Future of work

Shaping the workforce of the future with AI

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The current wave of technological advancements is a pivotal moment in human history.

Around the world, people are captivated by generative AI’s potential to heal diseases and unveil the universe’s deepest mysteries.

Already AI is accelerating innovations in biotechnology, such as drought-resistant crops, that could end world hunger. We could drastically see crime rates come down, thanks to sophisticated DNA analysis that eliminates doubt from crime scenes. The world’s deepest problems could be ours to solve.

The power, however, does not lie solely in the development of emerging technologies, but crucially, in how they are regulated, integrated into society, and guided by influential figures and organizations. The responsibility for shaping the future — and our destiny — falls to those at the helm of today’s enterprises — big and small.

As technology advances, the traditional workforce is at a critical juncture. Business leaders can influence the course of our collective future by choosing wisely when investing in and implementing technology. Their thoughtful planning that balances the synergies between artificial and human intelligence can define much more than a company’s prosperity. It can also set the future trajectory for the role of humans in the workforce, and how organizations enable the wider society to thrive.

Leading organizations are rapidly positioning themselves to seize this technological momentum. We believe the first step will be to understand where your people are today and where they need to go next on their journey to the future of work. After all, an organization’s success depends on its people being ready, willing and able to support the company’s evolution.

Our 2023 Future of work research delves into the minds of employees across the globe and gauges how effectively they feel their firm is preparing for the future of work. It also explores what businesses still need to do in advance of unleashing the combined power of machines and humans in their organization.

I hope this report supports your thinking about the future of work. There is much to learn as we bring humans and machines together like never before. It is important that we share our learnings and support the growth of human and artificial intelligence, so it can deliver the good it promises — not just for business success, but success of society and future for generations to come.

Ruth Svensson
Global Head of People and HR Center of Excellence
KPMG International
Introduction

AI and other advanced technologies are changing the way employees work — what they do and how they do it.

Meanwhile, as leaders navigate the future, they are setting new visions for their organizations. As they do, they can adopt new approaches when embracing technology and shaping their workforce around it. They can also rethink how they build skills and capabilities, while considering a new way forward for middle managers.

The journey to the future of work is uncertain. To get started, business leaders should understand where their employees are today to clear their path forward.

This report aims to do just this. Based on a survey of 4,197 employees in Australia, Canada, Germany, the UK and the US, we offer a roadmap for leaders with the four key markers that can move you forward. For each marker, we share employees' views and outline specific actions to support your progress.

The Future of work is intended to complement KPMG thought leadership in this space, including The Future of HR: Flux to Flow and Rise of the Humans. In these pages, we show that leaders should look to embrace the power of AI, shape their workforce to use it, and give employees skills-building opportunities on the job. Upskilling middle managers may also be crucial. With AI likely to touch every role throughout an organization, their pivotal position may be indispensable as we navigate the changes ahead.

Here is your roadmap, and what you can learn from today’s employees.
Emerging technologies — in particular generative AI (genAI) — are among the most powerful change agents currently shaping the world of work.

In the UK, genAI is set to boost GDP by an estimated 1.2 percent over the next decade, injecting GBP 31 billion in a single economy.¹ In the US, genAI together with robotic process automation (RPA) could overtake almost 30 percent of hours worked by employees by 2030.²

Contributing toward these estimates, leading organizations are rapidly trying to identify which AI solutions will help them deliver better service to customers, transform their operations, and support their employees’ needs and expectations. However, both the scale of change involved and the wealth of tools to choose from can be overwhelming to business leaders.

There is also confusion over genAI’s long-term impact, leaving organizations wondering how much of their resources should be redirected to harnessing its capabilities. Further, genAI can require massive upskilling of employees across the organization, as well as sourcing of dedicated and experienced professionals. The companies that master this the quickest will likely have a significant competitive advantage.

¹Generative AI and the UK labour market (kpmg.com)
AI goes generative

Unlocking the power of innovation

Traditional AI and generative AI (genAI) differ in their functions and capabilities.

Traditional AI uses algorithms to analyze data, identify patterns and make predictions based on that data. It applies these patterns to perform specific tasks, making it an excellent solution for repetitive tasks and numerical processing.

For example, recruitment teams can use AI algorithms to screen resumes, identify gaps in candidates’ skills and experiences, and match candidates with specific job requirements. They can also scan social media for more information about candidates, in particular their behavior outside of work. This significantly reduces selection time, allowing HR professionals to focus on the better qualified individuals.

GenAI is a form of AI that generates original content, such as images, text, video and music, by drawing from its vast foundation of data. Such capabilities transcend the limitations of specific task-oriented AI systems, and can spur innovation across roles and industries.

No longer reserved to handle routine operations, genAI has the potential to be a driving force for creative and novel solutions. However, to unlock the potential value of genAI, organizations should truly understand the roles and tasks that it can augment, and the capacity and productivity gains at stake.

What do employees think?

Our survey suggests that workers lack awareness of, and confidence in, their organizations’ technology strategies. Despite the race to embrace AI, little more than half of respondents (54 percent) said their employer has adopted new technologies over the past 3 years.

On the plus side, almost two-thirds (64 percent) are happy with the productivity tools and systems at their disposal. Perhaps as a result, 60 percent describe the impact of technology on their jobs as “largely positive.”

Looking forward, 66 percent of employees expect technology to enhance their productivity over the next 3 years. More than a third (37 percent) say new technology will automate as much as 30 percent of their job whereas a quarter (24%) think it could automate up to half of their job.

Yet, alongside this optimism, our research highlights concerns about feeling overloaded by new technology, and unequipped to fully benefit from it. The always-on nature of modern working environments has a predictably negative effect on employee well-being and mental health.

