery times, closer proximity to designers, improved product quality, reduced corporate social responsibility risk and improved brand image. Should reshoring become significant, emerging economies will face new challenges, such as strengthening skills policies and increasing aggregate demand to offset the resultant decline in foreign direct investment [xiv].

Multi-Polarization of the Global Economy

The risk of reshoring does not mean that all is lost for developing countries. The U.S. and Europe no longer hold a monopoly on job creation, innovation, and political power. Organizations from resource- and infrastructure-constrained markets in developing countries like India and China are innovating at a faster pace than those from developed countries in some areas, such as mobile technologies [viii]. In fact, a lack of legacy infrastructure is combining with rapidly growing markets to fuel higher rates of growth in developing countries. The decades-old model of innovation and design in developed countries, and technical support and software development in developing countries is rapidly changing. The emergence of multiple global economic capitals or poles will require companies to develop products for diverse categories of consumers and integrate local teams with the global infrastructure to remain truly competitive.

Economic Changes

There has been continuous economic growth even through periods of global economic volatility, and as

a result, the global economy has benefited from higher living standards than before. Looking forward, our future economic standing is not guaranteed. Improvements in future living standards rely on continued gains in productivity, and that means fostering innovation and creativity in the workplace [iv].

A Peek at America: Rising Income Inequality
The U.S. labor market looks markedly different today than it did two decades ago. It has been reshaped by dramatic events like the Great Recession, but also by a quieter ongoing revolution in the mix and location of by jobs. In the decade ahead, the next wave of technology may accelerate the pace of change. Millions of jobs could be phased out even as new ones are created. More broadly, the day-to-day nature of work could change for nearly everyone as intelligent machines become fixtures in the American workplace [xi].

A key trend of the American economy is the growing levels of income inequality. Less of people's income is coming from work, and more is coming from other sources, including dividends, investment income, and government programs like Social Security and disability insurance. Today, only half of personal income comes from wages and salaries, down from almost two-thirds in the 1960s. The shift has contributed to rising inequality, since a higher share of investment income goes to the rich. Also, as more income flows from non-work sources, the role and meaning of work potentially shift [xv].

Another noteworthy trend is the growing divide between the urban and rural areas in America. While all areas of the country lost employment during the Great Recession, job growth since then has been a tale of two Americas. Just 25 cities have accounted for more than two-thirds of job growth in the last decade. By contrast, trailing cities and rural counties, that are home to one-quarter of the U.S. population, have older and shrinking workforces, higher unemployment, and lower educational attainment [xi]. Automation technologies may widen these disparities.

One of the most profound changes of the past two decades has been the "hollowing out" of middle-wage jobs. Middle-wage jobs accounted for 49 percent of unemployment in 1997, but only 41 percent in 2017. More Americans have been climbing into higher income brackets or slipping out of the middle class altogether. Some 2.9 million middle-wage roles – including jobs in construction, manufacturing, and office support – vanished between 2007 and 2012, although some were regained in the recovery. But this trend has not played out evenly across the country. While states such as Florida, Maryland, and Rhode Island all saw middle-wage jobs vanish over the last decade, many others, from West Virginia to Utah, have seen middle-wage jobs grow in construction, mining and energy, and other sectors [xi].

II.   CHANGES AT THE ORGANIZATIONAL LEVEL
The aforementioned macro-level global trends have implications on the future of work in organizations - specifically, how work is done in organizations, the critical skills and capabilities desired in the talentforce of the future, and the ways in which organizations and workflows must be redesigned to support these changes. This report discusses three organization-level implications: the changing social contract between employers and employees, the implications of technology on work and workers, and redesigning tomorrow's organization.

The Changing Social Contract
The past few decades have brought with them a significant amount of change to the employer-employee social contract. Today, the expansion of this evolving relationship goes beyond a simple employment contract, stemming from changes in how people view and perform work, how organizational change is driven through

The Changing Social Contract

GIG WORK	DIVERSITY & INCLUSION	REWARDS & BENEFITS
• The gig economy is not taking over • Gig work can be liberating and rewarding, but also stressful	• Female talent remains an under-utilized business resource • Diversity will not drive real change without inclusivity	• Rewards programs are falling behind expectations • Shift from tangible extrinsic rewards to intangible intrinsic rewards

diversity and inclusion in the workplace, and how employees now desire more than compensation alone with regard to rewards and benefits.

Gig Work

The concept of gig work in today's economy has continued to increasingly garner attention. With the growth of the internet in the early 2000s, platform work emerged as a way for individuals to both create and deliver various services using online marketplaces. Later into the 21st century, applications used on smartphones made it possible to connect labor supply with demand within certain geographic locations. Today, alternative work can be done from virtually anywhere and by anyone, as it typically consists of those working as contractors, gig workers, freelancers, and crowdworkers.

The Gig Economy is Not Taking Over. While gig work is now believed by many to be a new norm in the nature of work, this "gig economy" is not taking over, and in contrast, levels of gig work have not been increasing. Online platform work continues to represent less than 1% of the overall workforce and self-employment has reached record-low levels [xvi]. The 2017 Contingent Worker Survey in particular challenges the idea of a current gig economy, revealing that levels of gig work have in fact been exaggerated, as the majority of those that partake in gig work are doing it alongside their regular jobs [xvii].The most probable forecast speculates that this form of labor is not the future, as it will remain mostly concentrated in a few industries and a way for individuals to earn additional compensation; however, if another recession were to occur in the future, this could potentially change.

