

Al and the Global Economy:

Unlocking Growth and Reshaping Work



Executive summary

Generative Al (GAI) is transforming the global economy and the way we work. GAI has the potential to bolster innovation and productivity, supercharging growth in the coming years. However, realizing this transformative promise requires decisive action from businesses and governments. Preparing the workforce with the skills needed to thrive in an AI future is not just an opportunity – it is an imperative.

At LinkedIn, our ambition is to help workers, businesses, and governments shape Al into a powerful lever for human prosperity. As many countries face growth and competitiveness challenges, GAl can be the catalyst to drive innovation, and accelerate growth. Three quarters of companies using GAl report significant time savings and half report a revenue increase of 10% or more. With many companies still at the early stages of their GAl journey, only using GAl tools for certain tasks or departments, the potential with greater adoption is immense. If implemented across all work tasks, GAl could unlock up to \$6.6 trillion in productive capacity for businesses in the US, UK, France, Germany, and India.

However, the greatest opportunity with GAI isn't increased productivity for the tasks we already do; it is how people use that extra time to foster innovation and unlock new opportunities. More businesses today are using GAI for innovation and creativity (70%) than to automate repetitive tasks (60%) or simplify processes (54%). Business leaders know that the best ideas happen when technology meets human creativity and GAI is fueling an immense demand for talent: two-thirds of businesses using GAI plan to increase headcount. As such, with the right focus and investment, GAI represents a potential net job expansion, not loss.

Despite its many benefits, GAI adoption remains low in many countries, and small and medium businesses (SMBs)¹ – the backbone of the global economy – are being outpaced by large companies. SMBs represent more than 90% of businesses and 50% of workers worldwide. Countries that close the SMB adoption gap stand to gain significant economic benefits.

One of the biggest barriers to GAI adoption is having a workforce with the right skills to build and leverage this technology, and companies of all sizes are struggling to find the right talent to execute their GAI plans. At the same time, much of the workforce today is unprepared for the profound changes GAI is poised to bring to the labor market. A workforce with AI technical skills, AI literacy skills, and essential people skills will be able to capitalize on the benefits of GAI tools and deliver value to companies. Having these skills will also help individuals succeed in their careers, allowing them to seize new opportunities and stay competitive in an GAI-driven world. Conversely, workers who lack these skills, or are in jobs highly exposed to GAI automation, may face significant challenges.

Business leaders and policymakers must work together to upskill and reskill workers to capitalize on GAI's benefits while minimizing potential negative consequences – and they must do so quickly. Even as many companies are still in the early stages of incorporating this powerful technology, GAI is expected to diffuse faster and more widely than any previous technical innovation, leading to changes in the workforce at a pace we haven't experienced before. While we have had decades to adapt the workforce to previous technologies, we expect GAI to have a profound impact on the labor market in the next few years.

The opportunity to harness Al's transformative power is immense, and with the right investments in skilling, we can build a foundation for prosperity and innovation that will benefit everyone. Now is the time for workers, businesses and governments to invest in the skills that will empower everyone to thrive in the Al economy.

¹We adopt a standard definition for SMBs as businesses with fewer than 1,000 employees. Small sized businesses are defined as those with fewer than 200 employees and medium sized businesses are defined as those with 200 to 1000 employees.

Chapter 1

The economic imperative:

Businesses and governments who adopt GAI will win

Across the globe, countries are facing immense challenges in maintaining or improving economic development and competitiveness, which are only expected to increase. Persistent structural headwinds such as aging populations and weak productivity growth are holding back growth in many advanced economies. Without higher growth, we face the peril of deteriorating living standards due to higher debt and higher interest rates.

Today, Europe is struggling to foster innovation, often losing talent and businesses to the US. The US is competing with China to close the innovation gap while contending with high government debt and borrowing costs. In developing economies, production disruptions due to factors like civil unrest and natural disasters continue to push economic forecasts downwards, while higher-income countries in Asia experience a boom from semiconductors and electronics, but still contend with high inflation and a shrinking labor force.

While it cannot single-handedly resolve all these challenges, GAI can be the catalyst countries need to boost productivity, drive innovation, and accelerate economic growth.

GAI can deliver massive economic benefits across sectors and countries

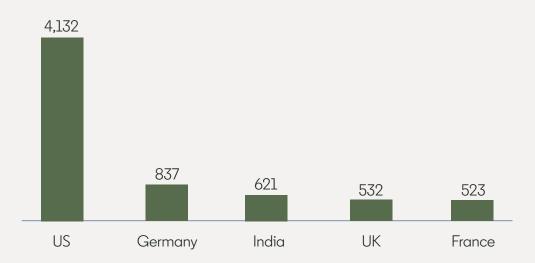
Research conducted by Access Partnership has found that the economic potential that GAI tools can unlock is substantial: up to \$6.6 trillion in productive capacity across the five major economies of the US, UK, India, France, and Germany. This means that if businesses implemented GAI throughout their organizations, they could save the equivalent of \$6.6 trillion in worker time, which could be reinvested to deliver more innovative products and create more value for customers. Today, however, less than half of businesses are using GAI company-wide, leaving significant untapped potential.

The US stands to benefit the most from widespread GAI adoption, with GAI potentially unlocking \$4.1 trillion in productive capacity, equivalent to 15% of the country's GDP in 2023. The US is followed by Germany (\$837 billion or 18% of 2023 GDP), India (\$621 billion or 18% of 2023 GDP), the UK (\$532 billion or 16% of 2023 GDP), and France (\$523 billion or 17% of 2023 GDP).



Productive capacity potentially unlocked by generative AI

USD Billion



Source: Access Partnership analysis, ILO, National Center for O*NET Development, World Bank.