38% Almost two in five workers feel that productivity improvements are outweighed by the effect on their well-being and mental health.

19% A fifth believe technology has impaired their productivity.

31% Almost a third believe that it has damaged their work-life balance.

Job insecurity looms large in employees’ responses to technology-driven change. Almost a third of employees (31 percent) believe that new technologies, like AI, will render their jobs obsolete.
Part of this anxiety comes from firms still not being completely clear on how new technologies will change their workforces, says Ruth Svensson, Global Head of People and HR Center of Excellence, KPMG International:

“Many firms are learning as they go, due to the rapid evolution of technology. This uncertainty requires more communication, not less. If companies don’t work quickly to close the communication void seen in our survey, employees’ anxiety and threat response may only escalate.”

31% believe that new technologies, like AI, will render their jobs obsolete.

“This is a real problem. When employee threat responses are high, they focus on protective behaviors and move away from essential growth behaviors like openness to new experiences, innovation and collaboration. Yet these are exactly the behaviors organizations encourage to thrive in the new world of work.”

What does embracing AI mean for organizations?

Employee enthusiasm for technology’s productivity benefits resonates with David Doyle, founder and CEO of AI-powered market intelligence platform, Forestreet. Doyle believes that genAI will radically shift the productivity dial, as it works in a totally different way to previous technologies from a user’s perspective.

“Until now, solutions have required us to bend to their processes. Users had to follow a sequence of steps and commands to get to a desired outcome,” he says. “But, tools like ChatGPT bend to our needs. Do you need to research a sector for a meeting, summarize a call, create a new policy or write an email? Just ask genAI to do it for you, and it’s 70 percent done. From a productivity standpoint, that’s transformative.”

That said, the productivity gains from new technologies will likely depend on exactly how businesses deploy them.

Organizations must remember that human beings are still at the core of the digital world of work.

When tools are designed without users in mind, they no longer serve their intended outcomes. Jennifer Howard-Grenville, Diageo Professor in Organization Studies at The University of Cambridge Judge Business School, explains:

“Technology can constrain work if it is designed to facilitate ideal work practices, rather than actual ones. Smart technologies may make a lot of sense in the development lab, but their use cases will be different in every setting. Their adoption is influenced by the people who use them, their expertise, the processes and practices they apply — as well as what has gone on before.”

Organizations should also take care not to overload people with more and more technology. Instead of making us more innovative and productive, the sheer volume of tools can have the opposite effect.

Microsoft found that two in three people struggle to find the time and energy to do their jobs due to this ‘digital debt.’ The same people are also much more likely to find innovation and strategic thinking a challenge. The root of the problem is what Microsoft calls a lack of “uninterrupted focus time,” since much of the day is spent communicating (e.g., email, chat, virtual meetings).³

How can organizations harness AI?

If the opportunity to unlock value and drive profitability through AI is enormous, so too, are the challenges.

How do businesses go about designing and deploying solutions around workers’ needs? How can they create productivity gains without jeopardizing employee well-being? How can they use AI to design the organization and build the workforce of the future?

Here are some of the steps leaders will likely need to take to harness the power of AI.

1. Experiment to make the most of AI

**Let your people, at all levels, be your primary source of ideas.**
Define clear objectives at the ideation stage, without setting too many constraints that can prevent innovation.

**Test ideas and develop them through to business cases.**
Run pilots to determine what tools may work and which may not. Now is not the time to select novel or popular tools; instead pilot the technologies everyone can benefit from using. This can help build excitement, enthusiasm and participation.

**Implement robust monitoring and evaluation processes from the outset.**
Establish a Digital Labor Center of Excellence to help govern, scale and improve connectivity between teams and functions during the ideation phase, and harness the best innovations.

**Engage your HR and IT functions.**
Both groups will be key to monitoring and planning for the outcomes of your AI experimentation.

**Be mindful of, and mitigate, potential harms.**
Carefully consider what the tools can or cannot do; the opportunities and risks for the business and its people; the risk of information bias and ‘hallucination’ (where genAI ‘makes up’ answers); and what this could all mean for the business, its ethics and compliance obligations, and its stakeholders.

2. Get into the detail of your processes and activities across the business

**Take time to understand the day-to-day workings of your organization.**
If you are to understand how to grasp the potential of AI, it’s imperative to understand the processes running behind the business.

**Explore how genAI can benefit different steps of a process.**
AI and genAI can vastly improve many aspects of your activities — and the speed at which they are completed.
3. Equip your workforce to use new tools effectively

Do not underestimate the employee change journey. AI can introduce ample and continuous change for employees and teams, which requires strong leadership throughout the process.

Take a thoughtful approach and prioritize employee well-being. Carefully considering the humanness of your employees will allow them to bring their best to work, while also reducing sick days, and avoiding ever-increasing litigation in this area.

Get your employees excited about the opportunities AI offers. Give your employee communication campaigns the same level of thought and consideration as you would to customer marketing campaigns.

Invest in training, not only on outcomes. GenAI and other tools will require new skillsets and ways of working that will take time to build. Recognize and reinforce constructive behaviors while employees use and apply their new skills. This is as much a behavior change exercise as it is a technology implementation.

Foster interest in the success of working with AI solutions. Promote AI tools through the lens of what is most important to employees to gain their trust and enthusiasm.

4. Prepare for your ongoing AI evolution

Hire data scientists and domain experts. Bringing in such expertise can help navigate the development and deployment of AI solutions.

Build data sources that support the use of AI. Information must be available in the right structure and format for AI engines to use, and with the right security protections.