Gig Work Can Be Liberating and Rewarding, but Also Stressful. While gig work can provide employees with flexibility, it also has its fair share of drawbacks, one of which is the stress that this form of work can bring. Crowdwork specifically is characterized for its ability to cater to people with disabilities, those caring for others, and individuals who live in diverse or more isolated geographic locations. However, one of the largest issues with gig work is that oftentimes, digital platforms will choose to classify these workers as independent contractors instead of regular employees, therefore not providing them with any labor law protections and diminishing their ability to bargain [xvi]. Greater attention must be paid to ensure that digital platform workers are provided with a clear employment status, are treated fairly, are earning just wages, and are sufficiently protected by the law.

Diversity and Inclusion

On the surface, the concepts of diversity and inclusion in the workplace may seem relatively simple to comprehend. Yet, these terms tend not to be clearly defined or articulated. While the benefits of diversity have been well established [xviii], the term in particular raises numerous meanings and continues to place a heavy emphasis on age, gender, race/ethnicity, sexual orientation, disability, and religion but not on more nuanced approaches such as diversity of thought. Inclusion has also chosen to remain focused on ensuring that all employees of an organization are equally afforded rights, privileges, and development. However, the true challenge is in figuring out how to truly diversify organizations through concrete

workplace practices instead of simply remaining fixated on how to define or think about it.

Female Talent Remains One of the Most Under-Utilized Business Resources. Women in particular are organizations' most under-utilized resources, as they are often either not promoted upon entering the workplace or remain as untapped talent from the onset. While more educated than men overall globally, the likelihood of female talent rising to leadership positions is still at only 28% compared to men [xix]. One cause for this phenomenon is that companies prefer to invest in developing women who are already in the development pipeline to avoid losing them instead of hiring strong entry-level candidates and invest in building them from the ground up.

Diversity Will Not Drive Real Change Without Inclusivity. In order to truly diversify organizations and drive change, leaders must not forget about the importance of inclusivity as a driving force. Solely setting diversity quotas will not accomplish anything if employees are not able to bring both their diversity in thought and experience to work; however, in order for that to happen, all individuals in an organization must feel heard and know that their opinions are valued. Inclusive workplaces are those that are accessible to everyone regardless of their background, create a secure environment, and value what their employees both believe and say. Therefore, looking forward, companies must make it a point to diversify their organizations through more ways than just defining the concept of it.

Rewards and Benefits

Total rewards are comprised of various components – employees' fixed base pay, incentivized variable pay, benefits, career development, and work life balance. What organizations hope to gain in return is the ability to attract, retain, and engage their employees. Employee benefits in particular are increasing in importance, as companies are now considering providing a variety of new benefits ranging from paid parental leave to wellness and fitness benefits and student loan repayment options. The current war for talent now requires individuals to be able to build critical skills on the job, so companies have shifted to hiring those that are capable of developing their careers. Lastly, work-life balance often stems from the work environment, where expectations are shifting as technology now allows for greater worker mobility in a variety of work environments.

Rewards Programs are Falling Behind Expectations. Most rewards programs are falling behind both internal and external expectations due to their reliance on outdated models. For employees, rewards mean more than compensation alone. However, with only 11% of organizations surveyed in 2019 stating that their rewards systems are aligned with their larger company goals and 23% admitting to not knowing what rewards are valued by their employees, little has changed in recent decades [xx]. Instead, many employers are choosing to implement a mix of benefits based on new societal and larger employee norms such as flexible working hours, free lunches, and unlimited paid time off. While this way of thinking may be potentially beneficial in meeting financial targets in the short-term, it will not address the needs involved in reskilling individuals, reforming the way they do work, or improving their work experience. In order to progress in the right direction, organizations must focus on basing their rewards strategies on their own companies' objectives and stand out by branding their offerings to potential employees.

The Shift from Tangible Extrinsic Rewards to Intangible Intrinsic Rewards. One of the largest changes in

recent years for organizations has been the noticeable shift from tangible extrinsic rewards to intangible intrinsic rewards. Today, the changing social contract involves more than a paycheck to employees in return for hours worked, as employers are no longer viewed to be employee caretakers. Unlike previous generations of workers who were overly committed to serving the interests of their employer, the younger generation is bringing with it a new value system that places an emphasis on its commitment to the work instead of to the employer [xxi]. The Accenture Worker Values Index reveals that instead, emotional factors like engagement, quality of life, and status are equally if not more important to employees than their pay or benefits overall [xxi]. In fact, what employees find most important is the value of their work along with an opportunity to be able to obtain a greater quality of life while having a purpose. Companies must therefore rethink how to personalize their benefits to individuals in various life situations and generations.

The Implications of Technology on Work and Workers
The industrial revolution changed the conception of work, as industrialists realized that products could be manufactured faster and cheaper if end-to-end processes were atomized into repeatable tasks in which workers could specialize. Now, as we step into the cognitive revolution, we once again are redefining work to create valuable human-machine collaborations, shifting our understanding of work from task completion to problem solving, and managing human relationships. To make all of this happen successfully, we will need to understand the effects of automation, develop the training of our workforce to adapt to the new skills needed, and change the way we conceive capabilities needed for future organizations. Otherwise, we could find ourselves weighed down attempting to apply legacy concepts and skills onto the new and quickly emerging world of human-machine collaboration.

