



THE TWIN TRENDS OF
AGING AND AUTOMATION:
Leveraging a tech-empowered
experienced workforce





This report was developed in collaboration with Marsh & McLennan Advantage Insights

CONTENTS

INTRODUCTION: THE TWIN TRENDS OF AGING AND AUTOMATION	3
EXPERIENCED WORKERS: THE UNDER-APPRECIATED WORKFORCE	5
LEVERAGING A TECH-EMPOWERED EXPERIENCED WORKFORCE	12
REDESIGNING JOBS	13
REDESIGNING THE TALENT MODEL	19
ORGANIZATIONAL CULTURE AS A KEY CATALYST	25
CONCLUSION	27
GLOSSARY	28
BIBLIOGRAPHY	29
ACKNOWLEDGEMENT	31



INTRODUCTION

THE EXPERIENCED WORKERS AND THE TWIN TRENDS OF AGING AND AUTOMATION

The twin trends of rapid population aging and automation have been unprecedented in speed and scope. Both academia and industry have dedicated extensive research to understanding the direction, magnitude, variations, and impacts of these separate trends.

In our first report of this two-part series, Marsh & McLennan Advantage Insights, in collaboration with Mercer and Oliver Wyman, contributed to this literature by focusing on how automation affects workers above the age of 50 across 15 major markets in the Americas, Europe, and Asia-Pacific.¹ The report showed that older workers are at moderate-to-high risk of being displaced by automation, with those in advanced and emerging markets in Asia at highest risk.

There is broad consensus in the literature that older workers not only experience major difficulties in the labor market, but also face severe fallout from displacement due to automation. Displacement leads to a more precarious financial situation,^{2,3} as well as adverse health effects both physically and socio-psychologically.^{4,5} These are serious issues that have commanded increasing attention from governments through research and public policy – but governmental efforts alone, unfortunately, will not be enough. The call has been growing for companies to be part of the solution and help ensure adequate social protection and well-being for older workers. This now constitutes a critical part of the discourse on healthcare and inequality in many countries.

At the same time, many companies now also find themselves under pressure to remain competitive by undergoing digital transformation. This focus on the technological side of organizational transformation has led many organizations to overlook the plight of older workers, regarding the problem as NIMBY (Not In My Backyard), until they realize that they themselves are increasingly relying on an aging workforce. In turn, companies will also increasingly face other macro problems associated with population aging, such as talent shortages and loss of institutional knowledge, heightening the need to keep older workers productive for longer.

In this paper, we propose potential solutions to these challenges. We first re-conceptualize the perception of older workers through unpacking their values as experienced workers - whom we refer to those above the age of 50 whose tenure within organizations and industries has provided them with a wealth of experience and knowledge that companies can leverage to enhance competitiveness. This term will be used throughout the paper. We take a corporate perspective to the intersection of aging and automation to argue that companies must seriously challenge current dominant narrative of older workers and seek to build more age-inclusive organizations. The question is, how do new technologies feature in this new vision?

Proposed answers to this question have focused on technological potentials – how technology can be applied and deployed to aid older workers.⁶ To complement this, we propose that companies approach the question from a workforce perspective to cultivate and leverage a tech-empowered experienced workforce: Many companies have underestimated experienced workers' capacity to contribute, as well as the potential synergies between technology and an experienced workforce, and would benefit greatly by directing their energy to foster this synergy. The strategy proposed here can serve as a blueprint for these areas of synergy, thereby laying the foundation for wider initiatives to bolster organizational resilience to fast-paced technological changes as a whole.

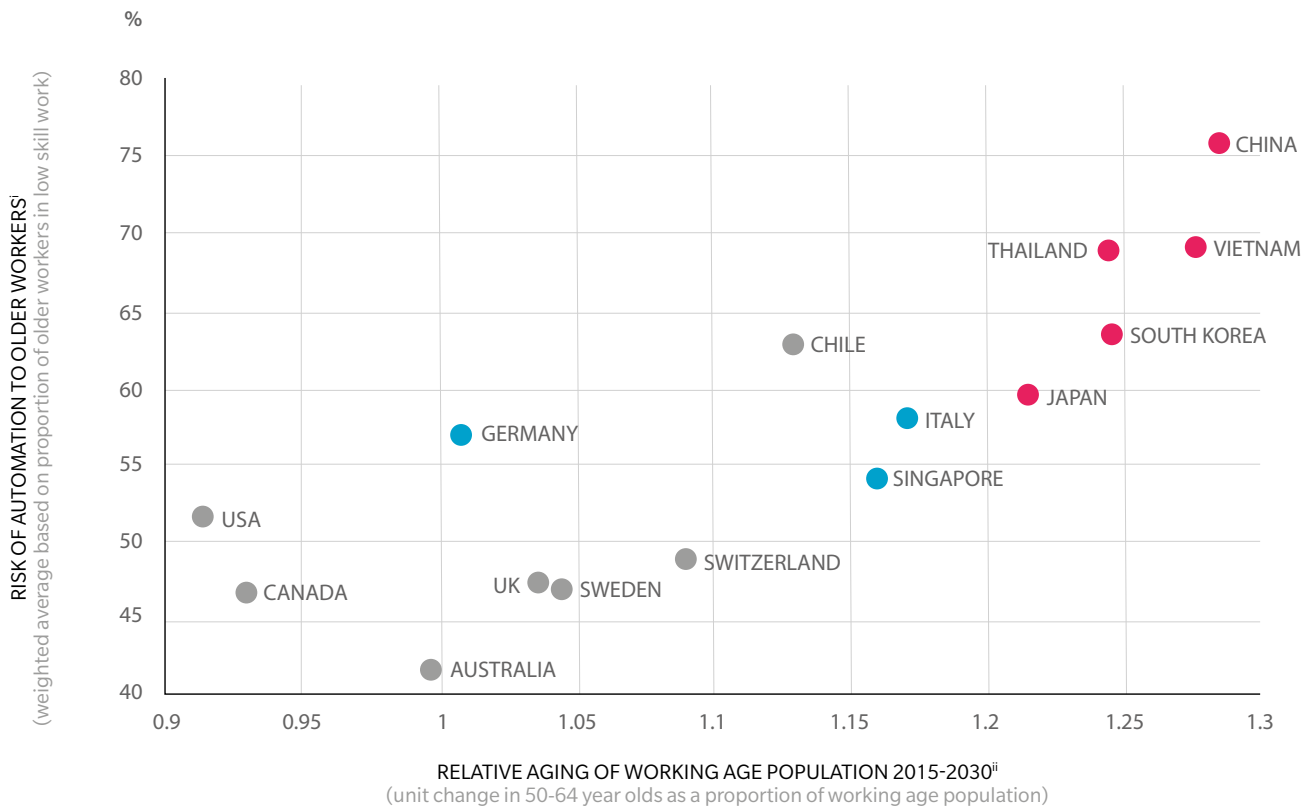
Experienced workers refers to workers above the age of 50 whose tenure within organizations and industries has provided them with a wealth of experience and knowledge that companies can leverage to enhance competitiveness.

A SUMMARY OF THE FIRST 'TWIN THREATS OF AGING AND AUTOMATION' REPORT

The Twin Threats of Aging and Automation report examines and quantifies the risks of rapid societal aging and of experienced workers' susceptibility to automation in 15 major markets

● Many older worker jobs in advanced markets are also highly automatable, notably in Germany, Italy and Singapore (57%)

● Older workers jobs in many East/Southeast Asian countries are at the highest risk of being automated



IMPORTANT FACTORS AFFECTING RISK OF OLDER WORKER JOB AUTOMATION



Education: Countries with higher education expenditure face lower risk of automation among older workers



Public Spending and Welfare: More government consumption spending and higher pension replacement rate tend to decrease the risk of automation for older workers



Industrial Structures: Markets with large manufacturing sectors tend to have higher risk of automation for older workers



Legal Rights in Financial Systems: Better protections for borrowers and lenders decrease the risk of automation for older workers

i: Shows how many percentages of the work older workers are doing in a certain country is automatable

ii: Shows how many times the number of older workers aged 50-64 will increase between 2015 and 2030

EXPERIENCED WORKERS

THE UNDER-APPRECIATED WORKFORCE

While the case for addressing the growing experienced worker population can be made with relative ease from a societal and governmental perspective, the issue becomes more complicated through a corporate and technological lens.

The role of experienced workers and their potential contribution remain all but absent in management discussions about digitalization.

Traditionally, experienced workers have not been considered a viable talent source to close the skill gap (see Exhibit 1 and the following discussion). This view persists despite efforts from governments and advocacy groups, as well as the fact that experienced workers constitute a growing proportion of the global workforce. According to the World Economic Forum's 2016 Future of Jobs report, only 4 percent of respondents planned on investing in experienced workers as part of their workforce strategy for the future.¹ The role of experienced workers and their potential contribution remain all but absent in management discussions about digitalization.

There are several layers to this oversight.

First, companies may be less attentive to the experienced workforce in younger societies, such as in the Philippines and Indonesia. Companies in these markets instead focus on nurturing and attracting young talent, as there is no perceived urgency around the societal issue of population aging.

A more powerful rationale, however, lies in preconceptions about experienced workers and their ability to contribute, such as assumptions of reduced productivity, weak technological skills, and high retirement costs. Such perceptions are often formed without a critical examination of the data (such as a quantification of older workers' contributions) and have been the source of age discrimination in hiring practices as well as ageism in the workplace.^{2,3}

These elements greatly undermine the economic case for retaining and retraining experienced workers. Even in aging societies, retaining experienced workers can be in direct conflict with companies' growth directions or transformational ambitions. A stark example is China's manufacturing sector,⁴ where some companies are under intense pressure to replace large swathes of workers with machines to remain competitive, and where the government has also been actively encouraging automation.

Exhibit 1: Reasons why companies have yet to consider older workers as an integral part of their workforce or digitalization strategy

1

Population aging is yet to become a serious problem in a large number of markets

2

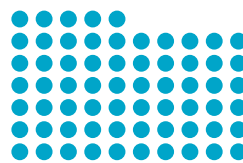
The economic case for retaining and retraining of experienced workers may not be compelling, and can run counter to a company's automation ambitions

3

Misconceptions on experienced workers' aptitude and ability to contribute lead to ageism and severely undermine the economic case for an experienced worker strategy

65%

of WEF survey respondents say they are planning to invest in reskilling current employees



4%

consider investing in experienced workers a viable option



At the same time, there is also a particular bias toward automation in the fields of artificial intelligence (AI) and other emerging technologies, as researchers are incentivized to pursue effective replacement of humans by machines.⁵

While many of these premises are increasingly being challenged, especially preconceptions surrounding older workers' ability,⁶⁻⁹ the economic case for retaining and retraining experienced workers is one that has to be made for businesses. Although a persuasive argument may not be possible for all companies,ⁱⁱⁱ a strategy centered around experienced workers will become necessary for many organizations, particularly those in countries with rapidly aging societies.

Building the case for an experienced worker-centered strategy

Though companies have historically not focused on experienced workers, aging populations and falling birthrates have now made it unsustainable to omit this demographic from any future-focused workforce strategy.

Marsh & McLennan Advantage Insights, alongside Mercer, has identified several challenges that together present a compelling economic case for a proactive aging workforce strategy (see the summary on Mercer's Next Age: 'Are You Age-Ready?' report on page 10):^{iv}

Redirecting the emphasis on the experienced workforce is partially defensive, as it is necessary to effectively cope with the challenges discussed. In fact, many companies have been investing more in the health and well-being of their experienced workers as their aging workforce grows in an effort to contain healthcare costs and maintain general productivity levels,¹⁰ and are specifically looking to technology to unlock these solutions. For example, the Asian Development Bank's recent report on harnessing technology for Asia's 'longevity dividend' shows how applying technology in medical science and biotechnology could facilitate a healthier and more productive workforce. Automation, meanwhile, is replacing more manual and physically demanding tasks, enabling experienced employees to participate in sectors previously unsuitable for them.¹¹

This focus on the health angle, however, is only part of the answer as it does not provide an adequate response to the question of balancing between the need to retain experienced workers and the continual need for digitalization (which can potentially lead to displacement). Rather than a question on the application of technology, it is a question on how a seamless and synergistic integration of technology with an aging workforce can be executed.