*Simply Get Results analyzed hundreds of millions of job posts and talent profiles, using data from Lightcast, to provide the statistics shared in this report.
GenAI experimentation

GenAI may usher in a whole new approach to change management. The conventional approach to business transformation is to define a target end-state, then design the roadmap to get there. With genAI, however, there may no longer be a final destination as AI may be in an ever-evolving current state.

As such, continuous experimentation with AI will be crucial at all levels of the organization. This experimentation should be unstructured, but collaborative and supported, so employees do not feel unsettled by ongoing uncertainty.

To encourage experimentation, a Digital Labor Center of Excellence can be established. This acts as your digital nerve center and core governance body for genAI experimentation.

KPMG firms, for example, are collaborating with Microsoft to drive genAI innovation internally.

The Center’s remit would be to develop new business and service delivery models — powered by genAI — and discover which work and which do not. From there, the business can select the ones to adopt.

The Center should also be responsible for supporting employees in a fluid environment, and capture learnings from genAI experimentation to rigorously evaluate pilots and projects from a data-centric perspective.

KPMG firms, for example, are collaborating with Microsoft to drive genAI innovation internally. In 2023, firms launched an extended genAI collaboration for clients, industries and society more broadly. Select groups are piloting tools like Microsoft Cloud, Azure OpenAI Service and 365 Copilot, to enhance their capabilities, and power their creativity and analysis with AI.
02. Shape the workforce of the future

New technology is fundamentally — and rapidly — changing the skills profiles that organizations need for success. Advances in AI also means that the workforce of the future will likely feature AI-augmented humans, carrying out tasks in new and different ways.

At the same time, leaders should address the ongoing tension over working patterns.

We know that leaders want people in the office — 64 percent of CEOs expect a full return to the pre-pandemic in-office working pattern, according to The KPMG 2023 CEO Outlook Survey. They believe it’s better for innovation, team effectiveness and overall productivity. Workers, by contrast, want to preserve the flexibility they enjoyed during the pandemic.

There is a growing lack of confidence among business leaders that they have the right capability in house to deliver on their business strategy. The CEO Outlook revealed that talent is among the top 10 risks to growth for CEOs over the next 3 years.

KPMG 2023 CEO Outlook
To be competitive, traditional approaches to workforce planning may no longer suffice, given the need for faster and more dynamic decision-making. Organizations need to think about ‘workforce shaping’ — that is, iteratively framing the shape, size and composition of the workforce to meet the needs of today while projecting a few years ahead to plan for what is next.

Predictive intelligence and advanced analytics can help organizations consider:

- Macro changes that will have the most impact on workforce requirements
- Optimal mix of employees, gig workers and automation
- Skills and capabilities that will be critical to success
- Incentives to motivate the workforce to acquire needed capabilities
- Location where work can get done optimally

When it comes to hybrid working, organizations are also struggling to put clear boundaries in place for employees, and to explain the reasons behind them.

Workforce shaping will likely emerge as a new business ‘muscle,’ equipping leaders with the data and insight to make the right choices.

What do employees think?

Workforce shaping is rising to the top of the agenda for business leaders, but it is not always filtering down to their teams.

More than a third (36 percent) of employees say their organization does not know how its workforce must change to meet future business and customer needs. A common reason for this is a lack of the necessary data and technology. Indeed, 60 percent of staff say their company is not using emerging technologies to match skills to job opportunities.

Our survey found that 50 percent of staff are fully office-based, but only 30 percent want to be. In that context, analysis by Simply Get Results suggests that less than 10 percent of job ads tap into this preference. Only 6.7 percent of postings describe roles as ‘fully remote’, while a mere 2 percent advertise hybrid roles.

50% of staff are fully office-based, but only 30% want to be.

It seems unlikely that such a small proportion of jobs offer flexible working. “Employers could be missing a trick,” says Simon Haines, founder and CEO of Simply Get Results:

“The ability to work remotely, at least some of the time, has now become a leading factor in whether people choose to join or stay with a company. Recruiters need to be absolutely explicit that flexible working options are part of the employment package.”

Such results point out that firms are not executing their workforce shaping strategies around employee needs and wants.
What does workforce shaping mean for organizations?

Technology, automation and hybrid working models are forcing us to think differently about what the workforce needs to do and when.

Up until now, we’ve relied on an annual workforce planning model that matches people to jobs. This should give way to a more agile, ongoing process of matching skills to tasks.

To understand the potential impact of an AI-augmented, partially hybrid workforce, you need great data and analytics capabilities to inform your workforce shaping decisions.

Without it, firms may only hope to know which skills and activities can be enhanced by which solutions. The job is made even more difficult, given that conventional wisdom may be misplaced.

John Doel, Go-to-market Service Integration and Innovation Leader, KPMG in the US says:

“The assumption is that process-heavy, commoditized jobs are most at risk. Approximately 90 percent of these roles have already been streamlined by robotic process automation (RPA). There’s not much firms can do to automate the rest without major upgrades to their enterprise platforms.”

Instead, Doel sees genAI as disrupting higher-value, less structured tasks: knowledge, creative and technical work.

Research from Forrester affirms this point of view, finding the influence genAI has on jobs rises with education levels. For example, just 2.7 percent of jobs needing a high-school diploma will be impacted, against up to 21 percent of those requiring a degree.⁶

Doel points out that these roles are crucial to value creation in a whole range of sectors: legal, professional and financial services; web and product design; coding and application development; advertising; customer service; health diagnostics; scientific research, and more.

“New business and operating models will emerge in these spaces, with more tasks delivered as an AI-enabled service. “That is what will likely be at the heart of this next wave of AI. Businesses should work out how to adopt these new models, and how to use genAI to transform knowledge work. Those that do not, may fall behind the competition.”