Automation
Concurrent with the rapid advances in artificial intelligence is the potential effects of AI-enabled machines on employment disruption. While productivity gains are expected through focused and enhanced roles in the organization, automation as a result is expected to lead to some reduction in the workforce. A question surrounding automation is with the anticipated creation of new opportunities and broad-based economic growth, how will this technology and human interaction affect work and workers? Literature surrounding automation reflects two major trends: automation will shift the demand for skills, and work trends will continue to shift globally.

Automation will Shift the Demand for Skills. Studies on automation show that displacement is high for routine tasks, including in many services sectors where digitalization and artificial intelligence have come to play a bigger role [xxii]. This elimination of automatable work will lead to an increased demand for skills that facilitate problem solving and innovation. However, as automation capabilities continue to advance, predictive intelligence will provide a new means to create powerful insights for strategic decision-making. These advancements will become prevalent in organizations as artificial intelligence is becoming cheaper, smarter, and more sophisticated allowing for capabilities to move past just automation into elevating human capabilities.

Automation will Continue to Shift Work Trends Globally. Though automation is becoming cheaper, the production processes and the increased deployment of robots require significant investments which may put developing countries at a disadvantage and may lead to job polarization in both advanced and

developing countries [xxii]. Special considerations of automation are its role as a catalyst for a new social contract for workers. With the onset of automation, companies are reshaping their talent strategies, workforces, and organizations to be more dynamic. The role of leaders in reshaping the human employment ecosystem to compete in a digital world is significant in managing the social impact of new modes of work.

Reskilling

In the absence of effective transition policies, including adequate opportunities and training to acquire new relevant skills, many of those who are at risk of automation-related job loss may be forced to accept lower-skilled and lower-paying jobs. As a result, there is a growing demand for employee training to upgrade skills to work with new technology (upskilling), or to learn new skills to move into industries or job roles that are less likely to be overtaken by technology (reskilling). The quality of and access to reskilling, upskilling, and retraining support will determine how the world's workforce will fare in the transition underway and engage with new opportunities in the labor market. Literature surrounding reskilling reflects three major trends: the importance of reskilling as new technologies emerge, the need for reskilling over hiring for skills, and a focus on the future skills needed.

The Implications of Technology on Work and Workers

AUTOMATION	RESKILLING	RETHINKING CAPABILITY
• Skills shift away from routine and toward problem solving and innovation • Significant investments put developing countries at a disadvantage	• The need for reskilling > hiring for skills • Training programs alone are not enough	• General shift towards valuing cognitive skills around the world • Growing need to bridge the gap between humans and machines

The Importance of Re-Skilling as New Technologies Emerge. As the types of skills demanded are changing rapidly due to disruptive change, workers will need to engage in lifelong learning to remain employable.

Disruptive technology and socioeconomic forces threaten to shorten the shelf-life of people's skill sets. Trends have shown that the most-in-demand occupations did not exist 5 to 10 years ago, and this pace of change is set to accelerate [xix]. Skills that are desired in the future are ones that are not yet considered crucial to the job today, which pushes organizations to have to rethink the importance of re-skilling as new technologies emerge to anticipate future demands.

The Need for Re-Skilling Over Hiring for Skills. Literature has posed focusing on reskilling as opposed to hiring for skills [iv]. For employers, relying solely on new workers entering the labor market with the right ready-made skills will no longer be sufficient. As predicting the exact nature of the demand for skills is impossible, there is less risk and investment in reskilling and training current employees to build capabilities rather than hiring for new skills. Revamping training methods will continue to be critical for success. While training is improving, there are still insufficient resources and on the job training opportunities which can help ensure workers are equipped with the relevant skills and increase exposure to new technologies. However, training and reskilling programs are insufficient without first understanding the culture of reskilling which includes assessing current skills and gaps as well as the motivating factors to drive change.

Future Skills Needed. The extent to which the working population acquires the right skills is one of the most impactful yet uncertain variables for the future of work, yet there is currently a significant mismatch between current employee skills and the qualifications required for their jobs [xxiii]. Future trends in reskilling focus on upskilling adults for digital literacy as well as a greater focus on human skills such as complex analysis and social/emotional intelligence.

Rethinking Capability

A common misconception is that the need for rethinking skills is synonymous with the need for rethinking capability. Skills are a finite ability that can be used under a fixed set of constraints in a narrow set of environments. You repeat it over and over and get better at it and do it the same way every time. A capability on the other hand is a deep-rooted ability which can be applied in many contexts. It is not an isolated skill, it's an ability that flows in and out as the environment demands it. With the nature of work that is evolving into greater technologies, there is a need to rethink the capabilities that are needed for both organizations and workers to meet the demands of the future and to create new forms of value. Literature surrounding rethinking capability reflects three major trends: the shift in the nature of work causes the need to rethink capability, emerging technology drives the need to bridge the gap between humans and machines, and the focus that corporations should be taking today to meet the demands of the future.

The Shifting Nature of Work Causes the Need to Rethink Capability. The nature of work is changing, with today's jobs becoming increasingly more likely to require knowledge-based work rather than manual-intensive work. Less routine jobs are harder to automate and is the area where employment has been growing. It is projected that 86% of all jobs created now until 2030 will be knowledge worker jobs [iv]. Even now with the overall scale of demand for various skills in 2020, more than one-third of all jobs across all industries are expected to require complex problem-solving as one of their core skills, compared to less than 1 in 20 jobs that will have a core requirement for physical abilities [xix]. There is a general shift towards valuing cognitive skills around the world, with new technology underpinning this move towards a majority skills-intensive workforce.