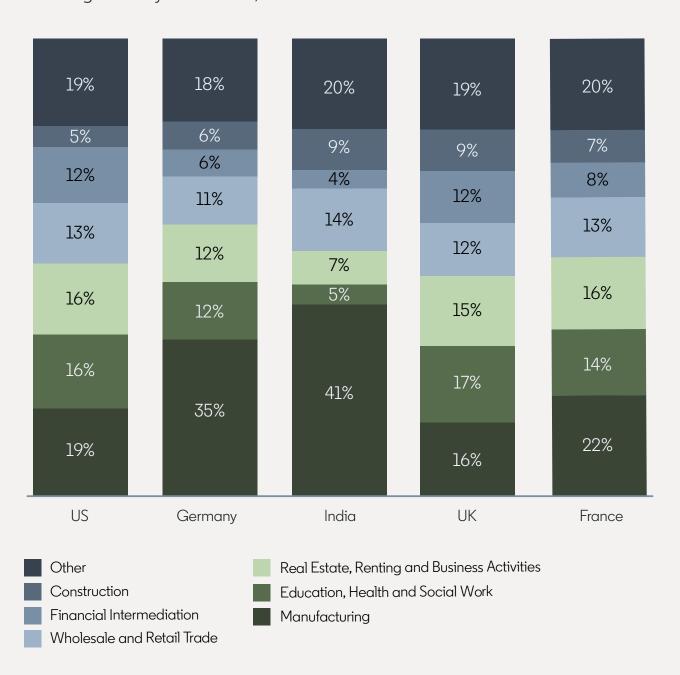
The economic gains from GAI adoption are available to all sectors, but some are poised to benefit more than others. The manufacturing sector accounts for a significant share of potential gains, particularly in supply chain management, product design, and market research.

In India, nearly half (41%) of total productive capacity gains from GAI can be unlocked in the manufacturing sector, with Germany close behind at 35%. Greater innovation and productivity in this sector could help countries increase exports and lower the cost of goods for their citizens.



The education, health, and social work sectors can also greatly benefit from GAI. In the UK, 17% of the total productive capacity that can be unlocked by GAI comes from the education, health, and social work sectors – the most out of any industry in the country. In the US, this figure is 16%. GAI-powered tools can reduce administrative work for healthcare professionals and teachers, and lead to innovative offerings like personalized healthcare and on-demand tutoring. Improvements in healthcare in particular is crucial for economies like the US, UK, Germany, and France, where an aging population is straining current healthcare infrastructure.

Industry split of productive capacity potentially unlocked by generative AI Percentage industry contribution, %



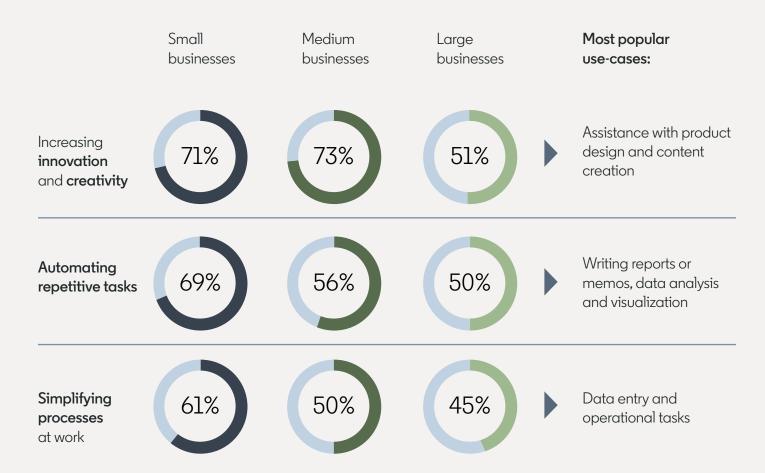
^{*}Note: Other includes: Agriculture, Hunting, Forestry, and Fishing; Mining and Quarrying; Hotels and Restaurants; Telecommunications; Transport Services; and Other Personal Services. The analysis excludes the Public Sector and Utilities.

Early adopters of GAI are using the technology to innovate and become more efficient

Today, more businesses are using GAI for innovation and creativity (70%) than to automate repetitive tasks (60%) or simplify processes (54%)². GAI tools are helping workers with idea generation and brainstorming, content creation and design, and product development and customization. As GAI tools streamline processes, they free up workers' time to be more creative. Our <u>data</u> shows that workers skilled in GAI are 5x more likely than others to develop skills like creative ideation, design thinking, and emotional intelligence.

Top ways in which generative AI is being used by businesses who report using the technology

Percentage of businesses, %



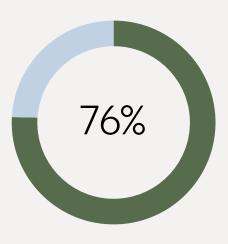
Source: Access Partnership's survey of 2,620 businesses in the US, India, Germany, the UK, and France.

² Access Partnership carried out a survey of 2,620 businesses in the US, India, the UK, France and Germany in order to analyze businesses' use of generative AI as well as barriers to adoption. The survey was limited to business owners or employees that hold a management position, are responsible for hiring, influence investment decisions and technology adoption decisions.

Three quarters (76%) of businesses using GAI are experiencing significant time savings across various job functions. Companies are reinvesting these time savings into customer engagement, business development, research and development, and employee upskilling and reskilling.

Time savings from generative AI usage

Percentage of businesses, %

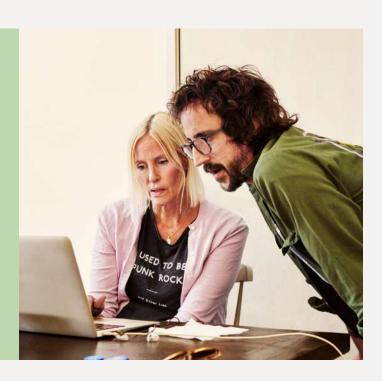


of businesses reported experiencing **substantial time savings** across some or most job functions The most popular ways in which businesses leveraged these time savings include:

- Customer engagement
- Business development
- Research and development
- Upskilling and re-skilling

Source: Access Partnership's survey of 2,620 businesses in the US, India, Germany, the UK, and France.

Businesses using GAI are seeing growth and returns in their bottom lines: half of the companies surveyed reported a revenue boost of 10% or more after adopting GAI solutions over a 24 month period.



Businesses are translating GAI gains into new jobs to transform and grow their companies

The GAI revolution is fueling demand for more talent. Among businesses considering the impact of technology like GAI in their workforce planning, 63% plan to increase headcount through hiring or greater retention. Businesses are considering increasing headcount to develop and deploy GAI applications, meet rising customer demand, and support new business opportunities.