John Doel

A focus on becoming more skills-led across your people processes, and building a skills data infrastructure, can be essential in this regard.

This upheaval in workforce shaping makes internal talent marketplaces — and their supporting technology — essential. That’s because they enable organizations to better match the demand for skills to the supply of them at scale. This reduces the hiring requirement, provides new development and growth opportunities for employees, and has been shown to increase overall productivity.

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Yet, most organizations have not adopted emerging technologies to successfully match skills to job opportunities, losing out on potential employee productivity gains. Without the right technology, firms may also lose out on vital visibility of the skills they currently have, and how to effectively match them to their strategic needs.

Workforce shaping is complex. There is a lot to account for: external forces, new technologies, employees’ needs and expectations, and more. When done well, however, it can offer leaders a competitive business advantage. The employee factor is especially difficult to get right, and at the same time, is vital to successfully execute the strategy.

The hybrid workplace is a good example of the need to strike a balance between employee needs and wants, and those of the business.

“When it comes to how and where we work, the pandemic showed us that there’s another way of doing things. People’s needs changed and organizations met them.”

Jennifer Howard-Grenville

Flexible working comes with many benefits. It can save on overhead costs and can draw from a wider talent pool. Plus, it strengthens engagement among employees who prefer such arrangements.

When it comes to diversity and inclusion, activities such as automation and outsourcing can have a disproportionate impact on certain working groups.

Hybrid working is inherently inclusive. For different reasons, certain employee groups will be more comfortable in a hybrid environment.

Facilitating that may only strengthen their performance, productivity and contribution to profitability — and make them more likely to stay.

There are complications, however. There are the obvious infrastructure requirements. Plus, where people work, for how long and the type of work they do remotely can affect a firm’s tax and compliance obligations. Organizations must therefore define policies and practices for flexible working and set guardrails to facilitate compliance.

The right balance may be different for every organization. What matters is being clear about how employees work and aligning decisions to current goals and those set for the future — all of which needs to be clearly communicated to employees and middle managers to avoid confusion.
What do employees value?

Expectations for employee value propositions (EVPs) are ever increasing. The ‘Great Reconsideration’ has encouraged many employees to re-evaluate priorities, goals, and ways of working and living. People are also reconsidering their relationship with work, family, community and the environment. They’re questioning traditional notions of success, and seeking more meaning, purpose, and fulfillment in their lives and in their jobs.

In response, employers should evolve their value proposition to meet employees where they are, while equipping and supporting middle managers and front-line leaders to engage and inspire their teams.

More than half (61 percent) of CHROs said they need to update their EVP in response to the external labor market, according to the KPMG The Future of HR: From Flux to Flow.

When asked about the most important aspects of their EVP, respondents highlighted

- 50% Culture
- 47% Values and purpose
- 34% Fair pay
- 33% Flexible working

Purpose, belonging, and well-being are also key factors of a compelling EVP, which Qualtrics found to be the most important drivers of employee engagement and well-being.?

To deliver such an evolved EVP, it should be shaped and governed in line with the functional owners’ vision, while corporate HR sets the overarching framework for reward, learning, career development and more.

However, it can be difficult to instill in organizations with large populations of employees, whose everyday work may not feel directly connected to the company’s value chain.

In this context, the EVP is moving away from the influence and control of HR, and toward employee expectations that center around the ease and enjoyment of their day-to-day working. This includes how meaningful their work feels, and how simple and frictionless it is to get things done.

Employees surveyed for this report identified the following as top reasons for wanting to leave their employer:

- 35% Poor work-life balance
- 33% Non-competitive pay
- 32% Inflexible working hours
- 32% Lack of career advancement

This makes the role of local leaders critical. It is their job to inspire their teams, provide recognition and a sense of value, and find innovative ways to connect people with the company’s wider mission and impact.

EVP in the era of AI

The rise of genAI and the need for continuous digital transformation provide a wealth of opportunities to enhance the EVP. Advanced technologies can remove mundane and repetitive tasks for employees, improve access to information, inspire creativity and save people time (which can improve their work-life balance).

Employees realize this. This survey found 64 percent of respondents have seen their workload increase, while according to the Microsoft Work Trend Index, 70 percent are open to delegating as much as possible to AI to lessen their workloads.8

Talented individuals will likely demand employers equip them with the technology to improve their effectiveness on the job.

They will likely expect to work for firms with modern ways of working and will want to work for companies that harness artificial and human intelligence to spur productivity, growth and innovation — not just to reduce costs. These elements of the EVP will take on just as much importance as the company’s rewards package.

A longer-term focus on productivity, value and growth is not only a compelling offer for employees. It can also build a more successful business in the long run as organizations see a multiplier effect from combining effective human and artificial intelligence, which remains out of reach when the two work in isolation.

Interestingly, smaller start-ups recognize the opportunity to use AI and supportive technologies to boost overall productivity, rather than reduce headcount.

This mindset, which is particularly prevalent in the fintech sector, can be hard for larger organizations to unleash — and govern — in highly productive ways, especially as they may lack the transparency typically found in start-ups.

How do organizations shape their workforce?

How can firms reshape their workforces for the future, and build the optimal combination of people and technology?

The answer lies in an agile, scenario-driven approach to workforce shaping. This demands a shift away from the neat strategic workforce planning segments where the ‘five Bs’ rule: Buy, build, borrow, bot and base (see more 16). Organizations should recognize the need to embrace flexibility in workforce management.

Redesigning work.