As New Technology Emerges, the Need to Bridge the Gap Between Humans and Machines will Become Critically Important. The jobs of the future are expected to become more machine powered and data driven than in the past, but they will also likely require human skills in areas such as problem-solving, communication, listening, interpretation, and design. While machines take over repeatable tasks and the work that people do becomes less routine, the need to redefine capabilities to marry technology with human skills and advanced expertise in interpretation and service becomes critically important. Major trends have shown that 61% of senior executives expect that the proportion of roles that require people to collaborate with artificial intelligence will rise in the next three years [xxiv].

What Corporations Should Focus on Now in Order to Meet the Demands of the Future. To succeed, organizations should pivot the workforce to areas that create new forms of value they need to create the mindset, acumen and agility that will be required to seize the longer-term transformational opportunities. Organizations should start by zooming out to imagine the possibilities of the future by leveraging industry-specific data analytics to guide strategy for transforming the workforce for the future, and activate the organization, leadership, and workforce to access skills and engage in new ways of working. In addition, increasingly there is a shift in the focus from whole jobs to job content. With a

greater focus on assessing tasks and skills rather than whole jobs, more insight can be placed on resource allocation of tasks to people or machines.

Redesigning Tomorrow's Organization
In order to prepare for the future of work, organizations need to fundamentally rethink the way work is done and talent is managed. Employees today are no longer confined to a single function, job, or industry. They value flexible work arrangements, and work in ways that require significant changes in the way workspaces are designed and communication is facilitated. Companies should pick up on these trends and adapt their practices to address these changing needs and priorities.

Talent Mobility
With increasing globalization, talent mobility is a growing trend (and crucial focus) for employees and organizations. Careers have become boundaryless - employees don't think of their professional futures in a single function, or even organization, alone. Instead, careers span across multiple functions, organizations, and even industries. While some mobility occurs involuntarily due to corporate restructuring or downsizing, a significant amount is driven by the employee herself. Individuals benefit from better compensation packages and diverse experiences, while organizations benefit from expanded skill-sets and social connections.

International Mobility. Labor mobility between countries is affected by the availability of economic opportunity, travel regulations, or crises and conflicts. The growth of jobs in certain regions can draw global talent to these areas of economic opportunity. To foster high labor mobility between countries, common credentials for recognizing skills and standardized qualifications for all levels of education across different systems, countries, and languages are critical. Moreover, firms must provide adequate support with social integration, visa regulations, and streamlined hiring processes.

Inter- and Intra-Organizational Mobility. In order to prepare for a future that involves a high degree of talent mobility, organizations should strengthen their talent pipeline from its source. They can do this by fostering national and cross-border programs, bringing personal influence to bear on industry groups, and collaborating with academia to establish career paths. Companies should also use predictive intelligence to chart their future workforce. As the nature of work shifts from roles to projects, large organizations and entrepreneurial firms should tap into digital talent platforms to access talent and expand their workforce model. For example, freelancers bring the flexibility to meet business goals and the scalability to meet fluctuating demand. Similarly, we see a slowly growing trend of boomerang employees - employees who leave a company and are later rehired. Hiring boomerang employees is cost-effective, ensures alignment with the company's culture, and helps the organization benefit from an enhanced set of diverse skills and social connections. Hence, companies should focus on cultivating relationships with employees who leave.

Flexible Work
The future of work is characterized by rapidly changing workforce dynamics, and effective business leaders must respond to these changes by creating an ecosystem that accommodates the needs of the individual worker. Employees expect the same degree of personalization and flexibility in the workplace that they experience with companies from whom they buy products and services. Already in

the past decade, flexible work arrangements have become increasingly prevalent in organizations. Currently, flexible work is rising in developed economies, and making inroads among middle-class occupations in emerging economies.

![Redesigning Tomorrow's Organization]

Redesigning Tomorrow's Organization

TALENT MOBILITY

- Individuals value boundaryless careers (diverse experience, better compensation)
- Firms will benefit from expanded skillsets and cross-functional social connections

FLEXIBLE WORK

- There is a strong business case for workplace flexibility (retention, productivity)
- May alter the sense of community that stems from physical proximity

WORKPLACE REDESIGN

- There is a fissuring of formal, physical workplaces as comm technology improves
- Different workplace models can effectively change the behavior of the workforce

Business Case for Flexible Work Arrangements. A 2014 SHRM report [xxv] suggests that flexible work options are more likely to be successful when an organization encourages managers and employees to view flexibility as a mutually beneficial business process. Organizations benefit through increased employee job satisfaction (and consequently lower turnover and higher productivity); expanded availability to clients (as workers work non-traditional hours); better applicant attraction and talent retention; improved employee loyalty, engagement, and performance; reduced negative outcomes such as absenteeism and accidents; greater cost savings (as companies spend less on real estate and healthcare costs); and a stronger ability to meet the growing demands of globalization. Employees benefit from greater flexibility through improved work-life fit (and associated positive outcomes such as lower stress, improved well-being, increased job satisfaction, lower turnover intentions, and less interference with family commitments) and potentially less time spent commuting (which helps individuals save time and money).