MAJOR WORKFORCE AND MARKET CHALLENGES FACING COMPANIES



Talent shortage: Difficulty in acquiring talent due to general labor shortage and skill shortage



Changing market realities: An aging customer base leads to different requirements of products and services



Loss of institutional knowledge: Loss of implicit knowledge within the organization due to mass retirement



Apart from these issues, **expected regulatory changes can accelerate experienced workers' participation in the labor market**, while also intensifying requirements for adequate social protection and welfare

iii: For a more detailed analysis of different older workers group, see Box 1

iv: These findings are elaborated in more detail in Mercer's latest report on the topic, titled 'Next Stage: Are You Age-Ready?' A general case can be made even though there are evident variations across different companies, worker groups, and industries (see Box 1 for an analysis of different worker groups).

A helpful way to start conceptualizing this integration process is to rethink the traditional concept of “older workers” and pay more attention to the valuable experience they bring. Recasting ‘older workers’ as ‘experienced workers’ puts in focus the value that they bring and direct organizational attention to areas where new technologies can augment or magnify the existing wealth of experience in the firm – in other words, areas of synergies.

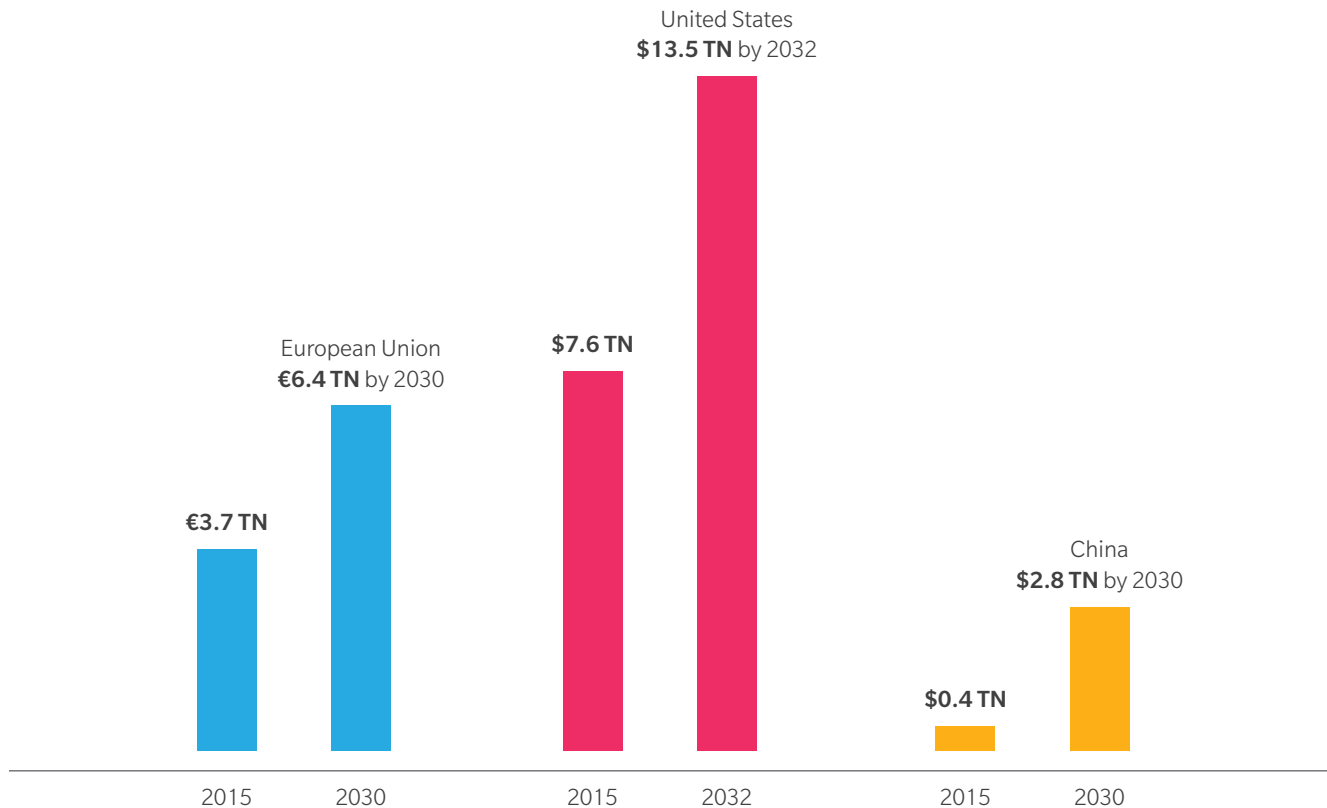
Experienced workers can not only plug the talent gap but also represent the best talents in a rising global longevity economy

Should such a strategy be successfully implemented, companies can achieve more than just effectively coping with the four challenges that were laid out. Considering the current rise of the ‘longevity economy’ (see Exhibit 2), a workforce strategy centered on experienced workers can also be seen as an opportunity for companies to advantageously reposition themselves in a new market.

Studies on the longevity economy in Europe suggest that private expenditures by those 50 years and older contributed almost €3.7 trillion (approximately \$4.1 trillion) in GDP to the European Union in 2015. This number is expected to grow to €6.4 trillion (32% of EU GDP) by 2025, corresponding to 88 million jobs (38% of EU employment).¹² In the US, the ‘longevity economy’ is estimated to have contributed \$7.6 trillion in economic activity in 2015 and is expected to reach over \$13.5 trillion by 2032.^{13,14} A similar story is unfolding in China, where the total consumption by those over 65 years of age is projected to jump from \$0.4 trillion in 2015 to \$2.8 trillion in 2030.¹⁵

In this context, experienced workers, who likely possess significant industry experience and an intimate understanding of the market are not only primed to plug the talent gap but also best placed to help businesses position themselves in the longevity economy.

Exhibit 2: Growth of the longevity economy in the EU, US, and China



Source: Oxford Economics; Standard Chartered

A SUMMARY OF MERCER'S 'NEXT STAGE: ARE YOU AGE-READY?' REPORT

The Are You Age-Ready? Next Stage report makes a strong case for rethinking companies' current approach to age. It argues that organizations need to critically examine their demographic data and prepare themselves to be age ready at this precipice where trends of automation, aging populations, skill changes and scarcity, migration challenges and the need for new life transitions are converging. (converging.)

NOT FOCUSED ON YOUR EXPERIENCED WORKFORCE? YOU SHOULD BE



TALENT SHORTAGE

- A shrinking labor force owing to a rapidly aging population and falling birthrates leading to general labor shortages
- Application of new technologies increases demand in high-skill jobs or radically different skill sets that are not necessarily provided by the current education system, both in quantity and quality



LOSS OF INSTITUTIONAL KNOWLEDGE

- Some companies are faced with mass retirement from baby boomers who will carry with them valuable stored knowledge within the organization that enables it to function efficiently



SHIFTING MARKETS AND CONSUMER PREFERENCES

- Changes in the customer base or market demand from an older population require firms to retain experienced workers as their experience and understanding of the new market is a crucial success factor



REGULATORY PRESSURE

- Policies initiated by the government to mandate or encourage companies to retain, retrain, and rehire experienced workers as a contribution to social protection for senior citizens (see Exhibit 3)
- Increasing legal actions from experienced workers against age discrimination

DEBUNKING MYTHS: EXPERIENCED WORKERS ARE...



"...less productive than younger peers"

Mercer found multiple cases in which the productivity of business teams or groups was higher when the work groups were older or comprised mixed-age teams.



"...slower in learning new skill and technology"

Experienced workers are less likely to have been taught new skills rather than being unable to learn them.



"...more costly"

Mercer research shows that at all job levels pay climbs during the earlier years, plateaus, and then falls as workers age. Compensation can also be exchanged for more flexibility.

Exhibit 3: Examples of regulatory changes across aging societies (non-exhaustive)



Extension, or planned extension of retirement age and pension eligibility age

While in some countries these policies are still being debated, they have received wide political support and are expected to be implemented



Mandatory rehiring or continued employment system

Policies that compel companies to rehire or continue employment for older workers up until a certain age should they desire and are qualified for work







Anti-discrimination policies

Regulations that are put in place to protect older workers against discrimination in hiring practices and the workplace. Many countries have age as one of the dimensions in their anti-discrimination policies, but the enforcement of such policies can vary



Provision of incentives

Providing businesses with incentives to retain or re-employ older workers

				
CANADA	✓		✓	
UNITED KINGDOM	✓	✓	✓	✓
SWEDEN	✓	✓	✓	
GERMANY	✓		✓	
CHINA	✓		✓	✓
SOUTH KOREA	✓		✓	
UNITED STATES	✓		✓	✓
SPAIN	✓		✓	✓
ITALY	✓		✓	✓
THAILAND		✓	✓	
VIETNAM	✓		✓	
SINGAPORE	✓	✓	✓	✓
AUSTRALIA	✓		✓	✓
JAPAN	✓	✓	✓	

Source: Oliver Wyman research, compiled from various news and official governmental sources

Box 1: Making the case(s) for the different older worker groups

It is necessary, in making the argument for retaining and retraining older workers, to recognize that the older workforce is not a homogenous population. As laid out in The first Twin Threats of Aging and Automation report, many older workers in lower-skilled professions are at the most risk of being automated. They also tend to be in a more precarious financial situation, accentuating their need to continue working.

Older workers in higher-skilled professions, in contrast, are under relatively less risk of automation and are more likely to continue working to stay active. To be sure, as technologies such as AI and robotic process automation (RPA) permeate the workplace, some higher-skilled, white-collar jobs will become more at risk. For example, many business news articles at Bloomberg are now being churned out by AI rather than journalists.¹⁶

Due to this heterogeneity, different older worker groups will require different economic cases to be made. A few caveats must first be stressed:

- I First, the worker groups presented are simple archetypes that are not meant to exhaustively reflect market realities. Many workers, both in low and high-skilled professions, may share the same motivation for both financial ends as well as meaningful work.
- II Second, the business case for retaining and retraining older workers is highly dependent on the specific context of the company, including but not limited to its industry, location, and firm-specific demographic characteristics.
- III Finally, the analysis below is purely confined to the realm of economics. There is a much broader moral and societal argument (and indeed a growing reputational argument) for companies to take care of older workers that needs to be taken up in a different discussion.

HIGHER-SKILLED WORKERS

The case for retaining and retraining higher-skilled older workers can be readily made. Older workers have been shown to possess many of the qualities that will be in high demand,¹⁷ such as verbal and social skills, industrial experience, innovative thinking, maturity, emotional stability, and better judgment in decision-making.⁶⁻⁹ Analysis from Oliver Wyman on the impact of new technologies in the wholesale banking sector, for example, has shown that there is a significant cost advantage for companies that retrain workers instead of hiring externally, strengthening the economic case for an older workforce strategy (see Exhibit 4).

LOWER-SKILLED WORKERS

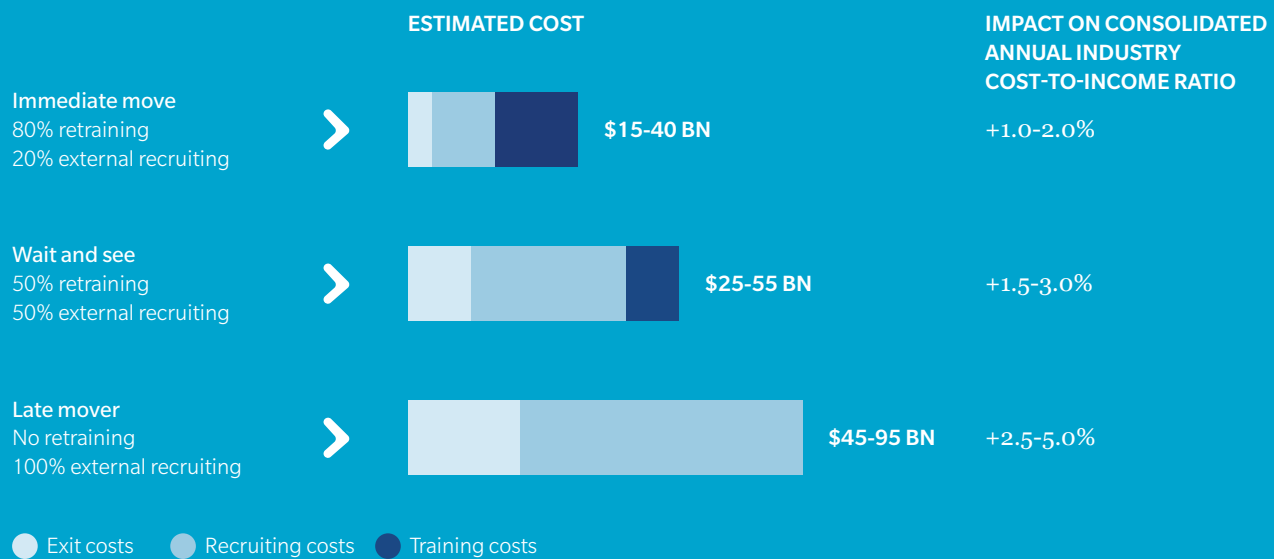
The case for retaining and retraining lower-skilled older workers is more complicated. It is less often that older workers in these professions can find and focus on the more value-adding tasks. Manufacturing jobs, for instance, come to mind as an example where automation can efficiently replace older workers. However, observations from several aging countries suggest that there is a case to be made for retaining older workers in lower-skilled professions. In some instances, older workers are providing the crucial complementary human touch needed for client service. For example, Mercedes-Benz found that the flexibility and adaptability of human input are necessary as customers demand more customization and individualization of their products.