In an AI-first world, workforce shaping requires an AI-first mindset, one that is focused on capturing and using meaningful data to redesign roles entirely.

Deciding on workforce location.

With a growing emphasis on employee flexibility, deciding where to base the workforce involves a nuanced blend of physical and digital environments, considering factors like cost, talent and business needs.

Optimizing the workforce mix.

Rather than exclusively ‘buying’ new skills, organizations should weigh the costs and benefits of hiring new employees against upskilling existing ones. The shift to skills-based organizations allows for a more tailored approach, leveraging both internal and external talent through talent marketplaces.

This involves addressing the following key aspects:

Organizations will likely have the ability to match internal and external talent to opportunities. More than ever, the focus can be on the right skill for the task at hand.

Access to deeper insights about their people can enable organizations to blend traditional ‘build’ and ‘borrow’ levers. This democratizes opportunity through talent marketplaces and gives organizations the ability to match internal and external talent to opportunities. More than ever, the focus can be on the right skill for the task at hand.

In a world where there’s no longer an end-state operating model, putting these considerations at the top of the C-suite agenda will likely be essential to delivering your desired outcomes. Companies must continuously adjust the shape of their workforces, as new technologies emerge, business needs change, and employee demands evolve.

The five Bs

Buy:
Recruit the right skills at the right levels throughout the organization, creating entirely new jobs where required.

Build:
Redesign roles to suit new digital ways of working, and upskill and reskill people to perform them.

Borrow:
Transfer people internally for specific purposes, while outsourcing certain tasks to third parties.

Bot:
Automate or augment day-to-day tasks to enhance how they are carried out.

Base:
Locate people optimally in terms of geography as well as working patterns (e.g., on-premise, remote or hybrid).

Case study:
Delivering the workforce of the future

A multinational insurance company recognized the importance of anticipating future disruptions beyond a five-year horizon. The firm needed to identify and visualize potential future scenarios for its operating model, workforce composition and practices, and partner ecosystem.

Using our workforce-shaping capabilities, KPMG worked with various stakeholders and subject matter experts to:

- Define the disruptive trends affecting the business. We then aligned its employees’ skills and the technologies they use to its changing requirements.

- Develop a series of workforce-shaping scenarios, and assess the firm’s end-to-end processes against them. We then examined the implications of each scenario for the workforce, and its overall impact on the business.

- Map functions and job families to the value chain. For each section of the value chain, we defined a series of rules that show the percentage impact on the workforce, and whether capabilities will need to be added, trained or relocated.

This helped the organization to establish and embed new capabilities, such as intelligent automation and strategic workforce intelligence. The result was a future-ready people strategy, and a more compelling employee value proposition.
Case study: Transforming skills with generative AI

A global pharma company needed to make sure its skills landscape remained fit for an era of dynamic change — from post-pandemic hybrid work models to technological breakthroughs. Its aim was to nurture a culture of continuous upskilling, which would proactively address skills gaps.

Using ChatGPT, KPMG developed an innovative, generative AI-powered tool, called Career Advisor, for the company.

This intelligent chatbot ingests job data, including insight on skill gaps, oversaturated positions and in-demand skills.

It then gives employees personalized career guidance and generates tailored job descriptions. These steer people toward the roles and skillsets needed to meet the organization’s operational requirements and strategic goals.

Career Advisor has driven many potential benefits for the business, including:

- empowered staff ready to develop the skills needed to meet changing business requirements;
- tailored job descriptions to align recruitment with the organization’s strategic goals;
- data-driven career advice that helps minimize the risk of skill gaps opening up;
- personalized career guidance that can improve employee satisfaction and engagement;
- automated career advice and job descriptions that help reduce HR’s workload, allowing for greater focus on more strategic tasks; and
- in-depth job data to inform workforce planning and talent management decisions.
Learning in the flow of work remains an abstract concept for many organizations. The idea recognizes that effective learning needs to happen on the job. Instead of introducing separate training sessions, employees learn the specific skills or knowledge at the time they need to do their jobs.

The pace and dynamism of change affecting organizations, on top of technological advancements has only intensified the importance of evolved upskilling opportunities. Learning should align with advancing technologies, and be more responsive to learning needs.

Failing to respond can put organizations at risk of seeing their workforces overtaken by progress. Mark Williamson, Partner, Head of People Consulting, KPMG in the UK explains:

“It’s a shift that is happening not just in small pockets, but across economies, across industries and across the world. Reskilling, upskilling and continuous learning will be crucial to firms’ ability to compete and grow. The need to reskill — at scale — is massive.”

The solution lies in delivering learning in the flow of work. Powered by AI and other advanced technologies, organizations can now seamlessly integrate learning into the workday, alongside more traditional, structured methods.
However, a new challenge has emerged: continuously evolving technologies are outpacing employers’ ability to apply them in the workplace, let alone reskill and upskill their people to make the most of them. To keep up, organizations should rethink their approach to knowledge transfer at scale.

To assess if learning is currently happening in the flow of work, ask:
- How long does it take employees to get an answer?
- How long does it take employees to successfully complete that task?
- How long does it take employees to learn and apply a new skill?

The less time it takes, the more productive your people are — and the quicker they can adjust to new requirements in their roles.

What do employees think?
Employees are optimistic that their current ‘human’ skills will be suitable for future roles, despite the speed at which technology is changing. Almost fourth fifths (78 percent) of our survey respondents believe this.

At the same time, they recognize that they cannot stand still. Some 72 percent agree that continuous learning and upskilling will be crucial for them to stay relevant in their field. This is reflected in their expectations of their employers: 62 percent say that investment in upskilling influences whether they join, leave or stay with an organization.