Types of Flexible Work Arrangements. Workplace flexibility options offered by employers usually fall into four categories: time(e.g. flextime, wherein an employee has alternative start and end times; compressed workweeks, flexible shift work, self-scheduled breaks, etc.), location and connectivity(e.g. telework options, such as home-based work, remote work, and satellite offices), amount of work (e.g. part-time work, reduced workload, job sharing, etc.) and continuity and time off (e.g. long-term breaks and sabbaticals, vacation and sick time, compensatory time-off, career flexibility, etc.). Improvements in technology have made flexible work arrangements possible for a broader segment of the labor force, and organizational participation has steadily risen in the recent past. For example, according to SHRM's 2015 Employee Benefits report, the share of organizations offering telework options increased from 53% in 2011 to 60% in 2015. Fifty-four percent of organizations offered flextime, and 31% allowed their employees to structure compressed work weeks [xxvi].

Implications of Flexible Work. The implementation of flexible work arrangements has implications for organizations, communities, and workers. Organizations have to be more agile in the way they think about managing people's work and the workforce as a whole. They must expand access to communication technologies to enable more collaborative work, virtual work, access to information, and access to different markets. Businesses will need to use digital talent platforms to connect and collaborate remotely with freelancers and independent professionals. As companies increasingly engage workers through the internet (e.g. oDesk, Elance) as and when their services are needed, individuals who prefer to work from different locations, from home, with more flexibility, and on more differentiated

types of work are drawn to the marketplace. It also brings previously marginalized workers to the job market. This trend may spur modern forms of associations such as digital freelancers' union and updated labor market regulations. Work may become less associated with the sense of community, associative behavior, and social interactions that stem from physical proximity and personal relationships of trust and familiarity built up over time. In fact, the gap between the standard employment contract and the reality in the world of work will grow.

Workspace (Re)Design

The workplace of the future will be characterized by the "fissuring" of formal, physical workspaces and working arrangements. The diversification of working arrangements means that workers will move between them routinely rather than staying in any one for a prolonged period. Moreover, the application of information and communication technologies allows more and more work to be done outside any fixed, collective workplace. This could result, at one stage, offering individuals the option of working from home or some other remote location, and at another, the definitive abolition of that workplace, and consequently the requirement (rather than the option) of working elsewhere. An example of this is the platform economy, wherein work can be done wherever an internet connection is available. This can benefit people who may otherwise struggle to connect, including micro-enterprises, women, and those on non-standard contracts. However, changing the physical workplace should not be seen simply as an opportunity to increase efficiency or reduce real estate costs. As teams become more distributed, organizations need to rethink how they foster both culture and team connections.

Remodeling Workplaces. Besides being implemented as a cost saving initiative, the redesign of a workplace can be used to effectively change the behavior of the workforce. Designs and redesigns can change in size and scope from cubicle seating to Activity Based Working (ABW) arrangements. Cubicles and closed spaces allow for greater personalization and privacy, but also create a sense of isolation among employees. Open spaces are designed to foster communication among employees, which would hopefully boost collaboration and innovation. By removing the physical dividers, employees are subject to more "collisions", creating a vibrant environment characterized by greater collaboration. However, critics argue that open spaces reduce privacy and increase stimulation or distractions [xxvii]. ABW is aimed at ameliorating some of the negatives of the open space concept. ABW focuses on creating adaptable spaces that can be organized to match people's needs. For example, it could entail a company creating designated huddle spaces for group discussions, quiet rooms for those who don't want to be disturbed, and collaboration booths for impromptu meetings. ABW gives employees greater autonomy on how and where their work gets done.

Use of Digital, Communication and Mobile Technologies. The workplace of the future will be characterized by an ecosystem of new communication technologies and collaboration techniques. Where once physical proximity was required for people to get work done, the advent of digital communication, collaboration platforms, and digital reality technologies, along with societal and marketplace changes, have allowed for and created the opportunity for more distributed teams. The proliferation and ubiquitous use of mobile devices allows work to be conducted through mobile technology. Mobile technology can improve organizational processes and the working lives of workers. The use of new technologies and communication platforms allows organizations to achieve the kind of scale and reach previously attainable only by large organizations. Organizations can now "superstruct"; i.e., use technology to do things beyond traditional organizational boundaries.

III. CHANGES IN PRIORITIES AND SKILLS FOR THE HR FUNCTION

The future of work will have implications for organizations in multiple domains. Specifically, it will create a new social contract between organizations and employees, with diversity and individualized rewards offerings becoming more critical than before, lead to a massive deployment of technology and automation, and encourage the redesign of workspaces and flexible work arrangements. Such changes will bear implications for the Human Resources (HR) function. Summarized below are five key imperatives that HR should focus on to prepare the workforce of tomorrow - building a positive employee experience, developing the right leadership capabilities, building critical future skills in the workforce, creating a business-aligned future-focused talent strategy, and adapting to organizational agility and change.

In order to meet these new priorities, the Human Resources function must look inside to assess whether it has the requisite skills to rise up to the challenge. This report also explores five skills that HR professionals must possess in order to successfully prepare organizations for the future of work - data literacy, digital acumen, cross-collaboration, business acumen, and future-thinking.

These priorities and skills are derived from prior research by the Center for Advanced Human Resource Studies (CAHRS). You may refer to the relevant articles in the Appendix on page 26. It must be noted that while a number of these practices are already a part of HR's agenda today, they should assume critical priority to help organizations prepare for changes in the future.