Reasons for increasing headcount due to generative Al

Percentage of businesses, %



To drive the **generative Al transition** (e.g., development and deployment of generative Al applications)



To meet **rising customer demand** and create more **customer value**



To **support new opportunities** created by the adoption of generative AI (e.g., business expansion, new service lines, new geographies)

Source: Access Partnership's survey of 2,620 businesses in the US, India, Germany, the UK, and France.

Companies are also realizing that providing AI tools to their workforce can lead to greater retention by increasing employee satisfaction and reducing burnout. LinkedIn and Microsoft's 2024 Work Trend Index Report found that many people are overwhelmed at work – and they're turning to AI for relief. In a survey of 31,000 people across 31 countries, 68% of respondents say they struggle with the pace and volume of work, and 46% feel burned out. Using AI tools can help reduce this stress: users say AI helps them save time (90%), focus on their most important work (85%), be more creative (84%), and enjoy their work more (83%). Similarly, a survey conducted by GitHub found that between 60–75% of software developers reported feeling more fulfilled with their job, less frustrated when coding, and able to focus on more satisfying work when using GitHub Copilot, a GAI-powered coding tool.

Who is adopting GAI today - and who is falling behind?

There are differences in levels of adoption across countries and among small, medium, and large businesses. Without policy interventions, we risk the economic benefits of GAI being concentrated only in large companies and only in certain countries and regions.

SMBs, which represent over 90 percent of businesses globally, are critical to realizing the full economic benefits of GAI but lag behind large businesses in adoption

The massive economic potential of GAI is only possible if SMBs successfully adopt this technology. When SMBs – or companies with fewer than 1,000 employees – have implemented GAI technology, they may be making better use of it than large firms. SMBs are more likely to use GAI tools for innovative tasks like product design, when compared to larger businesses. Despite this, only 41% of SMBs are actively leveraging these tools, compared to 48% of large businesses.

Medium-sized businesses lead GAI adoption in some countries, suggesting that smaller firms, with the proper support, could lead the way

While France and India's large businesses lead GAI adoption, medium-sized businesses – those with between 200 and 1,000 employees – have the highest adoption rates in Germany, the UK, and the US.

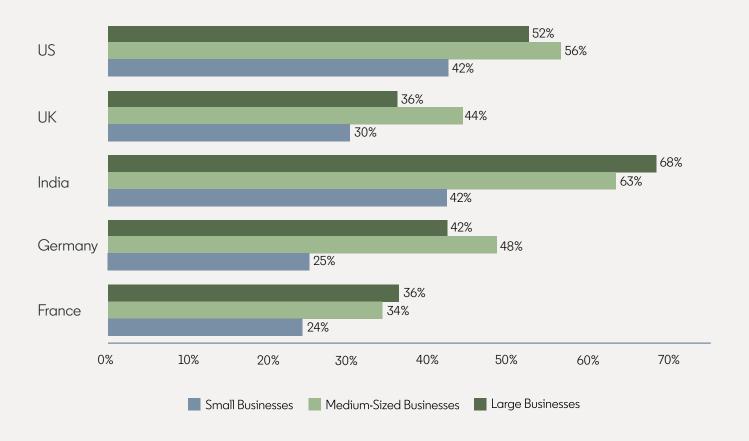
Medium-sized businesses in these countries may be outperforming both smaller and larger firms due to their balance of resources and agility. Compared to small businesses, medium firms have greater access to critical resources like high-quality data (83% compared to 73% of small businesses) and scalable cloud infrastructure (85% vs. 71% for small businesses). Meanwhile, medium businesses are more likely to have a strategy for organization-wide adoption compared to large businesses (25% vs. 20% of large businesses). Strategic planning, combined with fewer bureaucratic hurdles, allows medium-sized businesses to effectively couple experimentation with a roadmap for scaling adoption and potentially catch up to larger firms in the race to adopt GAI.

It's critical that the gap in adoption between SMBs and large businesses is reduced. Since one of the largest hurdles to GAI adoption for SMBs is cost, policymakers can accelerate GAI adoption among smaller firms through targeted financial incentives. 38% of businesses indicated that creating GAI adoption grants and subsidies for SMBs would significantly reduce the barriers associated with deploying GAI solutions.

Businesses in India and the US lead in GAI adoption compared to their European counterparts

Overall, India (62%) and the US (51%) report the highest adoption rates, followed by Germany (41%), the UK (40%), and France (32%). India is seeing such high adoption rates due to the country's rapid digital transformation, a growing tech-savvy workforce, and a strong emphasis on innovation, while the US follows closely behind due to the country's tech infrastructure and its propensity for early adoption of new technologies to maintain its competitive edge. Regulatory constraints and talent shortages in Europe may explain the slower adoption rates in France, Germany, and the UK.

Generative AI adoption rates by country and business size



Source: Access Partnership's survey of 2,620 businesses in the US, India, Germany, the UK, and France.



Chapter 2

The workforce imperative:

Preparing today's workforce for GAI

The economic imperative is clear: adopting GAI can lead to immense economic growth and prosperity. However, many workers today lack the necessary skills to meet this moment. GAI stands to transform jobs across all domains and is poised to bring profound changes to the labor market.

GAI is expected to diffuse faster and more widely than any technical innovation that has come before it, leading to unprecedented and rapid changes in the workforce. Our **research** shows that by 2030, 70% of the skills used in most jobs will change, with AI emerging as a catalyst. Businesses are re-evaluating what skills they need for future success and re-defining which skills will pave the path to economic achievement for workers. A workforce with AI technical skills, AI literacy, and essential people skills will be able to capitalize on the benefits of GAI tools and deliver value to companies. Having these skills will also help individuals succeed in their careers, allowing them to seize new opportunities and stay competitive in a GAI-driven world.

Policymakers must take decisive, coordinated action to upskill the workforce to enable widespread GAI adoption, and ensure all workers can thrive in this new technological era. We envision a three-part approach to workforce preparation in the age of AI.



1. Expand the AI technical talent pool: enable businesses of all sizes to drive technological advancements and compete in this new AI-driven economy.



2. Promote the widespread diffusion of Al literacy skills: empower workers to use GAI tools in their daily tasks, much as they use other digital tools today.