Yet, respondent to the survey suggests that new skillsets may be needed for workers to use these technologies to their full potential.

72% agree that continuous learning and upskilling will be crucial for them to stay relevant in their field.

It is easy to jump to the conclusion that AI will remove humans from work processes. In our view, however, the future may see less job replacement, and more role augmentation. As already seen, new technologies like generative AI present significant opportunities for efficiency, consistency and acceleration of work, particularly in knowledge roles.

Yet, respondent to the survey suggests that new skillsets may be needed for workers to use these technologies to their full potential.

62% say that investment in upskilling influences whether they join, leave, or stay with an organization.

What does learning in the flow mean for organizations?
A significant minority of workers — just under half — say their organization is not proactively upskilling them for the future of work. This might signal that companies are not investing in upskilling or identifying the emerging skills needed for the future. Equally, it could suggest a problem with how they are communicating and engaging with their staff.

72% agree that continuous learning and upskilling will be crucial for them to stay relevant in their field.
AI has the potential to fundamentally change what, when and how people work. For example, many organizations now use digital assistants to automate certain tasks and workflows. As some skills go out of date, new skills become more prized, including:

- Digital literacy to navigate the abundance of material available;
- Feeding the right prompts into AI tools to extract the right knowledge;
- Quality assurance to verify the content produced by AI solutions; and
- Curiosity and the desire to continuously learn.

Recent breakthroughs in genAI, along with its easy availability, enable organizations to integrate learning into the flow of work in ways that are effective and commercially viable.

Already there has been a shift from courses to resources. However, this next wave of learning, powered by AI, can take learning to the next level. It puts personalized, task-specific knowledge into every employee’s hands, right at the point of need.

The potential benefits of AI-powered learning

- Fully personalized learner journeys at the point of need
- Supercharged time to competence
- Targeted and engaging learning content
- Cross-border communication

A note of caution, however. We must keep in mind that genAI is an enabler, not a panacea. Maximizing employees’ performance and making learning in the flow of work a reality, will likely require a number of components to work in harmony.

The potential benefits of AI-powered learning

- Fully personalized learner journeys at the point of need
- Supercharged time to competence
- Targeted and engaging learning content
- Cross-border communication

Your skills landscape

Build a fluid and predictive representation of the skills needed in the business. There are AI tools that recognize and understand the roles and opportunities in an organization, and the skills needed to perform them. These can then be matched to across the workforce.

In addition to what the organization needs from the workforce, employers need to consider individual development needs, which are shaped by personal learning preferences and career ambitions. Aligning the two will greatly strengthen employee retention.

Strategic technology partners

Learning can no longer operate in a silo. Partnering with technology can help achieve learning in the flow of work while reflecting the company’s wider technology strategy. Look to maximize existing investments and partnerships, and intelligently target skill gaps with vendors who can help achieve upskilling ambitions.

Content and knowledge management

Content creation and curation can be dramatically accelerated by AI — with a greater focus on quality, relevance and alignment with your desired learning and business outcomes.

Consider early adoption of tools that can help do this. Be sure to have the necessary data and human checkpoints to maintain quality and drive the right outcomes from learning. The aim should be to understand what is having the most and least impact on tangible productivity and competence metrics.
Complete a high impact pilot.

1. Identify a pilot that can make an impact
Choose a project that people care about — and that can easily demonstrate the value of learning in the flow of work.

Employee onboarding, for example, can impact speed to competence, productivity and staff attrition. It also produces tangible value in the flow of work, and any improvements can be easily compared to previous versions.

2. Use AI to enhance a pilot
Work with AI specialists and functional leaders to understand how predictive analytics can continuously improve the effectiveness of real-time learning interventions for the pilot.

In contact centers, for example, static scripts can be replaced with dynamic AI-powered versions. Predictive analytics can be used to identify when customers are not satisfied with their service call, and automatically amend the script in real time to enhance the experience.

How do organizations deliver learning in the flow?
Right now, the opportunity to step up your people’s capability with learning in the flow of work is huge — and the biggest risk is doing nothing.

Start with small, thoughtful, incremental changes. Run a pilot project and build the essential foundations.

The end-to-end experience
For learning to happen in the flow of work, it must be available in multiple locations, over multiple channels, all at the same time. Integrating AI into the end-to-end learning experience can help remove barriers to content and knowledge-sharing, and provide a dynamic, personalized view of learning for every employee.

“Learning experiences must be contemporary, immersive and inspiring,” says Meaghan D’Arcy, Partner, KPMG Australia.

Finding the right learning should no longer rely on a single front-end.

Data and analytics
Using AI and advanced analytics can help you derive maximum value from your data. It can allow you to mine numerous data sources, and identify trends, gaps and opportunities relating to skills and learning.

It can also enable you to measure the impact learning is having — and take action accordingly — by aggregating your learning and performance data. That should unearth trends and correlations that weren’t visible until now. You can then use your new infrastructure to adjust your AI and machine learning models in real time, moving from a reactive to a proactive and predictive approach.
3. Measure the pilot’s impact on productivity
Combining learning in the flow of work with new technology offers practical and effective measures of learning on productivity; rather than relying on feedback forms and training completion rates.

A key part of any pilot, a measurement map should identify all the touchpoints and data points needed to evaluate success. Traditionally, learning assessments happen after the fact, often focusing on limited data points like training completion rates. Now, as companies adopt large language models, measurement maps can expand to include a variety of productivity indicators and offer a more rounded, before-and-after view of employee productivity.

4. Scale the pilot
Once the pilot is successfully completed and its value captured, it is time to scale the solution to the wider organization.