Key HR Priorities for the future

1. **Employee Experience**

   Successful organizations of the future will not merely be client- or customer-centric, but employee-centric as well. A positive employee experience will be characterized by a transition from Human Resources to Human Development, wherein HR leaders focus on enabling key skills that technology cannot substitute (e.g. higher-order critical thinking, creativity, emotional engagement). Additionally, organizations should engage in greater personalization of employee experiences, moving from a one-size-fits-all policy to more customizable solutions. Some examples of greater personalization are:
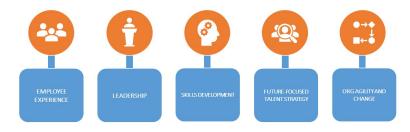
   - The Learning and Development function can leverage technology to deliver simplified learning solutions that are tailored to individual employees' needs, and push recommendations to help them achieve their goals.
   - Businesses should offer flexible work options that are customized to the nature and criticality of work, the work environment, and employee needs.
   - The Total Rewards function should segment the organization's employee population into demographically similar groups, survey the employees, and provide strategically aligned benefits offerings that meet the differential needs of the various employee groups.
   - Talent Management should modify their strategies to facilitate more employee-driven career paths, and greater cross-functional and global mobility opportunities.

   While a number of organizations adopt such practices already, they will gradually transition from being great EVP (Employee Value Proposition) offerings to basic employee expectations.

Therefore, it is wise for HR leaders to start thinking about how their practices and strategies can be adapted to foster a more positive employee experience today.

2. Leadership

The future of work will be characterized by a significant amount of uncertainty, complexity and change. In order to navigate these challenges, set

organizational goals, and align employee motivations with the company's objectives, successful organizations of the future will require transformational leaders. Transformational leaders are those who embrace challenges, lead change initiatives, build internal and external buy-in, encourage innovation and creativity, coach and develop others, and ultimately overcome adversity. The HR function plays a key role in building the right leadership bench:

- *Identifying future leaders*: In order to identify the leaders of tomorrow, HR must partner with the business to clearly define the organization's future-leadership model; i.e., what effective leadership will look like, and what competencies will be required to achieve the company's future goals. Moreover, HR will need to assess (and train business leaders to assess) potential, rather than performance. High potential individuals are those who demonstrate a specific set of competencies, harbor high aspirations, and exhibit a strong degree of engagement within the organization.
- *Developing future leaders*: A number of companies invest in leadership development programs. In order to fully maximize returns on these investments, and build effective future leaders, the programs must be aligned with not just the current business needs, but projected needs of the future. Leadership development should be built into the company's early career development framework, focused on individual ownership (through personalized training or individual-driven career paths for example), and foster engagement with executives through coaching and strategic direction.
- *Supporting new leaders*: HR will need to place leaders into the right roles in order to fully leverage their individual skill sets, and provide a return to the organization for its investment in their development. Due to the substantial variance in duties of different leadership roles, HR must evaluate leaders' readiness before placement. After placement, leaders must be provided continuous support through their leadership journeys in the form of coaching, networking, and mentorship.
- *Succession planning*: Due to the changing demographic patterns and career trajectories in organizations today, HR should be actively engaged in succession planning. This requires a

focus on the competencies of the future, engagement from leaders, a flexible and adaptive process, and individualized assessment of and support to the successors.

Besides these imperatives, HR should also make sure the leadership bench is diverse, and that leaders from underrepresented groups feel included. Diversity at all levels of the organization is a key focus of many companies today. In the future however, company leaders will be held accountable for the lack of diversity in their organizations.

3. **Skills development**

Automation and digitalization are changing the skills and competencies required for success. In a future characterized by rapidly changing business needs, and consequently, desired skill sets, organizations need to maintain the right balance of emerging, existing, and legacy skills. This will require an effective HR strategy to identify critical future skills, develop them in the organization's workforce through reskilling and upskilling interventions, and build employee career paths that simultaneously enable them to acquire these skills and meet their own career aspirations. These are some strategies to help HR prepare the workforce of the future:

- *External analysis*: Companies should leverage external jobs data and interpret market signals to predict future skills needs. This may require them to focus their efforts on a subset of critical roles that they deem vital to their future success.
- *Internal workforce planning*: In addition to external scanning, organizations must leverage their internal knowledge experts to understand how their business will shift in the future, and what skills they'd need to support these changes.
- *Multi-channel reskilling*: Once the critical skills are identified, increased investments are required in training and reskilling programs. These should leverage a range of different learning channels (e.g. mentoring, digital learning, on-the-job learning) that are matched to an employee's needs. For new and mid-career employees, rotation programs can also be effective in building skill diversity. Organizations may also explore potential partnerships with other companies and educational institutions to fill the skill gaps they have.
- *Culture of skill relevance:* Organizations that predict changing skill set requirements must seek to build a culture of skill relevance. They must be transparent with their employees about their expectation that individuals will be self-initiated and lifelong learners. The expectations should be further reinforced through the performance management process. In other words, organizations need to assess, develop, and reward people based on skills.
- *Effective use of skill portfolios:* Over time, organizations need to track and record the skills and capabilities of their employees in a real-time fashion to understand where skill gaps lie, identify potential fits for open roles and projects, and determine where investments in learning programs are required.

The responsibility for developing the right skills in the organization should not lie with HR alone. Instead, the function should partner with business leaders to identify skills and capabilities of the

future, understand employees' career aspirations, and point them towards resources that can help them build these skills.