3. Invest in workers' people skills: skills like communication and leadership are highly transferable and necessary alongside Al skills, and will remain resilient in a rapidly changing job landscape.

GAI could introduce dynamism into the labor market that benefits many workers, enabling them to move fluidly across roles, industries, and career paths. However, developing a workforce primed for this technological moment requires concerted investments in workforce adaptation and upskilling – and some workers are less well positioned to succeed than others. Workers in jobs where most tasks can be replicated by GAI are most vulnerable to the potential negative impacts of widespread AI adoption, including displacement. These workers will face greater challenges and require more reskilling support, making it critical that policymakers and companies can identify and provide targeted support to those individuals.

Governments with the right policies in place will ensure their citizens, companies, and economies benefit from the GAI transformation. And businesses that have prepared their workforce for the transition will gain a significant competitive advantage, and build a foundation for economic success.

Lack of AI technical and literacy skills is a significant barrier to GAI adoption

Many companies are unable to realize the full benefits of GAI because they don't have employees that can build or use GAI tools. More than half of businesses in Access Partnership's research cited a lack of relevant technical skills (57%) and literacy skills (60%) as a major barrier to their company adopting GAI. As companies compete over an extremely small AI technical talent pool and struggle to provide AI literacy training to their employees, they risk falling behind.³

Al technical skills: Skills referring to the technical expertise and practical competencies required to design, develop, deploy and maintain artificial intelligence systems. Examples include machine learning, natural language, and deep learning.

Al literacy skills: Skills referring to the knowledge, abilities, and critical thinking competencies needed to understand, evaluate, and effectively interact with artificial intelligence technologies and tools. Examples include ChatGPT, Microsoft Copilot, and Al prompting.



³ Throughout this report, we refer to both Artificial Intelligence (AI) broadly and Generative AI (GAI). Generative AI (GAI) is a technology that uses AI models to create new content. GAI can write text, compose music, design visuals, and perform other functions that were, until recently, the sole domain of humans. The use of GAI tools at work can change how people accomplish tasks and spend time during their workday, with broad implications for reshaping the economy and workforce. When we refer to LinkedIn's skill data in Chapter 2 and in the recommendations in Chapter 3, we use the term "AI skills" as we do not distinguish between the skills to build, understand, and use broader AI technology versus to do so for GAI specifically.

Many businesses miss out as demand for AI engineering talent outstrips supply

Companies are looking for workers with the technical skills to build, maintain, and deploy Al technology. According to Access Partnership's research, out of the businesses that have started adopting GAI more than half (52%) plan to increase hiring for technical roles, citing the need to adopt, implement, and integrate Al into applications to transform their operations and offerings. This is reflected in LinkedIn's data as well: hiring for Al technical roles on the platform has quadrupled over the past eight years. We are also seeing an explosion of brand new technical Al jobs – like "Al Engineer" which was the fastest growing job in the US and the UK last year. But the workforce is not catching up to fill these new roles.

The pool of AI engineering talent is very small – less than 1% of the workforce globally – and many recruiters are struggling to fill these roles as they compete with other companies. In 2024, hiring for AI technical talent grew 30% faster than overall talent, while supply typically grew by 16% across major economies. As the demand for AI talent grows, it will be even harder and more costly for SMBs to compete for and attract that talent compared to larger companies. To ensure a broader swath of companies, including SMBs, have the opportunity to hire technical AI and accelerate their adoption of GAI, business and government leaders must support the development of additional AI technical talent.

Businesses want an Al-literate workforce but too few are providing training

While companies have started hiring technical talent to power GAI success, the battleground for talent is shifting beyond pure technical AI expertise. All professionals will be expected to skill up their AI literacy to use GAI tools. We are seeing a rising demand for non-technical professionals with proficiency in these tools. The percentage of jobs on LinkedIn listing an AI literacy skill increased more than six times in the past year. Meanwhile, 66% of leaders say they wouldn't hire someone without AI literacy skills.

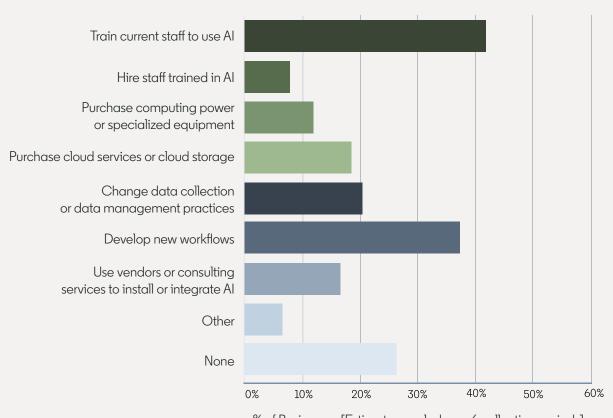
While the share of workers with Al literacy skills remains small, our data illustrates that workers are increasingly prioritizing learning these skills. In the last year, the number of Al literacy skills <u>added</u> by Linkedln members increased by 177%. The most frequently added Al literacy skills were ChatGPT (60% of members with Al literacy skills) and prompt engineering (38%)⁴. Professionals today are 26% more likely to add Al skills than they were last year. Even professions that were once less likely to see the value in Al skills – for example, recruiters, marketers, sellers, and healthcare professionals – are now embracing these skills. Globally, these sorts of professionals are now more than 40% more likely to add Al skills than they were last year.



⁴ Prompt engineering empowers users to effectively interact with AI tools by leveraging creativity and intuition, making AI accessible for practical applications across various domains without requiring advanced technical expertise.

While a growing number of businesses are taking steps to tap into this enthusiasm and offer Al skill training to their employees, it is not sufficient. Only half of businesses plan to upskill or reskill their current employees with Al literacy skills, according to the survey conducted by Access Partnership. These findings are consistent with recent data from the US Census Bureau Trends and Outlook Survey, which found that 42% of businesses in the US adopting Al plan to train current staff to use Al in the next six months. Training staff to use Al is the single most common change being made by these businesses, signaling the critical importance of skills development for the widespread adoption of GAI.