A key aspect of the value of a pilot is that it eases the transition to scale, by presenting a real-world story of the value generated.

That should create excitement, confidence and trust when rolling it out.

Implementing AI and learning in the flow of work involves industrial-scale change. It may affect not just certain groups, but almost every role across the organization. To achieve such widespread buy-in can be helped with connected, cross-functional communities involving employees at varying levels of seniority. These communities can spread the pilot’s success story, identify opportunities for future pilots, and get other employees excited about the transformation to come.

Yet, AI tools are only as good as their data inputs. The earlier you tackle the data, including any underlying quality or accuracy issues, the quicker the data can prove the value of learning in the flow of work.

3. Protect security and compliance
Using AI to support learning in the flow of work will likely require adapting security and compliance processes. Work with the compliance teams to understand the implications, and identify the necessary mitigations and safeguards.

Build the essential foundations.

1. Engage technology partners
Work with solution vendors to understand the art of the possible. Assess the company’s technology landscape now to help you decide what to build, buy, enhance and remove.

2. Have the data conversation
Engage with the people analytics team to develop a holistic data strategy for learning across the business.

AI solutions can be a key component of learning in the flow of work, dramatically strengthening the ability to personalize learning at the point of need, and improve the relevance of content.
The middle manager may or will likely be indispensable as you pursue AI, re-shape your workforce, and make learning in the flow of work a reality. Often overlooked, undervalued, and typically, seen as a blocker to change, middle managers have the potential to turbocharge efforts toward the future of work.

Yet research suggests that organizations are not investing in them. A study by the Chartered Management Institute found that 82 percent of managers had no proper management and leadership training — they are “accidental managers.”

Such insights enable middle managers to do three things:

1. They translate the organization’s ambitions and transformation goals for frontline workers in terms of their day-to-day jobs. Your middle managers are your communication bridge.

2. They gather real-time feedback on how the strategy is being implemented, which they can escalate to leadership.

3. They recognize change in the business environment, and help the organization to rapidly pivot in response.

“Organizations must get better at sensing, learning and adapting to the changes happening around them,” says Howard-Grenville. “That means connecting insights, making decisions, and learning from what does and does not work. Nobody is better positioned to do that than middle managers.”

Given their proximity to everyday tasks, your middle managers can quickly assess how effectively technology is being adopted, and whether employees feel equipped to make the most of it. This rapid feedback loop is essential for firms to target skill gaps that could hamper adoption, or to determine if the technology will not deliver the anticipated benefits.

Middle managers are also instrumental in creating a culture of psychological safety — a key tenet of an organization’s digital mindset. Without this, employees are less likely to innovate and experiment with technologies like AI.

The new digital mindset

Organizations have been told they need to adopt a digital mindset for over a decade. With the advent of genAI, the stakes are higher than ever.

Combining human and machine capabilities will likely demand a whole new level of digital transformation. Through our work with hundreds of organizations worldwide, KPMG professionals have identified four key attributes that can drive this mindset shift:

**Connecting end-to-end.**
A connected enterprise reflects the impact of change and disruption on its value chain, business outcomes and customer experience.

**Everyone is an innovator:**
All employees are encouraged to innovate how tasks, roles and delivery are carried out by a combination of humans and machines.

**A growth mindset:**
An innovative and flexible culture encourages agility, collaboration and transformation.

**The courage to act and challenge:**
Everyone is seen as a leader with the autonomy and freedom to act, while being accountable for meeting business objectives.

Middle managers can have a big influence when it comes to instilling these factors in the workforce. They can connect strategy and execution, empower people to be creative, and foster a psychologically safe workplace. KPMG has developed a tool to evaluate employees’ digital mindset against our model — [take the assessment here.](#)
Delivering the future of work
Let’s look for a moment at middle managers’ exact role in realizing the different imperatives we’ve examined in this report.

Making AI work
In most parts of the world, organizations promote hierarchical structures, and the behaviors associated with them. People, therefore, need permission to carry out more activities than leaders tend to realize. That has implications for how and when they use technologies like AI to improve tasks and processes. Employees may feel they need authorization from leadership — and for that to be reinforced by the support of their managers. Without this, they will lack the confidence to experiment with AI.

This reinforces the importance of the middle managers’ role in nurturing psychological safety. As businesses embrace AI’s transformative capabilities, managers must give employees the security to try doing things differently.

Workforce shaping
Managers can validate where employees should be spending most of their time, and what they are actually doing. What is more, they can work with them to pinpoint how technology can improve their productivity.

They are often responsible for managing resources, budgets and operational logistics. If every middle manager did this just 5 percent more effectively, the cumulative impact would be significant.

Plus, to get a great team mix, middle managers can better understand which roles are more effective in a hybrid environment, and which talented individuals to offer greater levels of flexible working.

Learning in the flow of work
Your middle managers see first-hand where productivity issues lie — and the skill gaps that cause them. And they know where learning is having the desired effect on productivity and why. This makes them the go-to person for delivering learning in the flow of work, operating as coaches and passing on technical knowledge and lessons learned.
Unfreezing the middle

Middle management is often described as the ‘frozen middle’ — a term to describe their resistance to change — and are typically the first port of call when organizations are cost-cutting.

Yet in these unpredictable times, “77 percent of employees say support from their manager is more important than ever, according to Gartner®.”10 Meanwhile, IDC research discovered that middle managers are increasingly being “tasked to design, support, facilitate and preserve the balance between two centers of power.”11 In other words, they are the vital bridge between leaders and workers.

Not equipping managers for this role — or worse, getting rid of them altogether — would risk staff turnover intensifying, and business objectives not being met.