Source: Mercer; Marsh & McLennan Companies Insights analysis

There is also a real possibility that automation technology may simply be unable to keep up with the pace of aging. For example, this may be the case for Britain, where automation has not received adequate investment. As the country grapples with immigration challenges from Brexit, its aging population means that skill shortages are being exacerbated. Many companies have found themselves unable to find enough bricklayers and carpenters, who have traditionally come from Poland and Hungary.¹⁹ In other instances, companies may be less willing to immediately go fully automated due to the large investment needed.

It is safe to say that in the short run, many companies with older workers in lower-skilled jobs will continue to face the same problems that those in the higher-skilled bracket are facing. Admittedly, a persuasive economic case may not be possible for every company. However, what we have seen strongly suggests that companies should at least examine the business case for retaining and retraining older workers instead of dismissing this option without properly consulting the data.

Exhibit 4: Three scenarios for workforce transformation in the wholesale banking sector and their cost impacts



Source: World Economic Forum (2018), The Future of Jobs Report 2018; Oliver Wyman analysis

LEVERAGING A TECH-EMPOWERED EXPERIENCED WORKFORCE

With the current speed of technological innovation and its rapid application in the workplace, digitalization has become imperative for many businesses. However, digitalization in the context of an aging workforce is no simple task.

The central puzzle for executives is to integrate new technology and successfully digitalize while still ensuring a motivated, productive, and healthy older workforce. While research has pointed to the myriad ways in which technology can be deployed to this end, technology cannot be an all-purpose solution that can be easily added on. The organization must change as well in order to not only anticipate but also leverage technological changes. The goal is to build a **tech-empowered experienced workforce in an age-inclusive environment**.

To this end, it is important to identify, promote, and facilitate areas of tech-human synergy. The strategy house below lays out areas where technology can potentially be integrated to augment experienced workers and, likewise, where the rich knowledge that experienced workers hold can make technology more effective, all off the back of a more age-inclusive culture (see Exhibit 5).

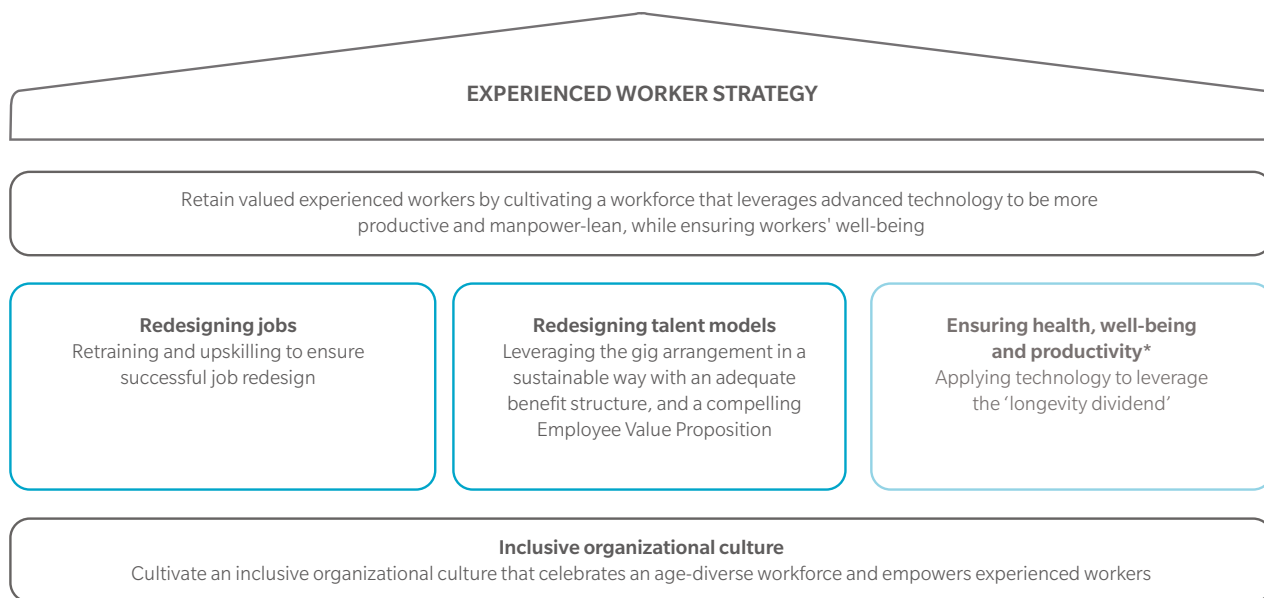
1. Technological integration: The introduction of new technologies will change the nature of work and talent management. As such, resources should be devoted to redesigning jobs and talent models in a way that is compatible with—and indeed, best leverages—experienced workers.

It is crucial to recognize that tech integration is not only about shaping the business with new technologies. It is equally important to listen to the needs of experienced workers and devise organization-specific strategies to help them embrace and adjust to changes. This is why in job redesign, bespoke training programs are crucial to meet the specific needs and motivations of experienced workers. Similarly in redesigning talent models, the deployment of technology needs to improve or at least retain protection and benefit structures.

2. An inclusive organizational culture: Changes cannot be implemented without a unified vision and support from the wider organization. Building an age-friendly, diverse, and inclusive environment is key to retaining and enabling experienced workers, thus forming the base of our strategy.

In what follows, we explore the different components of this proposed framework.

Exhibit 5: Overview of the experienced worker strategy



* Not discussed in depth in this paper
Source: Marsh & McLennan Insights

There has been much discussion about how new technology will change the nature of work as we know it. Rather than passively waiting for these changes, many companies looking to get ahead of the curve are actively redesigning their work around new technologies, which is the first pillar of our strategy house. While job redesign is a process that will be deployed across the entire organization and affects all workers, here we explore what this means for experienced workers in particular. We discuss how job redesign can help companies continue leveraging experienced workers' knowledge, and highlight retraining and reskilling as a critical component of successful job redesign.

THE CONCEPT OF JOB REDESIGN

Job redesign can be understood as the process of reconfiguring a job to deliver enhanced value, often when new technologies, such as AI and automation, are introduced and applied in companies. This is a core part of optimizing the workforce (see Exhibit 6).

Job redesigning projects can take many forms. The simplest version can be a straightforward application of existing technologies, such as communication devices, to improve the efficiency of old jobs. In contrast, a complete job redesign may mean rewriting the whole portfolio of tasks and necessary associated skills.

More broadly, as business leaders set out to deconstruct and reconstruct current jobs, it is worth challenging the concept of work itself as being mainly centered around jobs. Indeed, some companies have instead started to focus more on skills and skill sets as the center of work. This radically new system, which demands a step change in talent recruitment, evaluation, and compensation, is also one in which experienced workers can thrive. As verbal and social skills, industrial experience, innovative thinking, maturity, emotional stability, and better judgment in decision-making will be in high demand,²⁻⁵ companies will and should increasingly look to experienced workers as a key talent pool.

In the context of experienced workers, three questions need to be addressed with regards to job redesign.

1. How does job redesign benefit experienced workers and the company? Across all age groups, the purpose of job redesign is to achieve the ability to allocate workers to higher value activities. However, there is arguably a more specific synergy between new technologies and experienced workers. Technology and automation can take away the unfavorable aspects of work, such as physically demanding and repetitive tasks, enabling experienced workers to invest their extensive knowledge, heightened creativity, and evaluative thinking into activities that can generate more value for the company and customers.

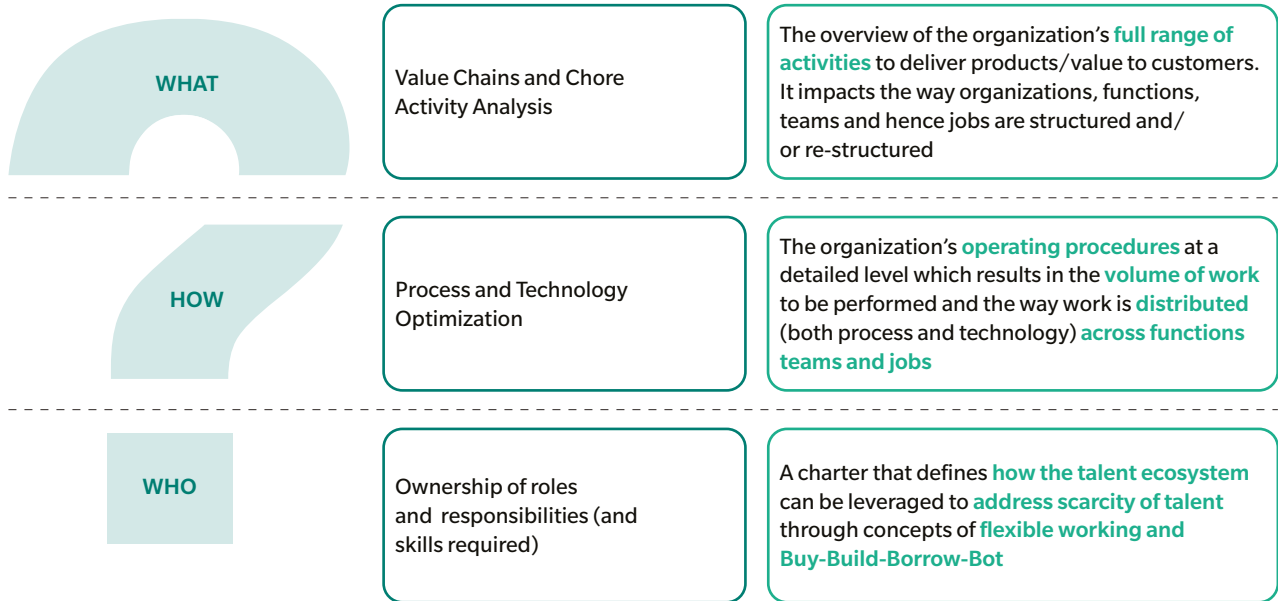
2. What is the right amount of technology in a new job? While technology is a driver of job redesign, the primary goal of such exercises is not to supplant humans with technology, but to achieve the best outcomes by finding the right balance between machine and human input. As the examples in Box 2 show, total automation is usually not the answer.

3. What are the necessary conditions for experienced workers to successfully adapt to new jobs? While there are many supporting initiatives a company can put forward to empower experienced workers, the most crucial prerequisite for a successful job redesign is the retraining and upskilling of experienced workers to prepare them for their new roles.

To be sure, retraining and upskilling can be a significant cost item in companies' books. Skeptics can point to lagging motivation over time and the substantial duration needed for technical training, which may make these programs less viable for experienced workers nearing retirement. It is, however, worth remembering that the working life of experienced workers is lengthening, which is commensurate to their improving health and also follows new regulations. Further, these are also general assumptions that may prove to be the contrary when juxtaposed with experienced workers' perspectives.

It is also worth noting that some but not all job redesign will require extensive retraining, and a radically new set of skills. Others may entail a refocus on tasks that have historically been an important part of the portfolio.