Changes businesses are making to adopt AI



% of Businesses [Estimates pooled over 6 collection periods]

Source: US Census Bureau Business Trends and Outlook Survey

Employers are deploying a variety of strategies for providing Al literacy training, including hosting Al learning days, requiring employees to complete specific Al courses, peer learning, and gamification (such as Al skill trivia). However, 58% of business leaders say they struggle finding the time or resources to provide upskilling opportunities to their employees.

Employer-offered AI skilling programs are too fragmented and inconsistent to benefit the entire workforce. Government leaders should help businesses with providing AI literacy training to ensure everyone can leverage this technology. The GAI promise will only become a reality if policymakers work with businesses – particularly small businesses – to facilitate the widespread adoption and diffusion of AI skills across the economy.

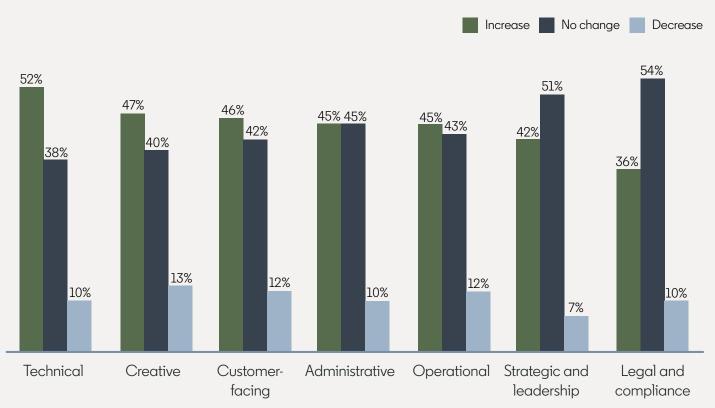
Al skills alone are not sufficient: people are the true catalyst for innovation

It's not just AI skills that will be in demand: Jobs in the GAI economy will prioritize a diverse mix of skills and people skills will be particularly valuable.

As leaders integrate GAI technology into their organizations, they plan to increase hiring across a range of functions. Roughly half of businesses adopting GAI are planning to increase hiring for technical, creative, and customer-facing roles, according to Access Partnership's survey. Across industries, businesses adopting GAI are looking for workers with a mix of technical (59%), digital (57%), business strategy and development (49%), and soft skills (46%). Demand for these skills and roles underscores a shift towards a workforce that is both technologically savvy and adaptable, capable of working in synergy with GAI technologies to execute a diverse range of business functions.

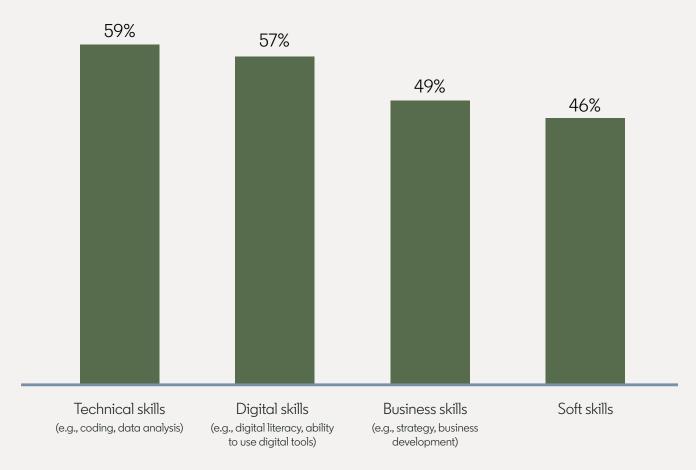
Changes to hiring plans by type of role due to generative Al

Percentage of businesses, %



Skills requirements that are expected to increase for new hires

Percentage of businesses, %



Source: Access Partnership's survey of 2,620 businesses in the US, India, Germany, the UK, and France.

As Al takes on the more operational aspects of work, people skills like effective communication, leadership, and critical thinking will be integral to how our everyday work gets done and will give organizations an advantage in the GAI economy. Our inaugural 2025 Skills on the Rise list reveals that companies are increasingly hiring for a mix of AI and human skills. For example, in the US, AI literacy ranks first, but people skills dominate the list, with eight out of the top ten fastest-growing skills including conflict mitigation and stakeholder management. People skills are increasingly in demand and have grown in importance on LinkedIn by 10% since 2018. In roles that historically didn't prioritize these skills, the significance of people skills has increased by 20% since 2018. As they look to adopt GAI technology, companies are placing a growing emphasis on the skills that complement what GAI tools can do. Take software engineers, for example. Researchers at LinkedIn and GitHub found that companies that are using the GAI coding tool Github Copilot hired software engineers with more non-programming skills – such as project management and communication – than companies not using the GAI tool.

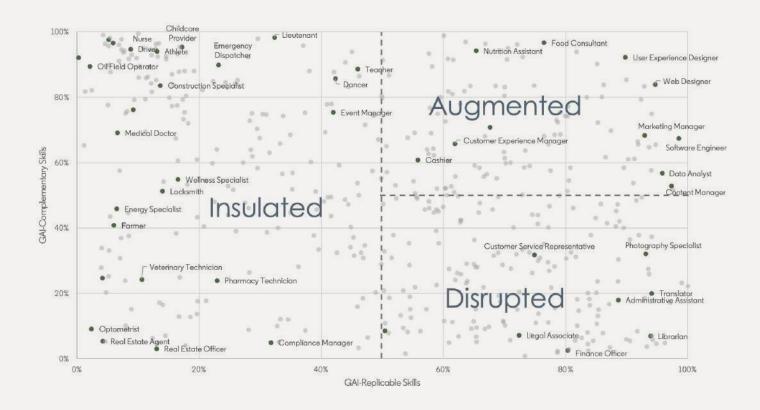
As GAI reshapes business operations, business leaders are continuing to hire workers in a broad range of roles and skills. To thrive in the AI era, workers across industries and roles should invest in people skills, which will remain in high demand.

Workers in jobs that are highly exposed to GAI will need more support

The GAI economy will have an uneven impact on different sectors and populations. These are the workers that will need the most reskilling support to navigate disruption and potential displacement.

For a vast majority of workers, Al isn't replacing jobs but transforming them. Policymakers should identify and provide targeted support to individuals whose roles are likely to change the most with GAI to help them succeed in this transition. By analyzing data on the skills listed by LinkedIn members through the lens of GAI's evolving capabilities, we have identified the jobs, industries, and population segments that rely most heavily on skills that GAI is likely to replicate and are vulnerable to some degree of automation.