Harnessing the power of middle managers will likely require a targeted effort that starts with holding a mirror up to the organization, and asking: Are middle managers the best they can be? If not, why?

This last question is likely to produce a wide range of issues that need to be systematically addressed — in a way that is tailored to the needs of each individual manager:

- Is there a skills gap, and can targeted training tackle it?
- Is there a lack of motivation?
- Are their performance targets focusing them on the wrong things?
- Is their workload overwhelming?
- Are they lacking the resources they need?
- Are they properly empowered to do what they need to be doing?
- Are they just not the right fit for the role?

Understanding the reasons for middle management performance issues is an essential first step. The solutions to then improve performance are multidimensional. They may include a clarification of role expectations, learning, mentoring, coaching, empowerment, conflict resolution, resource allocation, recognition and performance-based incentives.

77% of employees say support from their manager is more important than ever

Whatever the course of action, shifting performance in the right direction will mean ensuring that every aspect of your people processes is working in harmony.

For example, if you are incentivizing managers to compete with their team, they are highly unlikely to lead them effectively. This is common in when team leaders and members both have sales targets.

On occasion, new capabilities and energy will need to be brought into the organization. The important thing is to not make assumptions. Gather the evidence needed and get to the root cause before making any changes.

Like any problem, middle management performance can be improved with the right level of focus. Yet organizations that fail to do so will struggle to pivot quickly enough in the fast-changing future of work.

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10Gartner, “Managers are Cracking and More Training Won’t Help”, 2023, p.2. Gartner is a registered trademark and service mark of Gartner, Inc. and/or its affiliates in the U.S. and internationally and is used herein with permission. All rights reserved.

GenAI is already disrupting education and creative industries, and the incoming generation is quickly adapting to make the most of these new tools both within and outside of the workplace.

As it transforms the future of work, genAI can drive the emergence of new operating models. Howard-Grenville points out that many organizations’ operating models have barely evolved over the decades:

“There are really only a handful of models out there — most of which are strikingly similar. Many of them still look a lot like the one used by General Motors in the 1960s. We’re putting our children into our grandparents’ organizations.”

GenAI can change all that. The technology can identify and recommend where to improve all aspects of the operating model, from customer engagement and supply chain, through to risk management and product development. At the same time, its capabilities and speed are such that it can make operating models far more adaptive.
Evolving the operating model

With no fixed end-state to aim for, organizations must carefully plan and implement the transformation of their operating models — to reap the benefits of genAI, and address the challenges it presents.

This process cannot be static: It should continuously evolve based on the latest data. Executives must constantly have their finger on the pulse of AI advances, changing business needs and growing employee demands. And they should adapt their firms’ operating models in response.

Some of the suggestions made in this report can help businesses meet the demands of the future of work through the way they operate.

These include:

- **Building a Digital Labor Centre of Excellence.**
  Responsible for governing and harnessing the firm’s collective ability to identify and unlock the power of new technologies like AI.

- **Adopting a skills-first approach to your workforce.**
  Following the principles of a talent marketplace — ideally supported by technology — total transparency of your people capability will likely be essential when continuously evolving the operating model.

- **Delivering learning in the flow of work.**
  An enabler of operational effectiveness, learning in the flow of work drives agile, adaptable and knowledge-driven operating models. As the sophistication of the learning increases, so too, the workforce’s efficiency and productivity.

Making learning in the flow of work happen may mean challenging traditional organizational designs, and rethinking functional management and specialist career paths.

There has never been a better time to be in the People and HR world because the biggest challenges facing organizations right now are human challenges.

The future of work will likely demand access to new skills in real time to maximize adaptability and competitiveness. Delivering that access will likely require organizations to embrace the power of AI, optimally reshape the workforce and upskill employees through learning in the flow of work.
Transformation never stops. Neither do we.

At KPMG we believe that business transformation is too good an opportunity to miss. Combining the right tech and the best processes with people whose insight is as broad as it is deep, are essential ingredients to successfully transform.

KPMG firms have worked at the heart of global businesses for many decades, helping clients realize the potential of their people and technology and working together to achieve real-world outcomes. Because when people and technology are in harmony great things happen.

Making a world of difference:

KPMG people can make all the difference on your transformation journey. Together we can help you to orient your business around the customer, optimize functions for a new era, manage enterprise risk and regulation for a safer future, rise to a new level of value creation, and create an environment for managing ongoing change.

KPMG firms’ suite of business transformation technology solutions can help you engineer a different future — of new opportunities that are designed to create and protect value.

KPMG Connected Enterprise
Rebuild your business, end to end, around your customers.

KPMG Trusted
Build and sustain the trust of your stakeholders.

KPMG Powered Enterprise
Drive outcome-driven functional transformation.

KPMG Elevate
Unlock financial value quickly and confidently.
This thought leadership aims to explore the perceptions of employees on the future of work amid post-pandemic recovery, fast AI advancements, unstable geopolitical instability, and a looming global recession.

The research methodology is based on the analysis of primary and secondary data, as well as expert opinions from leading professionals.

**Primary data:**
The research targeted employees working in Australia, Canada, Germany, the UK, and the US. The sample size consisted of over 4000 employees.

Employees must have been employed full- or part-time by an organization with 5,000 or more employees across various industries such as consumer/retail, government, healthcare and life sciences, financial services, technology, and others.

Data was collected using a self-administered structured questionnaire. The survey was distributed using an online survey tool. It followed ethical guidelines to protect the privacy and confidentiality of participants.

**Secondary data:**
Relevant reports, research papers, and articles from reputable sources, including Forrester, Gartner®, and IDC.

**Expert opinions:**
Interviews of subject matter experts and professionals.
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