Exhibit 6: The concept of job redesign



Example 1: Job redesign in the banking industry

Relationship managers and key account holders are currently only spending 20 percent of their time servicing clients, with the rest of the time spent on administrative, client analysis, Know-Your-Customer (KYC) or other documentation tasks.

With the application of automated systems on KYC, client analytics and other repetitive tasks, workers can focus on solving complex problems for clients or providing non-standardized, bespoke solutions.

These more value-adding tasks naturally lend themselves to the many skills that experienced workers can leverage on their know-how and the interpersonal skilled built up in the course of their careers.

Example 2: Job redesign in the trucking industry

When trucking becomes fully automated, will truck drivers become redundant? Not necessarily. TuSimple, an autonomous trucking company has partnered with Pima Community College in Tucson, Arizona to launch a training program for ex-truckers, who will now apply their knowledge to ensure operational safety of the fleet and logistic optimization, among other things.¹

While the primary goal of the program is to build truckers' competency in interacting with new autonomous technology, it is also worth noting that there are situations where autonomous driving will not be suitable, and hence will need the experienced hand of truckers.

Source: Mercer, Oliver Wyman analysis; Truckinginfo

Box 2: Job Redesigning for Experienced Workers: Co-bots, not Robots

Automation may be the perfect solution in industries where repetitive and physically onerous tasks constitute the bulk of work, such as manufacturing. It has also been touted as a possible solution for the rapid population aging witnessed in countries like Japan, where labor shortage has become acute in recent years.

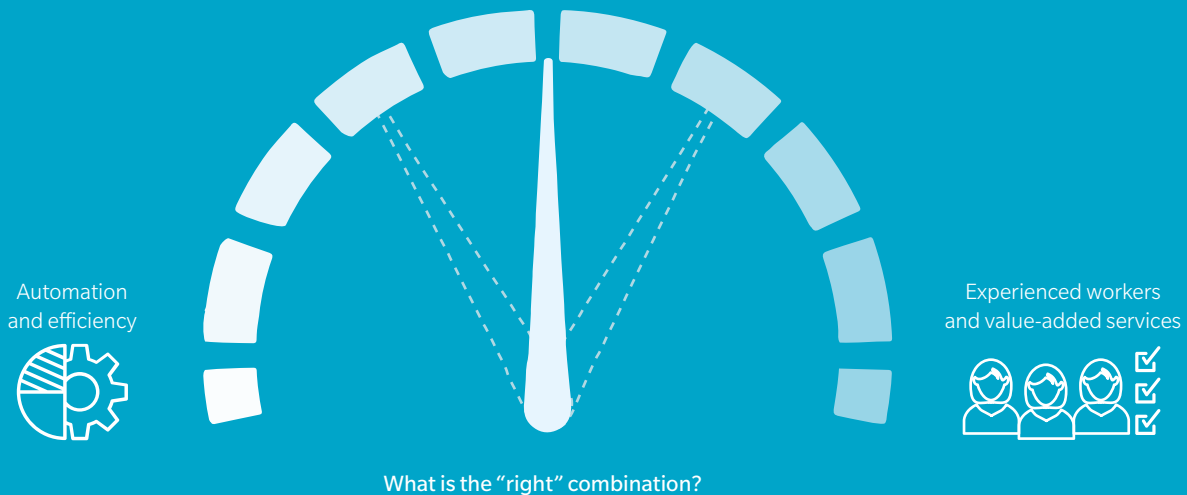
Yet, as automation becomes more prominent across industries, some companies have found that complete automation may not be the answer. Take, for example, the case of the Henn na Hotel in Japan. The hotel initially employed an 82-robot staff instead of humans, pushing the notion of an automated workforce in the service industry to the limit. However, the hotel has since seen its robot headcount significantly reduced by the hotel manager as guests started falling out of love with the initial novelty concept, and once again came to rely on human help.⁶

Elsewhere, Mercedes-Benz switched from a fully automated assembly line with industrial robots to hiring more people to work alongside smaller and nimbler table-top robots. As customers demand more customization and individualization of their products, managers at Mercedes-Benz found that the company needed the

flexibility and adaptability that can only be made available by re-introducing human input into the process.⁷ At BMW's largest factory in Europe in Dingolfing, Germany, experienced workers are now working alongside Kuka table-top robots that aid workers with repetitive or physically demanding tasks.⁸

The key to improved productivity is thus sometimes found in a combination of machines and humans – particularly experienced workers. In rapidly aging societies, experienced workers have already proven that they can be invaluable assets to companies: Japanese companies such as Pola Cosmetic have relied heavily on experienced workers, many above the age of 65, to deliver high-quality customer services leveraging their extensive experience and understanding of the customer base.⁹

Many companies with an aging workforce have understood that while automation is necessary for maximizing production efficiency, experienced workers bring valuable skills and experiences to the table that can be leveraged to provide differentiating services. Companies such as BMW and Mercedes-Benz have, therefore, strived to redesign work to get the best of both worlds.



UPSKILLING AND RETRAINING EXPERIENCED WORKERS: TARGETING THE WHITE SPACE IN GOVERNMENTAL PROGRAMS

THE WIDER TREND

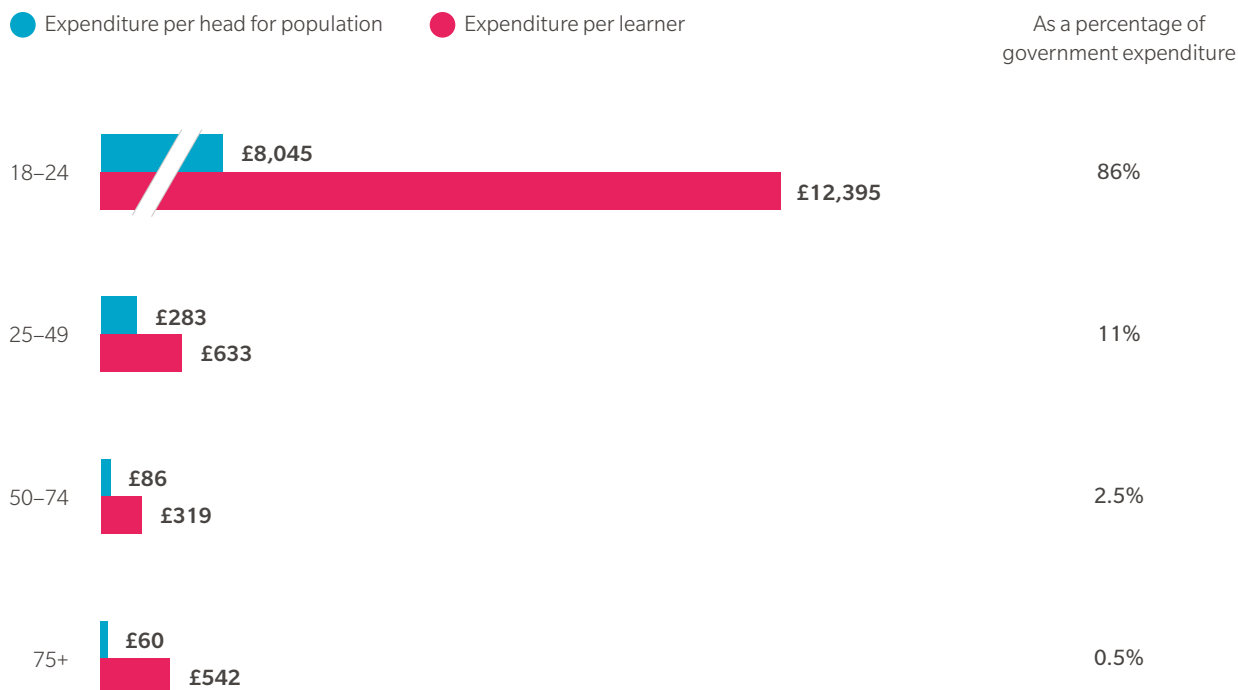
White Spaces in Governmental Training Programs

A crucial part of job redesign will be continuous workforce upskilling and retraining. In fact, this has already become one of the top general priorities for business leaders¹⁰ – and amidst mounting pressure from population aging, these programs are increasingly focused on experienced workers.

Governments in rapidly aging countries, meanwhile, have long recognized the need for national upskilling and retraining initiatives. What scant literature does exist on the subject, though, points to gaps in both programs and funding for upskilling and retraining experienced workers in particular:

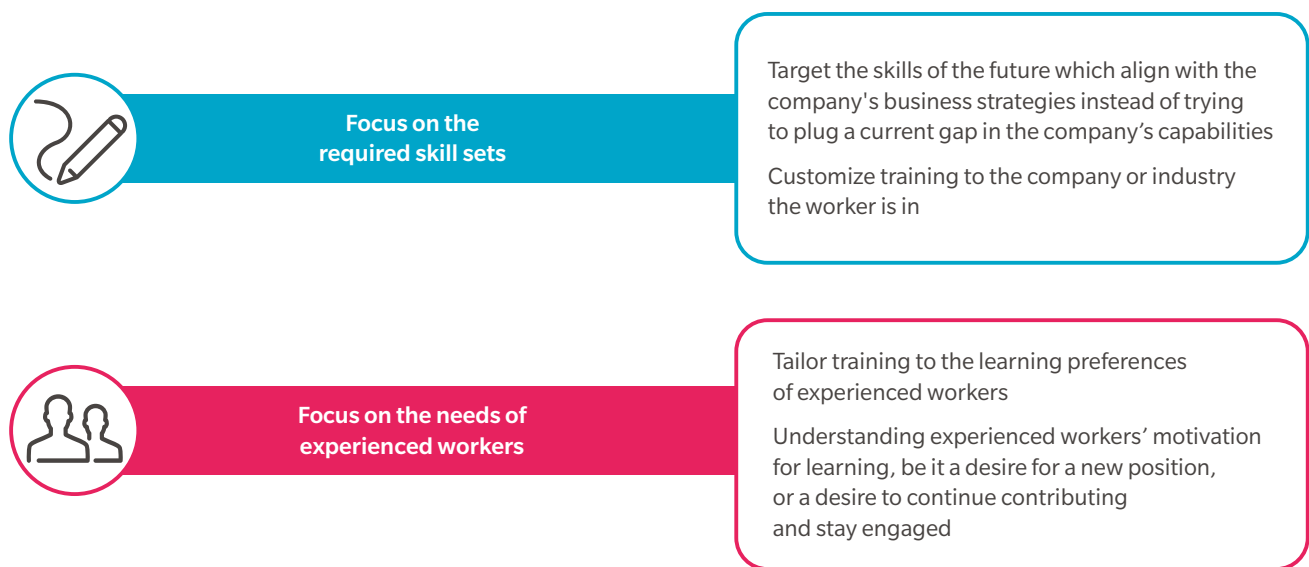
- **Gaps in the number of lifelong learning programs for experienced workers:** A 2015 review of the national strategy for skills in the UK showed that the offerings were more geared towards younger adults and the unemployed.¹¹ Similarly, a recent survey by IBM in Japan revealed that only 48 percent of businesses thought higher education institutions promoted ‘lifelong learning and ongoing skill development.’¹²
- **Gaps in program funding:** According to a 2016 report by UNESCO, adult learning and education received a minimal share of public spending on education, with 42 percent of countries spending less than 1 percent of the public budget for education on adult learning and education. Meanwhile, only 23 percent of countries spend more than 4 percent.¹³ It can be safely inferred that the budget allocated to experienced workers more specifically is highly limited. These findings are consistent with statistics from the UK, where government expenditure per person on experienced worker training trails significantly behind that of younger cohorts (see Exhibit 7).¹⁴

Exhibit 7: UK government expenditure on learning by age group (in pounds sterling)



Source: Older People, Learning and Education: What Do We Know?

Exhibit 8: Effective retraining and upskilling programs for experienced workers



Source: Marsh & McLennan Insights analysis

CORPORATE RESPONSE

Customized Retraining and Upskilling Programs

The presence of a clear white space in government-led upskilling and retraining programs stresses the urgent need for companies to be more engaged. Compared to government-led efforts, a corporate training program has several advantages (see Exhibit 8).

1. First, retraining and upskilling initiatives from companies can be more focused on the most important skills of the future. Capabilities in emerging technologies such as AI and blockchain may become a requirement for businesses, similar to the current necessity for data science and analytics. However, it is worth noting that in many cases, the skills of the future are not necessarily technological, but rather cognitive skills such as visualization and problem solving, as well as social skills like communication, coaching, and team building.