Jobs where a majority of tasks can be replicated by GAI include Administrative Assistant, Legal Associate, and Librarian. Workers in these jobs will need support identifying how their roles will change and adapting their skills relatively quickly. While none of the jobs in our analysis is fully composed of skills that can be replicated by GAI, businesses may choose to hire fewer workers in these positions and those workers may need help transitioning into new jobs. Using LinkedIn's skills taxonomy of over 40,000 skills, we can identify skills-based pathways from jobs that are highly exposed to GAI today into jobs that are less exposed. For example, Administrative Assistant and Event Coordinator share 50% of the same skills, but an Event Coordinator job is significantly less exposed to GAI.



Workers in the Technology, Information and Media, Financial Services, and Professional Services industries are the most exposed to GAI, meaning there are more roles in these industries where GAI can replicate many of their tasks. For example, our recent <u>report</u> on AI in the EU found that 75% of EU workers in the Technology sector are exposed to GAI. Other sectors likely to be impacted include Financial Services, (74% of workers), Accommodation and Food Services (72%), and Professional Services (72%). These industry findings highlight that GAI will likely have a larger impact across white collar professionals than past technology disruptions.

The disproportionate impact of GAI on women, younger workers, and people with degrees

The shift to a GAI-powered economy will bring both change and opportunity. Most jobs will evolve rather than disappear, but some workers, especially those in roles where much of the work can be replicated by GAI, will need support to successfully transition. These impacts won't be felt equally. Women, younger workers, and those with undergraduate degrees are among the groups most exposed. In these cases, displacement becomes a possibility, particularly if workers are not equipped to adapt. But exposure doesn't have to mean displacement. With the right mix of Al skills, people skills, and access to targeted reskilling programs, workers can find new ways to succeed. By working together, businesses, governments, and workers themselves, can make sure that the benefits of this technological shift are broadly shared, and that more people have the chance to thrive in the GAI era.



Women: Women tend to be overrepresented in jobs that stand to change the most with GAI. More women are in jobs highly exposed to GAI than men in over 90% of countries included in our **global analysis**. These include Medical Clerks, Customer Service Representatives and Sales Operation Assistants. However, women are more likely to have indemand people skills. Women who combine an understanding of AI with their people skills are in a prime position to navigate this disruption.

Younger workers: All generations face some exposure to GAI, however younger generations face slightly higher exposure. This is not surprising, as young professionals tend to be more represented in roles requiring GAI-replicable skills, such as writing and analytics, while they are still in the early stages of developing the people skills that can complement technology — many of which come with longer professional experience, such as leadership and negotiation. As the scope for entry-level roles in organizations continues to evolve, 38% of global C-suite executives are now prioritizing 'agility' when considering entry-level candidates for their organizations, according to recent LinkedIn research.

Workers with undergraduate degrees: Workers with undergraduate degrees are likely to be the most heavily impacted by GAI. Previous technological revolutions have disproportionately impacted lower-skilled workers but that's not the case with GAI, which can partially replicate skills used in many jobs that require an undergraduate degree. Workers with graduate degrees like Masters, however, are most likely to be insulated from GAI, suggesting that they have gained a level of specialization in their field that GAI may not be able to easily replicate. With the right support, workers with undergraduate degrees may be better positioned to navigate potential GAI disruption than less educated groups because they change jobs more frequently – and therefore may be able to move out of GAI-disrupted jobs faster. In fact, our research suggests that bachelor's degree holders are leaving GAI-disrupted jobs faster than workers with lower educational attainment.



Chapter 3

Policy recommendations:

Taking bold action to prepare the workforce for the age of GAI

GAI is poised to unlock trillions in productive capacity, but only if governments and businesses are able to take full advantage of this technology. Those who invest in GAI skilling across the workforce, breaking down one of the leading barriers to adoption, will reap the economic benefits. Those who do not will fall behind.

This section outlines actionable recommendations under two key themes: access to skilling and proactive worker support. Tackling these priorities together will help governments and businesses unlock the benefits of GAI.



Access to skilling: Equipping the current and future workforce with Al technical, Al literacy and uniquely human skills

Governments must prepare our current and future workforce to thrive in the evolving GAI economy. This requires coordinated action across primary, secondary, vocational, and higher education institutions as well as through adult learning and workforce development programs.

First, governments must invest in developing a robust pipeline of workers with the technical skills and knowledge necessary to develop and implement AI technologies. Second, governments must support efforts to provide access to affordable, high-quality AI literacy training. As AI becomes integrated into daily life and work, a baseline level of AI literacy will be essential for every member of the global workforce. Lastly, given the significant demand among employers for human skills to complement GAI's capabilities, policymakers must focus on continuing to develop these skills in education and workforce development programs.

Without sufficient skilling opportunities, individuals risk being left behind, widening workforce gaps and harming the broader economy.

Recommendations

Building our future workforce

- Encourage Al literacy courses for all students.
- Expand computer science programs with Al modules in secondary, vocational, and higher education.
- Provide professional development for teachers to effectively teach Al-related subjects and integrate Al tools into the classroom.
- Assist schools with safely and confidently integrating Al tools into academic environments.
- Establish Al-focused degree programs and interdisciplinary studies.
- · Fund academic Al research.
- Support partnerships between technology companies, vocational schools, and universities to develop up-to-date AI curricula.
- Support the infrastructure and capacity needed for vocational schools, colleges, and universities to educate technical AI talent.
- Encourage interdisciplinary programs that combine AI with other fields, such as healthcare, finance, and environmental science.



Case study: Transforming education and workforce development with AI in Mississippi

Mississippi faces a number of economic and educational challenges today. Nearly half of the state's college graduates leave annually in search of better opportunities, creating a persistent brain drain that weakens local communities. Small businesses, which make up 99.3% of Mississippi's economy, often lack the resources to adopt transformative technologies like AI, leaving them at a competitive disadvantage. And gaps between education and workforce needs hinder the state's ability to align talent development with economic progress.