4. **Future-focused talent strategy**

In addition to building the critical skills in the organization's workforce, HR must ensure that its talent strategy aligns with its future business strategy. For example, nearly all organizations today are focused on digital business transformation efforts. However, Gartner reports that 43 percent of HR leaders believe that their organization does not have a clear and consistent strategy for digital transformation. Also, 35 percent of HR leaders state that they have inadequate talent to drive digital transformation. In order to execute the business strategy of digital transformation, HR must become the trusted driver and advisor on digital transformation. It should:

- Become experts in digital business themselves, and help set organizationally-aligned digital goals for different parts of the business;
- Track employees' skills to identify where gaps lie, and strategize appropriate intervention efforts;
- Deliver functional support and review HR strategies to stay aligned with the changing needs and expectations of employees and business leaders.

While most organizations pursue digital transformation, they may have other business strategies as well (e.g. expansion into a new market, launching a new product, optimizing its global headcount footprint, automating (or using artificial intelligence) for key business processes, etc.). HR should partner with the business to understand these strategies and develop a corresponding talent strategy to help the organization achieve its future goals. This is more than just skill-building - it is the entire set of end-to-end HR practices that encompass acquisition, retention, training, talent management, compensation, performance management, rewards, leadership development, etc. Such strategies should be proactively developed as the business thinks about its future; not retroactively, once the business direction has been set, and HR is expected to follow suit. This will allow HR to play a critical role in informing or shaping parts of the business strategy. Moreover, the strategy must be adaptable to changes in business needs and goals.

5. **Organizational agility and change**

Structurally, the organizations of tomorrow will be characterized by a number of key changes. The way work is done may transition from traditional roles to project-based tasks and other flexible models of work. Employees may choose to drive their own career trajectories, which could entail a number of complex, lattice-like patterns, and lateral moves. Compared to executive decisions made and implemented in a top-down fashion, organizations may adopt team-based decision-making structures, or even encourage the co-creation of business strategy. As discussed earlier, companies may have digitally transformed operations, offer flexible work options, and prioritize the employee experience. Some key strategies for the HR function to navigate these changes include:

- Adapting their talent acquisition strategies to source talent differently and tailoring their compensation and benefits offerings in response to the changing demographic of the workforce, as more employees develop varying relationships with the company (e.g. part-time employees, short and long-term temps, contractors);

- Effectively communicating with their employees through times of change to provide them with the information they need to do their jobs successfully and navigate the changes;
- Influencing people's mindsets to embrace rather than resist change, prioritize continuous learning and skills updating, and view change as an opportunity for personal and professional growth.

In a landscape of change, HR will be expected to be more nimble and agile, build new tools, and adopt more of a consulting role. There will be a strong need for flexibility, communication, and cultural sensitivity. In fact, changes in the organization's structure may completely transform tzhe type of HR advisorship that is expected by the function's clients.

Key HR skills for the future

1. **Data-driven**
When preparing for the future of work, the HR function must place an emphasis on developing HR professionals to not only be able to understand analytics but also have the skill to draw their own inferences using data. While it is not necessary for those in the HR function to be technical experts in manipulating "big data," they will need to be able to frame questions on the front end in order to facilitate proper analyses, understand statistics in order to identify when data is being used correctly (and incorrectly), and use analytical results to draw conclusions and make meaningful decisions. While data analytics remains a top competency for HR professionals for the future, it is a skill that many lack, with only five percent of companies disclosing that their HR teams are "very good" in basic data literacy skills [xxviii]. Understanding how to collect, evaluate, and drive change based on data is an essential piece of HR's contribution to a firm's business strategy, so HR professionals who lack this ability must be upskilled in this area.
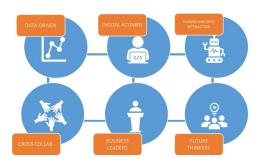
2. **Digital acumen**
Many companies today are engaging in digital transformation efforts. The HR function is not (and will not be) immune to the rapid adoption of automation and new technologies across the business. In order to help others navigate these changes, HR must build its own digital acumen. It can recruit for talent equipped with the required digital skills, enroll employees in internal or external digital literacy courses, partner with other internal teams already adept at data and other digital tools to build its own capabilities, use data visualization techniques to present HR data and influence key stakeholders, and explore new HR technologies to simplify existing processes, or execute them more effectively. A digitally smart HR function will also build credibility among business leaders, and earn the trust required to influence, inform, and drive the organization's digitalization efforts.

3. **Cross-collaborators**
As the world of work becomes more interconnected, it is becoming increasingly important for HR professionals to collaborate across functions and with those who may not be in their own ecosystem. While new technologies for the workplace have made it seemingly easier to communicate, these tools are not enough to break down the barriers that exist to keep work teams in silos. Bringing together divergent ideas and viewpoints will speed up the process of

innovative thinking and lead to more thoughtful execution as well. HR professionals must be encouraged to create strong bonds and successful collaborations with those in other departments or geographic locations. While it can be challenging, the world of work becomes more interconnected, it is becoming increasingly important for HR professionals to collaborate across functions and with those who may not be in their own ecosystem. While new technologies for the workplace have made it seemingly easier to communicate, these tools are not enough to break down the barriers that exist to keep work teams in silos. Bringing together divergent ideas and viewpoints will speed up the process of innovative thinking and lead to more thoughtful execution as well. HR professionals must be encouraged to create strong bonds and successful collaborations with those in other departments or geographic locations. While it can be challenging, cross-functional collaboration in particular allows teams to leverage the skills and experience of a more diverse group of people, promote creative thinking that results in more creative solutions, and even upskill employees' management, leadership, and communication skills. Moreover, as the HR function continues to change at an accelerated pace, promoting cross-collaboration with other functional teams can help bring a new perspective and aid in areas where the team, unbeknownst to itself, may be stuck in its ways.