These retraining and upskilling initiatives must also be specific to industry and company needs. Targeted programs will help experienced workers better understand which skills are required and how these skills benefit the organization. This ability to design more focused curriculum is where company-led initiatives can fill the gap for the government, which can only provide a general level of education in new areas.

Some companies identify these required skills through consultation with in-house experts, while others engage in a more data-driven process (see Exhibit 9).² With regards to the latter, modern assessment tools can be leveraged to understand the skill gaps in terms of current skills and the future required skills. These analyses can lead to highly targeted individual level training interventions.

2. Retraining and upskilling programs should be relevant to experienced workers' needs. Experienced workers can also have specific learning preferences which, if taken into account, can make the learning process more effective. For example, experienced workers have shown they prefer hands-on, on-the-job training, and mentorship over formal-led training sessions.¹⁵ Reverse mentorship for technological training, in particular, has been successfully implemented in several companies such as AXA and Cisco and has been suggested as an effective tool for companies' technological transformation.^{16, v} The design of these training programs can also be supplemented by data on the learning agility of the experienced workforce, which can give insights into the behavioral orientation that should be adapted.

More broadly, understanding experienced workers' motivation for learning is crucial. For some, an end goal in the form of a new job or position at the end of the program targets a primary motivation and will encourage completion of the training. A clear objective for each course will also provide the training program with more direction and structure. In many other cases, experienced workers are actually seeking a sense of purpose and the ability to remain engaged with work. Here, the proposed courses should be designed to better equip experienced workers for their current role.

One example of a company-led large-scale program for the retraining and upskilling of experienced workers is at AT&T. The company plans to retrain half its workforce in preparation for new technologies, and learning and development programs have been designed with special attention to experienced workers' needs (see Box 3).

v: The term "reverse mentoring" does not capture all the benefit of these programs, as they benefit both the experienced workers who receive training and assistance on new technologies, and their younger counterparts who also receive guidance as would in a traditional mentorship arrangement.

Exhibit 9: How can companies identify the skills of the future?



Data analytics at an engineering firm in Europe

- A range of workforce data was analyzed to understand how senior engineers' jobs will change in the future
- Findings show that product digitalization is on the way, while roles are still mostly populated with experienced workers slated to retire in the following five years

OUTCOMES:

1. Concluded that a retention program for experienced skilled engineers is needed
2. Engineering jobs are to contain a coaching and troubleshooting role to help develop the next generation of engineers by an experienced engineer. Solution both ensures business continuity and invigorates the workforce



Expert consultation at an advanced manufacturing company

- The company wanted to understand the talent implications from automation, digitalization and AI for experienced workers in managerial positions
- Interviews were conducted with experts – plant leaders and teams to identify key changes needed
- Most critical skills identified are cognitive skills and social skills rather than technical skills

Box 3: Retraining at AT&T – the Workforce 2020 initiative

Telecommunications giant AT&T has initiated a massive effort to reskill half its workforce of approximately 250,000 employees. The effort, which is dubbed Workforce 2020 (WF2020) and is estimated to cost the company \$1 billion, was initiated as the company expected its workforce's skills to become largely obsolete by 2020 when it planned to migrate 75 percent of its network to a software-controlled system.¹⁷⁻¹⁹

Large incumbents like AT&T rely heavily on talent in new tech capabilities such as cloud computing, data science, and other emerging technologies like AI to remain competitive. However, the high turnover rate and fierce competition for talent from industry disruptors such as Google and Amazon have meant that the current supply from the labor market is unlikely to be enough. As such, AT&T is focusing its resources on reskilling its workers.

The company's retraining programs, in particular, have been designed with special care to meet experienced workers' needs. This case highlights several best practices:

- First, AT&T has made clear the skills that it requires for the future. Courses in strategy, virtual technologies, and big data, for example, are offered online and taken up by managers. More importantly, these courses are also specific to the industry, the company, and the workers' needs. Career guidance tools are set up to communicate the development direction of the company, the skills experienced workers need to acquire, and the available courses that can help. These courses are developed internally, or provided online through a partnership with Udacity, an online education company.
- The programs also focus on experienced workers and their needs. They are designed to accommodate workers with commitments and make materials more accessible to them, such as time-saving short videos, or online modules that can be paused and resumed. There are also different course formats to choose from, ranging from individual online courses and nano-degrees that are designed to help workers achieve the necessary technical specialties for a role transition, to full master's degrees programs.

Most importantly, workers can take advantage of the career profiling and career intelligence tools to understand their current skill levels and credentials, then juxtapose them with future hiring trends and job profiles. The availability of such tools to guide workers along their careers provides them with a tangible goal at the end of the training. This also serves as motivation for workers and helps make the program more successful.

Perhaps another success factor for the AT&T WF2020 is its scale and cohesiveness. While the WF2020 is focused on reskilling and retraining workers, the plan comprises all the different components of a holistic workforce strategy. This includes a job redesign angle, where not only are groups of jobs and tasks broadly redefined and consolidated but where internal mobility also plays an increasingly important role. Linking retraining initiatives back to an overall workforce strategy is crucial in successfully rolling out such programs.

REDESIGNING THE TALENT MODEL

In addition to using technology for job redesign, forward-looking companies are also using technology to reevaluate the way their organizations are structured and how talent should be managed. This section will focus on the second pillar of the experienced worker strategy: how companies can use technology to redesign talent models, ultimately complementing the value and contribution of experienced workers.

THE WIDER TREND

Rise of the Gig Economy – How Can Experienced Workers Adapt?

Much discussion has been dedicated to the rise of jobs in the gig economy, which can be loosely thought of as comprising non-traditional, technology-enabled work arrangements.^{vi} While it is not the only major shift in the relationship between companies and talent, it is arguably the most observable change and has accordingly received ample attention from the public, academics, governments, and business leaders.

The success of platforms such as Uber and Grab has spurred efforts to apply this concept more widely across other industries and populations. It is worth noting here that in contrast to common perception, gig jobs are not restricted to a specific skill level. “Gigs” encompass a wide range of work, from the lower-skilled jobs, to “contractor plus” types of work, to highly skilled advisory roles. Accordingly, the switch to the gig economy seems to be underway at all levels of skills as companies contemplate the application of an on-demand talent model instead of solely relying on traditional employment contracts.

In this growing gig economy, experienced workers may find themselves in the driver’s seat. A recent Mavenlink report on the white-collar gig economy in the US showed that experienced workers, not millennials, are driving the switch to the gig economy model.^{21,22}

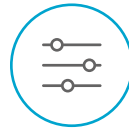
From an employer’s perspective, seasoned workers with broad and deep experience can quickly add value to any company or project they join. Rather than having to spend significant time and resources on training a new employee, companies can take advantage of experienced workers’ expertise and can expect projects to be executed faster, more effectively, and at lower costs.

Tellingly, the most sought-after contractors by company executives are those with specialized degrees and more than 10+ years of experience, criteria that experienced workers are more likely to meet than their younger counterparts.

MOST SOUGHT AFTER QUALIFICATIONS FOR CONTRACTORS



Specialized degrees



10+

years of experience



Comes from a reputable firm



Worked with someone you know

Experienced workers also welcome the benefits of the gig arrangement, the main value proposition lies in its flexibility. Discussions conducted by Mercer with employees at major companies have shown that a sizable segment of workers above 55 find gig work projects moderately to extremely attractive as a way of achieving more flexibility and work-life balance. Many have also indicated that they are willing to participate in freelance work or gig project arrangements offered by companies they are currently working at (see Exhibit 10).^{vii}

As such, there is great potential for companies to apply a ‘gig economy model’ of talent management for experienced workers to achieve a win-win arrangement. Such an endeavor, however, is not without its difficulties. Companies will need to overcome structural barriers to make gig work more attractive to experienced workers, such as supply and demand imbalances, the potential loss of guaranteed income and benefits, an unclear career path, and the onus of self-promoting and bearing business costs.

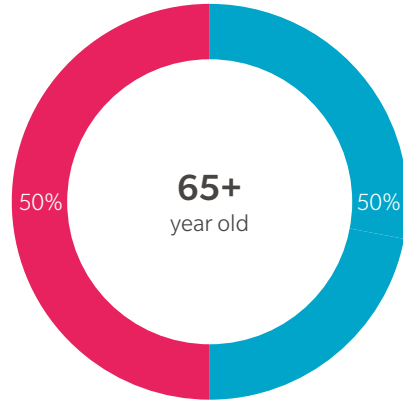
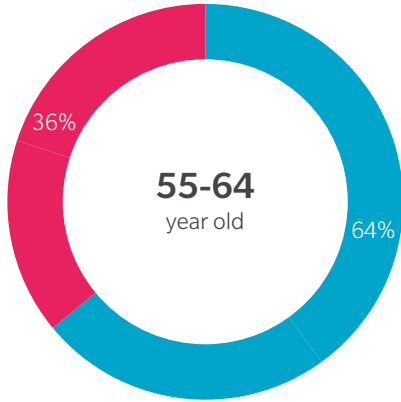
vi: The gig economy is not new, as non-traditional work arrangements based on gigs instead of formal employment with an employer has always existed; however, technologies have enabled a qualitatively different way of arranging these gigs. See National Association of Counties (2017). The Future of Work: The Rise of the Gig Economy.²⁰

vii: Based on Mercer research on experienced worker’s preferences for gig work.

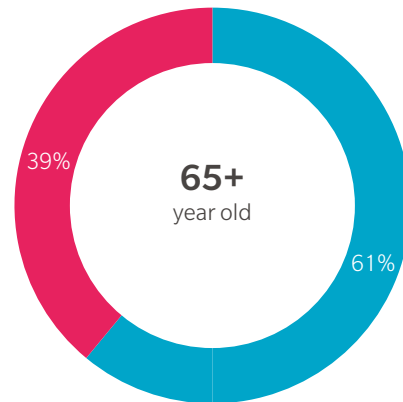
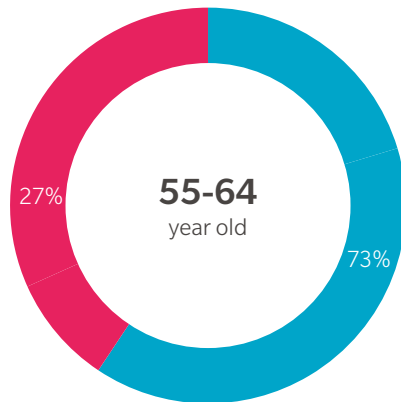
Exhibit 10: Experienced workers' receptiveness to gig work

● Open to or fully support the idea ● Do not support the idea

HOW ATTRACTIVE IS FREELANCING OR DOING GIG WORK PROJECTS TO YOU AS A WAY TO HAVE A MORE FLEXIBLE SCHEDULE AND WORK/LIFE BALANCE?



HOW WILLING WILL YOU BE TO PARTICIPATE IN FREELANCE WORK IF THE PROJECTS WERE OFFERED BY YOUR CURRENT COMPANY WORK FOR?



Source: Mercer workshop on Talent Pool Consortium, October 18, 2018; Alpha

CORPORATE RESPONSE
Exploring the Potential of the Gig Talent Model

In the context of ever-increasing overhead costs amidst talent crunches and growing medical expenditures, the gig economy and the gig model of talent management have become increasingly attractive. The question is how to apply this concept in a sustainable manner. Certainly, replacing the traditional workforce with an on-demand, flexible one has the potential to significantly cut costs and increase efficiency. However, as has been pointed out in our previous research, such a tectonic shift can severely disrupt the social protection system and diminish society's ability to take care of the aging workforce. With the right to healthcare

and benefits becoming a visceral issue in the current political climate (particularly in the US), an undisciplined approach to the application of the gig talent model is not an option.

Companies should move forward cautiously and pay close attention to the end-users – the workers, and particularly experienced workers. Previously voiced concerns, such as potential loss of guaranteed income and benefits or unclear career paths, need to be adequately addressed. One way of doing this is to become more efficient in managing areas such as healthcare through the use of new technologies. Companies are also starting to engage one another in rethinking talent models.

The key question for corporations is how to apply the gig model of talent management in a sustainable manner

One such effort is the 'Talent Pool Consortium' (TPC), proposed by Mercer with input from major companies' business leaders. While still an exploratory concept, it is worth examining its premises and potential.