<u>Mississippi Al Collaborative</u> (MSAIC) is a state-wide initiative dedicated to addressing these challenges by integrating Al into education, business, and community development. The initiative is a public-private partnership between the Computer Science Teachers Association Mississippi (CSTA-MS), Jackson State University, Mississippi Coding Academies, The Bean Path, and Microsoft.

The initiative consists of four programs:

- **1.** Al Educator Accelerator: An Al curriculum taught to K-12 public school teachers across the state. The program integrates Microsoft Copilot and other GAI tools into workflows, curriculum development, and workshops for Mississippi educators-empowering them to be advocates of responsible AI integration.
- **2. Al-Thon:** Hands-on Al challenges to develop Al capabilities statewide for universities, employers, and libraries.
- **3. K-12 Al Thon:** An Al learning program tailored for K-12 students, which introduces young learners to Al concepts while cultivating critical thinking and technical skills for future success.
- **4. Al Agency:** An apprenticeship program providing undergraduates at Jackson State University the opportunity to solve challenges for small businesses using Al.

Through the Al Collaborative, teachers are testing novel ways to use generative Al to differentiate content, ensuring students of all abilities and learning styles can make the most of their education. College students are answering questions about Al in community forums and assisting everyone from children to grandparents try generative Al for the first time. And anyone in the state will be able to take an easy-to-digest class on Al through LinkedIn Learning.

Since its founding in 2023, Mississippi Al Collaborative has trained a total of over 2,000 individuals, including more than 1,000 educators in the train-the-trainer model, and issued over 800 certifications across various programs. There has been significant engagement with educators and businesses, leading to increased digital literacy and confidence in using Al tools across the state.

Case study: How the UK advances AI skills in education

In January, the UK Prime Minister, Sir Keir Starmer, published the <u>UK Government's Al</u> <u>Opportunities Action Plan</u>, which sought to outline how the UK can build an Al sector that is capable of scaling and competing on the global stage. The Government acknowledged that creating a strong talent pipeline and addressing wider skills demands will be critical to realizing this ambition. To this end, it accepted all of the Plan's recommendations on skills, which included several educational reforms such as: supporting higher education institutions to increase numbers of Al graduates and teach industry-relevant skills, facilitating the development of new Al courses codesigned with industry, ensuring its lifelong skills program is ready for Al; and promoting alternative routes to university into Al professions through apprenticeships and employer and self-led upskilling. The Plan is serving as the guiding document for the Government's Al policies.



Recommendations

Preparing today's workforce: Funding and incentives

- Provide direct payments to employers to cover a portion of on-the-job Al training, including apprenticeships.
- Provide or expand current employer and/or individual tax incentives to help offset the cost of Al skills training.
- Provide funding to educational institutions and labor organizations to cover the cost of delivering Al skills training. These efforts should aim to expand access to high-quality programs and foster collaboration in addressing local and national Al skills gaps.
- Offer targeted incentives and funding to improve digital connectivity, access to devices, and other essential infrastructure required for AI education and training.
- Expand funding for non-profit organizations working to provide underserved and likely disrupted communities with access to AI technologies and training. These should focus on bridging gaps in access and ensuring that individuals from all regions or groups can benefit from AI-driven opportunities.



Case study: Germany's "Hubs for Tomorrow" help SMBs with Al skills and strategy

Germany's "Hubs for Tomorrow" funded by the Federal Ministry of Labour and Social Affairs (BMAS) and the European Social Fund Plus (ESF Plus), are helping small and medium businesses (SMBs) overcome Al adoption obstacles with targeted technical support, among other things. These 12 hubs, located across the country, are providing up to 80 hours of free support to businesses seeking to incorporate Al into their operations, including providing training to employees.

SMBs like the ACO Guss GmbH employ more than half of all German workers and train nearly three quarters of apprentices, making Al adoption crucial for Germany's competitiveness as well as the preparation of Germany's workforce for the future. For businesses like ACO, however, generalized "Al upskilling" cannot address these challenges; ACO needs its employees to quickly understand exactly where and how they can deploy Al tools to address pain points to make the investment worthwhile. With the support of their local "Hub for Tomorrow" ACO piloted automation of its inventory monitoring processes using Al-enabled cameras and drones. This pilot produced such positive results, in terms of efficiency and employee confidence, that ACO decided to fully implement Al-enabled inventory monitoring. By providing targeting training to eager SMBs like ACO, the Hubs for Tomorrow are helping build Al skills in a way that leads to immediate economic and workforce development impact.

Case study: Public-private sector collaboration to accelerate return to employment in France

France Travail is a public employment service in France that supports job seekers in returning to work, compensates them, and guides companies in addressing their recruitment needs.

To anticipate changes in the job market, remove recruitment difficulties for employers and facilitate the return to work of job seekers, <u>France Travail</u> and Linkedln forged a partnership that consists of:

- **Product Best Practices:** LinkedIn runs training sessions for the agency's job counselors on how to leverage LinkedIn and runs profile optimization sessions for jobseekers, with guidance on how to use LinkedIn's Al-powered features.
- Labor Market Insights: As a partner to France Travail's internal training institute charged with upskilling their 5,000 managers, LinkedIn hosts conferences on the latest labour market trends, focusing on the role of AI in recruitment and today's economy.

France Travail and Linkedln's partnership reflects the joint vision of matching talent to opportunity at scale and combining the strengths of private and public sector actors to build a future-ready workforce.

Recommendations

Preparing today's workforce: Training and hiring

- Establish national Al skilling banks in partnership with the private sector and philanthropic organizations.
- Develop certification programs that validate AI competencies and provide a clear pathway for career advancement.
- Promote skills-based hiring to help businesses find workers with Al skills, which may not be apparent from their current job title or degree. Nearly half (44%) of businesses agreed that skills-based hiring could help them find more Al talent and our data show that a skills-based approach <u>would increase the talent pipeline</u> for Al roles by 8.2x globally.
- Leverage the growing body of reputable, free online content and course offerings which support Al literacy development.
- Support professional development and training opportunities in human skills, such as communication, teamwork, and critical thinking.