4. **Business leaders**

HR leaders are most importantly business leaders and should therefore both understand the business and make decisions that align with the overall business strategy. This goes beyond understanding various business disciplines or other areas of the organization and requires that HR comprehend how the organization operates, the intricacies around the firm and industry's competitive environment, and how to then use that knowledge to make more informed business decisions. HR leaders must therefore be able to demonstrate to other leaders in the business how they are strategically important to the core functions of the business and make HR decisions that are in alignment with both the broader business goals and key stakeholders. Overall, the investment in equipping HR leaders with this level of business proficiency helps signal to others in the organization that the HR function can be trusted and deserves a role as a key contributor in the decision-making process.

5. **Future thinkers**

Looking at business problems through the customer's eyes enables companies to better sustain their innovation and emerge as market leaders. Similarly, with the enormous improvements in technology that have come in the last ten years, many organizations have begun to place a large focus on designing their technologies and services with the end user in mind. HR teams are no exception to this and will need to use a "design thinking" approach to upskill the way they solve problems through understanding the needs of their different stakeholders. This new focus on co-creating with one's customers and employees drives a necessary change from a focus on tasks and activities to outcomes. As a whole, HR leaders need to develop a more customer-centric mindset

that helps them better understand how to remove barriers that negatively impact employees, ensure that the HR interventions in place enhance the employee experience, and create better levels of service across the function.

Conclusion

The only certainty in the hypotheses, questions, and studies related to the future of work is that the future looks different from the present, and that work, workers, and workplaces of tomorrow must be adequately and effectively equipped to successfully navigate the myriad of uncertainties. This is a complex and challenging endeavor for organizations. It's also an important one.

While a substantial amount of literature on the topic maps out the future of work in purely (or predominantly technological terms, there exist a number of other variables that will have significant economy-wide and organization-level implications. Therefore, this report conducts its analyses on three levels - Level One (macro-level trends, Level Two (organization-level implications, and Level Three (HR priorities and skills. Level One captures the key megatrends that have the potential of shaping the future of work, specifically, Technology, Demographic Trends, Globalization, and Economic Changes. These trends are of interest not just to organization leaders, but also to governments, public policy analysts, and other stakeholders. Level Two explores the implications of these trends at the organization level. These include the changing social contract between work and workers, the implications of technology on work and workers, and the redesign of tomorrow's organization. Key trends under each category are discussed. For example, gig work gets more ink than it deserves, flexible work arrangements are no longer a benefit, but an expectation, and reskilling is a crucial forward-looking imperative for organizations. Level Three discusses the implications these changes bear on the Human Resources function. This includes the need to build a positive employee experience, develop the right leadership capabilities, build critical future skills in the workforce, create a business-aligned future-focused talent strategy, and adapt to organizational agility and change. It also explores the skills HR professionals must possess for this future of work: data literacy, digital acumen, cross-collaboration, business acumen, and future-thinking.

When thinking about and preparing for the future of work, business leaders may find it helpful to use this three-level framework as a "blank canvas" against which they map out expected changes. For example, what are the expected technological changes and economic trends (Level One) that are likely to impact my business in the next five years? Where does my organization stand in terms of Diversity & Inclusion efforts, reskilling programs, and flexible work arrangements (Level Two)? The model can even be layered with Level Three implications. For example, HR leaders and practitioners may use this model and business imperatives deduced from the model to design their five-year talent strategy. Similarly, the framework can help experts and special-interest groups understand the implications of the future of work for their "target group" or "bargaining unit" (e.g. underrepresented minorities, disability groups, unionized workers, etc.).

It's important to note two caveats about this analysis. First, although the model is comprehensive, it is not exhaustive. The trends discussed in this report are far from being the only ones. Based on a review of the literature on the topic, these emerged as the most-prevalent, widely discussed themes. Additional trends, such as data privacy, organization layers (i.e. hierarchical vs. flat organizations), and social responsibility, may have been excluded from analysis perhaps because they are unique or peculiar to

certain organization types, or that they're playing out in organizations in the present (and are therefore not novel trends that will shape the future). However, they're still important to consider. Second, the model is dynamic. As new trends emerge, technologies develop, and geopolitical rules change, the framework will need to evolve and expand to accommodate new priorities.

Appendix

Methodology

Two types of literature were reviewed to develop CAHRS Future of Work framework:
1. Research-backed consulting reports (e.g. Accenture, Deloitte)
2. Organization reports (e.g. International Labor Organization, World Economic Forum, Center for Advanced Human Resource Studies)

Identification of major themes, include:
1. Macro-level themes, i.e., external factors that will shape the nature of work in the future (e.g. technological changes, demographic changes, etc.)
2. Micro-level themes; i.e., changes expected at work at an organizational level (e.g. automation, D&I, flexible work, etc.)
3. HR-level themes, i.e., implications for the Human Resource function (e.g. building a positive employee experience, developing the right leadership capabilities, etc.)

Consolidation of major themes:
1. Frequency count of themes that cut across literature sources
2. Clustering of themes into three thematic clusters which align closely with the clusters identified by CAHRS executives:
   1. The Changing Social Contract
   2. The Implication of Technology on Work and Workers
   3. Redesigning Tomorrow's Organization

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