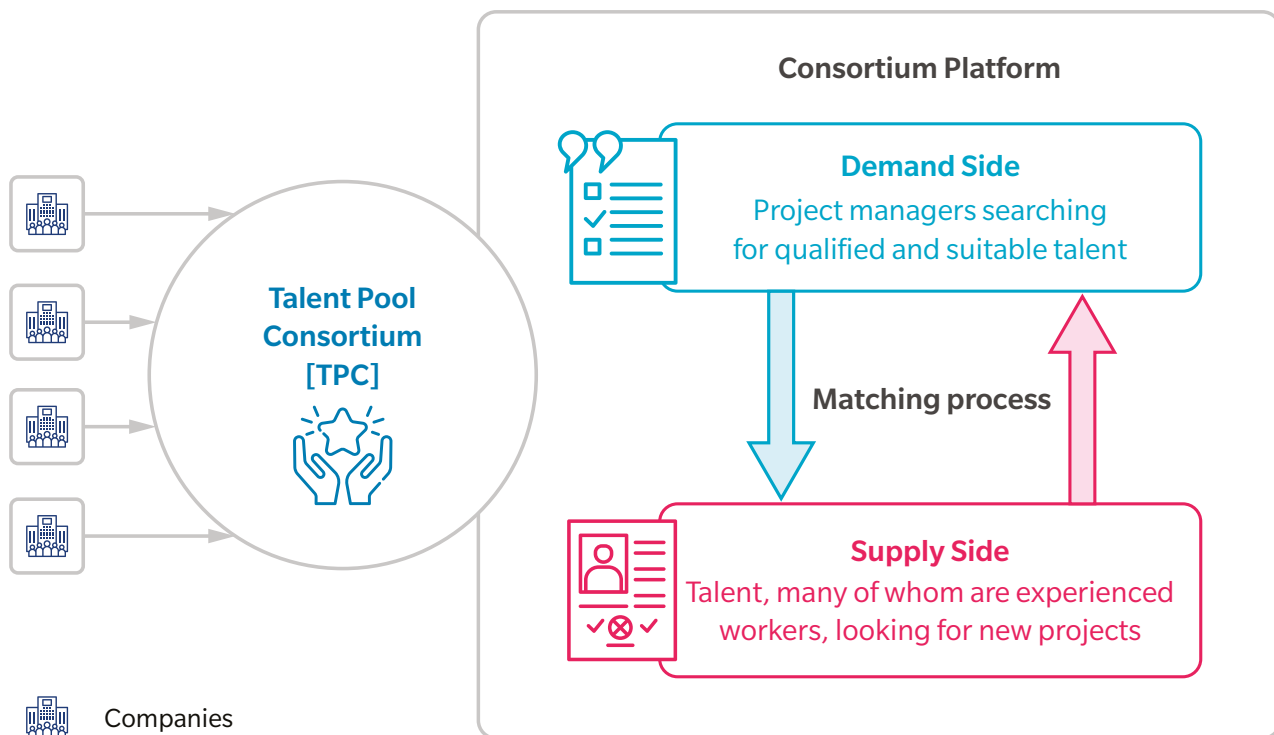
The Talent Pool Consortium

At its core, the talent pool consortium (TPC) is a simple concept. It proposes a gig economy among a group of companies, where a portion of each company's workforce becomes part of a group of 'on-demand' talent, to be hired into workstreams and projects by different members of the group. A TPC signifies an organizational change in talent management because it departs from traditional employee contracts, and instead adopts the management of a shared talent pool. It can also be seen as a technological shift because talent supply and demand are most likely to be managed on a technological platform (Exhibit 11).

As a derivative of the gig economy, the TPC concept offers businesses access to an on-demand talent base and the opportunity for more flexibility in staffing. The ability to better leverage experienced workers can help companies enhance their strategic position when facing talent shortages, loss of institutional knowledge, increasing regulatory pressure, and changing economic realities.

The most important aspect of the TPC, however, is its potential to be a solution for several concerns raised by experienced workers. By pooling resources, **members of the TPC can help overcome the structural problems that have made the gig economy unattractive and unsustainable for some experienced workers**. Specifically, the TPC can take over some of the processes and costs that workers have to handle themselves in a normal gig environment by setting up the necessary infrastructure. For example, instead of having to build and market their profiles, workers using this platform can update their profiles on the system and rely on it to do the job matching. The TPC arrangement can also provide experienced workers with better, more stable income and guaranteed benefits as compared to normal gig work arrangements. Box 4 discusses efforts to reshape the benefits model in the era of the gig economy in more detail.

Exhibit 11: A conceptual illustration of the TPC as a platform



Source: Mercer; Marsh & McLennan Insights

Box 4: The Experienced Worker Contract – Spotlight on Social Protection Initiatives

One of the key challenges that a comprehensive experienced workers strategy purports to tackle is ensuring workers’ well-being. The main obstacle is to come up with an innovative, inclusive benefit or social protection scheme. This topic has generated much discussion, particularly in countries where healthcare has been a hot button issue such as the US, and where there has been significant scrutiny and criticism of the gig economy.^{24,25}

In a traditional employment setting, the costs for benefits and healthcare are shared between the government, businesses, and individuals. Current gig economy arrangements, however, typically shift the entirety of this burden onto workers, particularly where there is less social protection in place.

At the same time, insurance premiums for individuals are projected to skyrocket in the future. For example, Marsh & McLennan Advantage Insights estimates that insurance premiums could increase by as much as 150 percent across the Asia-Pacific region by 2030 due to societal aging.²⁶ The move toward the gig economy

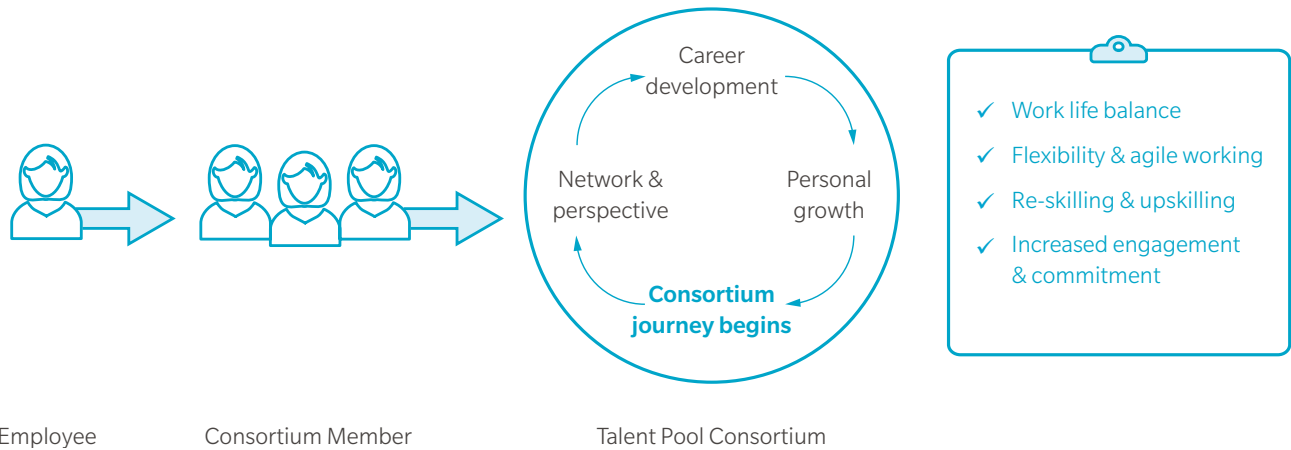
amidst mounting healthcare costs means that gig workers will face significant challenges in securing healthcare and other benefits. These challenges are especially pressing for experienced workers, many of whom feel compelled to continue working due to their precarious financial position.

In response, several companies have experimented with different ways to provide gig workers with the protection and benefits they need (see Exhibit 12). The TPC arrangement does this by requiring companies in the TPC to contribute to a common benefit pool. The advantage of the TPC over existing models is that social protection can be institutionalized and guaranteed, eliminating an important barrier for experienced workers to engage in gig work.

Exhibit 12: Benefits models in various gig arrangements and in a Talent Pool Consortium

	TPC	A GIG PLATFORM COMPANY	A BENEFITS PROVIDER
BUSINESS DESCRIPTION	A TPC in which individuals can take on jobs and move between member organizations	Mobile app for workers in the restaurant and hospitality industry	Benefits provider for cleaners who are gig workers
BENEFIT MODEL	Required contribution from companies in the TPC to a common benefit pool Employees enjoy a benefits package that is portable as they move around in the consortium	Workers earn points for every dollar earned using the app Points are used for paid time off, and the company aims to partner with insurance companies for healthcare, dental, and retirement benefits	Clients sign up to participate in the program. Each month clients can contribute to workers’ benefits, which include paid time off and insurance coverage with a partner insurance company

Exhibit 13: An employee's journey in the TPC



Source: Mercer; Marsh & McLennan Insights

Effective utilization of pooled resources should not stop at solving for the healthcare and benefits challenges. A host of other initiatives, from reskilling and upskilling programs to agile working schemes and career pathways, are also on the table to ensure an attractive employee value proposition (Exhibit 13).

As a concept, the TPC has strong potential. Operationally, however, successful implementation of the TPC requires careful consideration of many other issues, such as supply and demand balance, privacy and confidentiality, and people and culture. The two latter points are briefly discussed below.

Privacy and confidentiality: The movement of workers across companies raises serious questions over how much information employees can divulge about their past assignments as they constantly move between projects or companies. Here, members of the consortium are faced with the need to strike a delicate balance between information sharing that can facilitate more effective communication and efficiency, and proprietary data protection. As the consortium will also heavily rely on a central information system, safeguarding the database for workers' profiles from cyberattacks will also be a major concern.^{viii}

People and culture: During workshops conducted by Mercer, businesses have also raised several potential people and culture issues with the TPC, including:

- The possible loss of corporate identity and cultural belonging for employees in the TPC
- The potential perception of the TPC as a mechanism to force experienced workers to gradually exit the organization
- Potential strenuous dynamics between TPC employees and normal employees that can lead to patchy cooperation and ineffective teamwork

The TPC aims to leverage the flexibility of the gig economy while enabling companies to pool resources and help experienced workers safeguard against the downside of typical gig work. It is also important, however, to explore other talent models. Box 5 examines the current trend of 'enclave entrepreneurship' to suggest that experienced workers can also be regarded as potential entrepreneurs. With the right support, they can become an internal driver of innovation for companies.

viii: It should be noted that there are various roles that by nature have limited contact with proprietary information such as functional roles, and any company that is engaged in the gig economy will have already considered these problems. Furthermore, a TPC setting may make it easier to manage privacy and confidentiality challenges through formal rules and regulations for conduct within the consortium as compared to the relatively unregulated normal gig setting.

Box 5: More than Employees

THE RISE OF THE ‘ENCORE ENTREPRENEURS’

The rise of the longevity economy can significantly change the customer base for many companies. However, it is not the only thing that is changing.

The emergence of new business models ushered in by technological application have shifted the focus to value-adding customer services as a key aspect of competitiveness. Automated processes, for example, have enabled more efficient service delivery and at the same time, added a more personal and customized touch to services. Business models such as ‘mass customization’ and ‘mega-hyperlocal’ which focus on bespoke products are also likely to be among the successful models of the future.²⁷

This growing emphasis on value-adding customer service presents a significant windfall for experienced workers. The reason is that these workers possess a deeper understanding of companies’ customer base, particularly for older groups of consumers. Accordingly, research has observed a growing trend in ‘encore entrepreneurship,’ in which more and more experienced workers are leveraging this extensive understanding of the consumer market to set up their own services or consulting businesses.

For instance, the increase in entrepreneurs above the age of 50 has been stark in New York City.²⁸ This is evident not only in the change in the number of self-employed experienced workers across a wide span of industries but also in the rise in venture-backed companies founded by entrepreneurs over the age of 50. This class of encore entrepreneurs is well-placed to take advantage of the growing 50+ demographic segment, given that the market for goods and services catering to this segment is estimated to be worth \$7.6 trillion by 2032 for the US. They are also primed to leverage their industry experience for successful consulting work.

Companies are therefore facing not only a shifting market in general but also potentially more competition from enterprises run by experienced workers. This is, however, not necessarily only a cause for concern, as companies can also ride this wave by supporting encore entrepreneurship within their own organization, thereby opening up new business opportunities for themselves.