Case study: Building a digital nation with India's 'Al for All' platform

India is rapidly positioning AI as a cornerstone of its economic growth, innovation, and digital transformation. As part of this overarching vision, the Ministry of Education has launched the 'AI for AII' platform, a pioneering initiative aimed at democratizing AI education and training across the country. The platform seeks to demystify AI and foster a digital-first mindset among citizens from all walks of life. It is structured into two interactive sections: 'AI Aware' and 'AI Appreciate'. These sections offer engaging lessons that can be completed in just four hours, upon which users receive digital badges to showcase their newly acquired knowledge.

- 'Al Aware' introduces fundamental Al concepts, empowering citizens to distinguish between human and machine intelligence.
- 'Al Appreciate' explores the various domains of Al, its impact across industries, and the principles of responsible Al use.

The 'Al for All' platform is available in 11 Indian languages, ensuring that people from diverse linguistic backgrounds can engage with Al learning seamlessly. The platform also features talkback applications to support visually impaired individuals, further expanding access to Al education. This initiative underscores a commitment to advancing Al literacy on a national scale, providing individuals across India with the foundational knowledge needed to navigate an increasingly Aldriven world.



Recommendations

Proactive worker support

GAI presents noteworthy opportunities for a vast majority of workers, but risks having a significant impact on those who we know are in jobs most likely to be disrupted by this new technology. Government policies should proactively meet the needs of such individuals in order to help them be aware of and navigate this disruption, as well as mitigate potential job displacement risks.

- Invest in updated data capabilities that track how AI is impacting jobs and skills in real time. Make this data accessible to workers, including by leveraging partnerships with the private sector and academic institutions.
- Provide or expand current employer and/or individual tax incentives to help offset the cost of AI skills training programs aimed at supporting individuals to transition into jobs with lower GAI exposure.
- Promote skills-based hiring to enable workers impacted by AI to more easily transition to new jobs by demonstrating their transferable skills, as opposed to being evaluated based on their current job title or degree alone.
- Launch campaigns to educate the public about Al's potential and its implications for specific jobs, addressing fears and promoting its benefits.



Conclusion:

An all-in approach to Al skilling

The transformative potential of GAI will only be realized if governments, businesses, and communities work together to address the interconnected challenges of skilling, literacy, and access. Businesses need talent to build and deploy GAI solutions; workers need affordable, high-quality AI training; and policymakers need resilient economies where every member of the workforce can succeed.

Policymakers can unlock Al's promise to drive economic growth, create jobs, and improve lives worldwide. The time to act is now – the nations that lead in skilling will shape the future of work and define global competitiveness in the Al age.



Methodology

In this report, we draw on anonymized and aggregated data from the LinkedIn platform, used by more than a billion members and 67 million companies worldwide, to provide an unparalleled look at how AI is impacting the global economy and workforce. This report also leverages economic and survey analysis conducted by Access Partnership to understand the economic potential of GAI, the current state of GAI adoption, and GAI's impact on businesses. For more information on Access Partnership's methodology, please refer to their report.

LinkedIn Economic Graph data

Skills

Refers to the 41,000+ skills that are sourced from Linkedln members (skills explicitly listed on member profiles, or inferred from other aspects of members' profiles, such as job titles, fields of study, etc.) or from job postings on Linkedln.

Jobs or occupations

LinkedIn member titles are standardized and grouped into approximately 15,000 occupations. These are not sector or country specific. These occupations are further standardized into approximately 3,600 occupation representatives. Occupation representatives group occupations with a common role and specialty, regardless of seniority. Skills Genome For any entity (occupation, country, industry, etc.), the skills genome is an ordered list of the 50 'most characteristic skills' of that entity. These most characteristic skills are identified using a TF-IDF algorithm to identify the most representative skills of the target entity while down-ranking ubiquitous skills that add little information about that specific entity (e.g., Microsoft Word).

Al skills

LinkedIn categorizes AI skills into two mutually exclusive groups: "AI Engineering" and "AI Literacy" skills. AI Engineering skills refer to the technical expertise and practical competencies required to design, develop, deploy, and maintain artificial intelligence systems. Examples of AI Engineering skills include: Machine Learning, Neural Networks, and Natural Language Processing (NLP). AI literacy skills refer to the knowledge, abilities, and critical thinking competencies needed to understand, evaluate, and effectively interact with artificial intelligence technologies. Examples of AI Literacy skills include: AI Prompting, ChatGPT, Microsoft Copilot, and Google Gemini. As skills are ever evolving, we refresh these classifications on a periodic basis.

Al jobs

An Al job is an occupation that requires Al skills to perform the job. Examples of such occupations include but are not limited to: Machine Learning Engineer, Artificial Intelligence Specialist, Computer Vision Engineer.

Al talent

A LinkedIn member is considered AI talent if they have explicitly added at least two AI skills to their profile and/or they are or have been employed in an AI job.

Al LinkedIn hiring rate

The Al LinkedIn hiring rate is a measure of hires normalised by LinkedIn membership. It is computed as the percentage of LinkedIn members who are considered Al talent and added a new employer in the same period the job began, divided by the total number of LinkedIn members in the corresponding location.

GAI exposure

LinkedIn researchers identify GAI-replicable and GAI-complementary skills, combining generative AI tools with skill embeddings and matching techniques, and map it to occupations using their skills genome. This way, each occupation on LinkedIn is classified as augmented, disrupted or insulated from GAI based on the medians of this metric. These occupations are further mapped to LinkedIn members and their selected characteristics across countries to estimate the share of members in each group that fall within each category. You can find more information on this methodology here.

Gender classification

If not explicitly self-identified, we have inferred the gender of members included in this analysis either by the pronouns used on their LinkedIn profiles or inferred based on first name. Members whose gender could not be inferred as either man or woman were excluded from any gender-centered analyses. We define 'occupations where women are most underrepresented' as those occupations that are in the bottom quartile for their country in terms of share of women employed in the last five years.

Generation classification

A LinkedIn member's generation (Gen Z, Millennial, Gen X, Baby Boomer) is inferred based on graduation years listed on their LinkedIn profile. We follow the Pew Research Center's definition for each generation as Gen Z being born between 1997 and 2012, Millennials being born between 1981 and 1996, Gen X being born between 1965 and 1980, and Baby Boomers being born between 1946 and 1964.

Linked in