EXPLORING ‘INTRAPRENEURISM’ AMONG EXPERIENCED WORKERS

A couple of large organizations have tried to foster this sense of ‘intrapreneurism’ by leveraging their experienced workers’ unique qualities.

In 1999, Bosch founded Bosch Management Support GmbH, which employs former and retired Bosch associates for projects and consulting assignments on an ad-hoc basis within the organization. These senior experts are former specialists and executive managers with up to 40 years of Bosch experience, who can supplement normal consulting work. Classic working areas are research and development, production, purchasing, finance, sales, and marketing, while there is also typically high demand for technicians, engineers, controllers, and logisticians. In this case, a separate business unit is set up within a company to add value to traditional competencies.

In other instances, these separate business functions can help companies branch out to new service offerings or expand their clientele. For example, Home Depot, the US home improvement supplies retailer, has been hiring retired construction workers. The company leveraged these seasoned workers’ knowledge and expertise in the construction industries to help advise customers on the Home Depot sales floor. In a different industry, Mercer, a major HR consultancy, has hired retirees to consult SMEs, a traditionally under-leveraged client segment for the company.

ORGANIZATIONAL CULTURE AS A KEY CATALYST

Thus far this report has dealt with why and how corporations should develop a comprehensive strategy for leveraging a tech-empowered experienced workforce. This last section will explore a key enabler that forms the foundation for the experienced worker strategy: an inclusive organizational culture.²⁹ While organizational culture has been explored at length in the vast literature on organizational studies, its importance in a successful experienced workers strategy warrants reemphasizing.

THE IMPORTANCE OF CULTURE

Organizational Culture and Policies for the Experienced Workforce

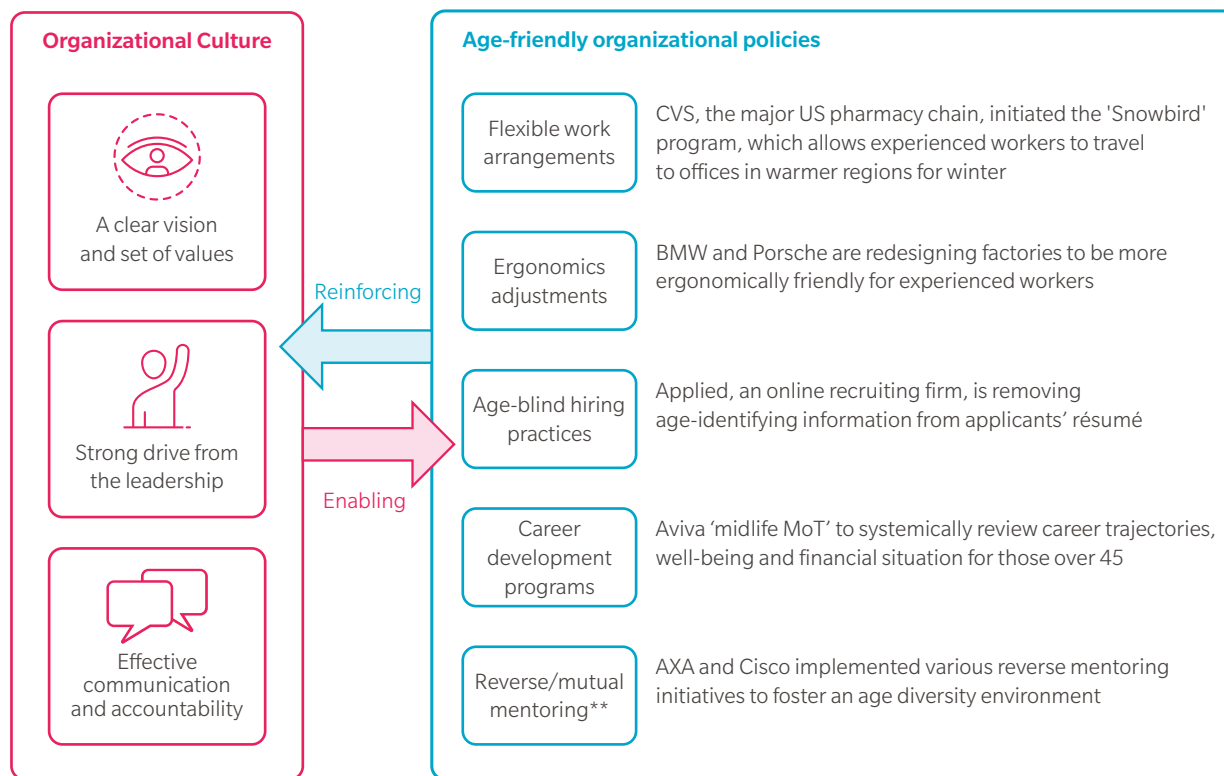
It is first instructive to look at an egregious example where the organizational culture is dysfunctional for experienced workers: ageism in the workplace,³⁰ and the hiring process more specifically. Negative attitudes against experienced workers manifest in discriminatory everyday interactions, compensation practices, and retention and recruitment policies. They persist despite new employment policies and anti-discrimination

laws,^{31,32} partly due to the lack of serious legal consequences and partly due to continued dysfunctional cultures. Correspondingly, attorneys have long noted the significant difficulty in bringing age discrimination issues to light from an employee perspective.^{33,34}

‘Organizational culture’ is your operating environment. It is what you ‘say’ and ‘do.’

Discriminatory hiring practice is an example where unconstructive values and beliefs hinder the effectiveness of policies. Changing the collective attitude towards experienced workers in an organization is, therefore, an important part of our proposed strategy and these changes should start from the leadership. Exhibit 14 demonstrates the relationship between culture and policy, and some examples of implemented policies targeting experienced workers across different organizations.

Exhibit 14: Organizational culture and age-friendly policies^{31,35,36}



**See footnote v

Source: Marsh & McLennan Insights analysis; Financial Times

CHANGING THE ORGANIZATIONAL CULTURE

Vision, Leadership and Communication

Shifting organizational culture toward an age-friendly one is a challenging endeavor as it involves the changing of long-held assumptions and beliefs. Our conversations with businesses, and research of other existing work done on the topic suggest a couple of key takeaways for business leaders.



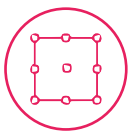
Having a clear vision and set of values is crucial

To the extent that the strategy is centered around experienced workers, they should play a more prominent role in the companies' Diversity and Inclusivity (D&I) efforts. As argued in a recent Mercer report, it is time for age to be put under the spotlight alongside gender and ethnicity as key D&I values.²



Cultural change needs to emanate from the top

Research has shown that CEOs' attitudes towards experienced workers play a significant role in shaping general organizational attitudes. To go one step further, there should be a consistent and persistent board and management focus on the issue. Consistent messaging from the leadership lends credence to age-inclusive human resource practices, which have shown to be effective in creating an age-diverse climate and attenuating the negative impacts of age discrimination.^{37,38} Through leadership support, such policies can be further institutionalized, creating a more supportive culture for experienced workers.



Communication and accountability is key

Communicating the importance of experienced worker programs and the positive impacts that they create is also critical, for instance in promoting success stories of how experienced workers' lives and business performance have been positively impacted.

Equally important is maintaining an open channel of communication between different levels of the organization for timely feedback. For example, a recent WomenCorporateDirectors report on dysfunctional culture, co-authored with Marsh & McLennan Advantage Insights, suggests that boards should frequently visit their organizations to get a sense of what is happening on the ground.³⁹

The leadership can more closely monitor organizational culture via an informative set of metrics for data analytics. For example, executives can measure how flexible jobs currently are in the company, or find out the potential drivers for early retirement—be it financial, career, health, or other factors—to make appropriate adjustments and improve retention rates (see example below).

Ongoing employee surveys can be deployed to detect culture problems early to administer corrective measures. These follow-up action are particularly important as they signal that the leadership is serious about age-inclusivity, without which trust may be eroded. This ties into another important point on accountability at all levels at the organization. Simply put, this means that being age-inclusive should not be considered an option, but a necessity that requires formal training. This needs to be combined with a system to track accountability built into the review process, rewarding managers who are able to leverage an age-diverse workforce, while penalizing age-biased practices. Strong enforcement of these policies is crucial in communicating the leadership's commitment to an age-inclusive organizational culture.

Example:

In order to provide an attractive proposition for experienced workers to stay with the organization, companies will need to provide them with adequate support. Without such enabling environment, early retirement for many experienced workers may be a straightforward choice.

In turn, understanding why experienced workers decide to retire early will help businesses recalibrate their policies towards a more empowering environment and supportive culture. Analytics can aid with this process.

For example, a large employer in the health sector wanted to gauge where the risks of retirement were concentrated in its workforce. In the process, it hoped to gain insights into what factors influence employee's decision to retire.

A vast amount of data was subsequently collected and analyzed, yielding some important insights:

- The model was able to identify areas in the enterprise where highly experienced workers are most likely to retire. In many cases, retirement was found to be detrimental to business interest
- The analysis also provided insights on some key factors that influence early retirement decisions, most prominently financial, health, and career factors among others
- These insights, in turn, shed light on potential actions that help the employer forestall early retirements

CONCLUSION

In the first report of the Twin Threats of Aging and Automation series, we discussed the complex interplay between aging and automation, especially in emerging economies. We noted that although automation has the potential to offset the productivity fallouts from societal aging, it can also suppress labor opportunities for experienced workers. In many major markets, experienced workers are at mid-to-high risk from automation, and countries highly dependent on low-skill work are at particularly high risk.

As the second in this series on aging and automation, this report has discussed the potential corporate response to these trends. Together with our other reports under the Workforce of the Future theme, we propose a pathway for companies to not only guard against adverse trends in the labor market, such as shrinking labor forces and talent shortages, but also help companies reposition themselves to leverage both new technologies as well as the extraordinary value that the experienced workforce can offer.

The center of our proposed strategy is a tech-empowered experienced workforce. Achieving this synergy will require significant commitment, resources, and coordination on various fronts. In this report, we have discussed a 'strategy house' with the aim to retain experienced workers, cultivate a workforce that leverages technology to be more productive and lean, and ensure workers' well-being.

At the base of the strategy house is the organization's culture. Leaders need to realize the urgency of population aging and direct more attention to building an age-friendly environment for their experienced workforce. This shift is crucial, and will likely require a step-change from leadership in recognizing the value that experienced workers bring to the table.

Once this foundation of inclusive organizational culture has been laid, it will be easier to identify potential areas in which technology is complementing the experienced workforce's expertise. Experts have pointed repeatedly to the potential of new technologies as an enabler for experienced workers' health and productivity. This, however, may not be enough. Forward-looking companies are going one step further to fundamentally integrate technology into their operations via job and talent model redesign, the latter of which can entail alternative employment and staffing models. Here we have stressed the importance of retraining and reskilling efforts, as well as innovative ways to integrate the emerging gig economy model into organizations.

While this is a complex and challenging task, the rationale behind the strategy is simple: to acknowledge the societal and organizational issues posed by aging and automation, while focusing on the opportunities these trends can bring and avoiding the false dichotomy of choosing one or the other. Research and advocacy will also need to step up by building a more persuasive case for experienced workers via deeper examination of data and quantification for the more intangible benefits that experienced workers bring in terms of diversity, mentorship, and stability. This report thus serves not only as an articulation of a new vision but also a call to action for corporations to refresh their workforce strategy and a first step for future research to build upon.

GLOSSARY OF TERMS

AGE DISCRIMINATION: Practices in employment, housing accommodation, goods, services and facilities, contracts and membership in trade and vocational associations that discriminate against older people

AGEISM: According to the Ontario Human Rights Commission, ageism is a socially constructed way of thinking about older persons based on negative attitudes and stereotypes about aging and a tendency to structure society based on the assumption that everyone is young, thereby failing to respond appropriately to the real needs of older persons

AUTOMATION: The replacement of human labor with fully or partial automated processes. This can lead to partial (automation of a number of tasks) or total replacement of human employment in certain jobs

BABY BOOMERS: Baby boomers are the demographic cohort most often defined as those individuals born between 1946 and 1964, many of whom are currently poised for retirement

ENCORE ENTREPRENEURS: The phenomenon of experienced workers increasingly setting up their own businesses and successfully leveraging their extensive experience

EXPERIENCED WORKERS: Workers above the age of 50 whose tenure within organizations and industries have provided them with a wealth of experience and knowledge which companies can leverage to enhance competitiveness

FINANCIAL LITERACY: The ability to make informed and effective decisions on one's financial resources

GEN X: Generation X (or Gen X) is the demographic cohort following the baby boomers, typically signifies people born from the early-to-mid 1960s to the early 1980s

GEN Y: Generation Y (or Gen Y/ Millennials), are the demographic cohort following Generation X, typically signifies people born in the early 1980s to the early 2000s

GIG ECONOMY: The gig economy can be loosely defined as the part of the economy comprising non-traditional work arrangements (gigs) that are enabled by technology; companies such as Uber and Grab are prime examples

INDUSTRIAL STRUCTURE: The structure of an economy, more specifically, manufacturing value-added as a percentage of GDP

JOB REDESIGNING: Redesigning jobs entails the breaking up of existing jobs into separate tasks with varying degrees of automatability, and repackaging them into new jobs that are both less labor-intensive and more value-adding

LEGAL RIGHTS IN THE FINANCIAL SYSTEM: Legal protection for borrowers and lenders in a country's financial system

LOSS OF INSTITUTIONAL KNOWLEDGE: The loss of valuable information about an organization and/or industry practices due to employees leaving the organization

MEGA-HYPERLOCAL: An emerging business model where components for a product or service are (part or wholly) sourced and assembled within a local area and then also sold locally

NATIONAL EDUCATION EXPENDITURE: Education expenditure of a country as a percentage of gross national income

ORGANIZATIONAL CULTURE: The shared values and beliefs of employees working for a company. These constitute the operating environment of a company and is what workers 'say' and 'do.'

RETIREMENT-SAVINGS GAP: The gap between savings needed to last a lifetime and actual savings

REVERSE/MUTUAL MENTORING: A mentorship program where more experienced workers or executives, aside from being a mentor to more junior staff, are also their mentees for selected skills such as on new technologies or social media

LONGEVITY ECONOMY: A phenomenon observed in rapidly aging societies in which the income and expenditure by the elderly population constitute an increasing proportion of the economy

SOCIETAL AGING: The rapid increase in the population of older people in a society, often based on retirement age in the respective society. This growing population constitutes an increasingly larger percentage of the population, putting significant strain on pensions, healthcare, and other social protection systems

TALENT MODEL REDESIGNING: The reconfiguration of how an organization attracts, hires, retains, rewards, and manages talent to adapt to new technological and market realities

TALENT POOL CONSORTIUM (TPC): The TPC is a concept developed by Mercer as a potentially sustainable solution for applying the gig economy model into talent management. It entails the pooling of resources by companies to set up a gig economy model for talent while ensuring the well-being of workers by institutionalizing social protection mechanisms often missing in typical gig arrangements

TALENT SHORTAGE: The inability of organizations to attract, hire and retain people with the right skill sets to remain competitive due to a limited or shrinking talent pool

WELFARE AND OTHER PUBLIC SPENDING: Government expenditure on welfare and pensions as a percentage of GDP

BIBLIOGRAPHY

CHAPTER 1: INTRODUCTION

1. Marsh & McLennan Insights, Mercer & Oliver Wyman. The Twin Threats of Aging and Automation. (Marsh & McLennan Companies, 2018).
2. Ozturk, G. & Gallo, W. Effect of Job Loss on Wealth Accumulation of Older Workers. (CUNY School of Public Health at Hunter College, prepared for the Department of Labor, 2013).
3. Haider, S. & Stephens, M. The Impact of Displacement on Older Workers. (RAND Corporation, 2001).
4. Lassus, L. A. P., Lopez, S. & Roscigno, V. J. Aging workers and the experience of job loss. *Res. Soc. Stratif. Mobil.* 41, 81–91 (2015).
5. Gallo, W. T., Bradley, E. H., Siegel, M. & Kasl, S. V. Health Effects of Involuntary Job Loss Among Older Workers: Findings From the Health and Retirement Survey. *J. Gerontol. B. Psychol. Sci. Soc. Sci.* 55, S131–S140 (2000).
6. Asian Development Bank. Tapping Technology to Maximize the Longevity Dividend in Asia. (Asian Development Bank, 2018). doi:10.22617/TCS189330-2

CHAPTER 2: EXPERIENCED WORKERS: THE UNDER-APPRECIATED WORKFORCE

1. World Economic Forum. The Future of Jobs Report 2016. (World Economic Forum, 2016).
2. Umoh, R. Older Job Applicants Not Protected By Age Bias Law, Says U.S. Appeals Court. *Forbes* (2019).
3. Blaine, B. E. & McClure Brenchley, K. J. Understanding Age Stereotypes and Ageism. in *Understanding the psychology of diversity* (SAGE, 2018).
4. Knight, W. China Is Building a Robot Army of Model Workers - MIT Technology Review. *MIT Technology Review* (2016).
5. Acemoglu, D. & Restrepo, P. The Wrong Kind of AI? Artificial Intelligence and the Future of Labor Demand. (National Bureau of Economic Research, 2019). doi:10.3386/w25682
6. Mercer. Next Stage: Are You Age-Ready? (Mercer, 2019).
7. Bussolo, M., Koettl, J. & Sinnott, E. Golden aging: prospects for healthy, active, and prosperous aging in Europe and Central Asia. (World Bank Group, 2015).
8. Bagri, N. T. Startups worship the young. But research shows people are most innovative when they're older. *Quartz* (2017).
9. Facing the challenges of a multi-age workforce: a use-inspired approach. (Routledge, Taylor & Francis Group, 2015).
10. Marsh & McLennan Insights. Aging Workforce: Cost And Productivity Challenges Of Ill Health in Singapore. (Marsh & McLennan Companies, 2017).
11. Asian Development Bank. Tapping Technology to Maximize the Longevity Dividend in Asia. (Asian Development Bank, 2018). doi:10.22617/TCS189330-2
12. Farla, K., Simmonds, P., Várnai, P. & Worthington, H. The Silver Economy. (2018).
13. Oxford Economics. The Longevity Economy: Generating Economic Growth and New Opportunities for Business. (American Association of Retired Persons, 2013).
14. Oxford Economics. The Longevity Economy: How People Over 50 are Driving Economic and Social Value in the US. (American Association of Retired Persons, 2016).

15. Ahmed, E., Phoo, T., Amerasinghe, S., Narayanan, C. & Oh, K. Special Report: Aging - Passing the Baton to Asia. (Standard Chartered, 2017).
16. Martin, N. Did A Robot Write This? How AI Is Impacting Journalism. *Forbes* (2019).
17. World Economic Forum. The Future of Jobs Report 2018. (World Economic Forum, 2018).
18. Rauwald, E. B., Christoph. Why Mercedes is halting robots' reign on the production line. *Livemint* (2016).
19. The Economist. If robots don't take all the jobs. *The Economist* 77 (2019).

CHAPTER 3: LEVERAGING A TECH-EMPOWERED EXPERIENCED WORKFORCE

1. Truckinginfo. TuSimple Teams With Community College to Offer Autonomous Truck Driving Certification. *Truckinginfo* (2019).
2. Mercer. Next Stage: Are You Age-Ready? (Mercer, 2019).
3. Bussolo, M., Koettl, J. & Sinnott, E. Golden aging: prospects for healthy, active, and prosperous aging in Europe and Central Asia. (World Bank Group, 2015).
4. Bagri, N. T. Startups worship the young. But research shows people are most innovative when they're older. *Quartz* (2017).
5. Facing the challenges of a multi-age workforce: a use-inspired approach. (Routledge, Taylor & Francis Group, 2015).
6. Lewis, L. & Shrikanth, S. Japan lays bare the limitations of robots in unpredictable work. *Financial Times* (2019).
7. Rauwald, E. B., Christoph. Why Mercedes is halting robots' reign on the production line. *Livemint* (2016).
8. McGee, P. Germany invests to prolong employees' working lives. *Financial Times* (2019).
9. Ito, M. Japan puts its seniors to work. *Financial Times (FT.Com)* (2016).
10. Bonic, I. Upskilling is About to Explode. *Mercer: Our Thinking* (2018).
11. Altmann, R. A New Vision for Older Workers: Retain, Retrain, Recruit. (A report to the government of the UK, 2015).
12. IBM Institute for Business Value. Reskilling Japan: Three steps to navigate Japan's skills challenge. (IBM Institute for Business Value, 2018).
13. UNESCO Institute for Lifelong Learning. Global Report On Adult Learning And Education. (UNESCO, 2016).
14. McNair, S. Older People, Learning and Education: What do We Know? (NIACE paper for the Department for Business, Innovation and Skills, 2011).
15. Urick, M. Adapting training to meet the preferred learning styles of different generations: Adapting training to generations. *Int. J. Train. Dev.* 21, 53–59 (2017).
16. Dell Technologies. Is Reverse Mentoring a Lever for Digital Transformation? *Dell Technologies* (2018).
17. Donovan, J. & Benko, C. AT&T's Talent Overhaul. *Harvard Business Review* (2016).
18. Caminiti, S. AT&T's \$1 billion gambit: Retraining nearly half its workforce for jobs of the future. *CNBC* (2018).
19. Clegg, A. Older staff, new skills: employers retrofit the workforce. *Financial Times* (2018).
20. National Association of Counties. The Future of Work: The Rise of the Gig Economy. (2017).

21. Bolden-Barrett, V. Older workers — not millennials — are driving the gig economy. HR Dive (2017).
22. Mavelink. Mavelink Study Finds that Senior Executives, Not Millennials, Driving US Towards Gig Economy. (2017).
23. Tan, J. & Lim, J. How Will Evolving Employment Models Impact Retirement Savings? Brink – The Edge of Risk (2017).
24. Gaskell, A. The Demographics Of The Gig Economy. Forbes (2018).
25. Temperton, J. The Gig Economy Is Being Fuelled by Exploitation, Not Innovation. Wired UK (2018).
26. Marsh & McLennan Insights. Societal Aging’s Cost to Insurance. (Marsh & McLennan Companies, 2017).
27. Association of Chartered Certified Accountants. Business Models Of The Future: Emerging Value Creation. (Association of Chartered Certified Accountants, 2017).
28. Center for an Urban Future. Starting Later: Realizing the Promise of Older Entrepreneurs in New York City. (Center for an Urban Future, 2018).
29. Zacher, H. How to Create an Organizational Culture for Successful Aging. AGEnda: How to Create an Organizational Culture for Successful Aging (2015).
30. World Health Organization. Ageism in the workplace. World Health Organization Available at: <http://www.who.int/ageing/features/workplace-ageism/en/>. (Accessed: 19th June 2019)
31. Cook, L. Longevity — the biggest business opportunity of the 21st century. Financial Times (2018).
32. Naegele, L., De Tavernier, W. & Hess, M. Work Environment and the Origin of Ageism. in Contemporary Perspectives on Ageism (eds. Ayalon, L. & Tesch-Römer, C.) 73–90 (Springer International Publishing, 2018). doi:10.1007/978-3-319-73820-8_5
33. Lemov, P. What It Takes To Win An Age Discrimination Suit. Forbes (2013).
34. Wilkie, D. Discrimination Against Older Workers May Be Common but Hard to Prove. The Society for Human Resource Management (2018). Available at: <https://www.shrm.org/resourcesandtools/hr-topics/employee-relations/pages/age-discrimination-.aspx>. (Accessed: 4th September 2019)
35. Groom, B. Companies cannot afford to ignore older workers. Financial Times (2019).
36. Cook, L. Ageism in the workplace ‘starts at 40’ for women. Financial Times (2018).
37. Kunze, F., Boehm, S. & Bruch, H. Organizational Performance Consequences of Age Diversity: Inspecting the Role of Diversity-Friendly HR Policies and Top Managers’ Negative Age Stereotypes. J. Manag. Stud. 50, 413–442 (2013).
38. Boehm, S. A., Kunze, F. & Bruch, H. Spotlight on Age-Diversity Climate: The Impact of Age-Inclusive HR Practices on Firm-Level Outcomes. Pers. Psychol. 67, 667–704 (2014).
39. Marsh & McLennan Insights. Identifying and Responding to a Dysfunctional Culture. (Marsh & McLennan Companies, 2019).

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