

Drivers of labour-market transformation

Technological developments, the green transition, macroeconomic and geoeconomic shifts, and demographic changes are driving transformation in the global labour market, reshaping both jobs and

required skills. This chapter provides a picture of how companies expect these macrotrends to drive industry transformation by 2030.

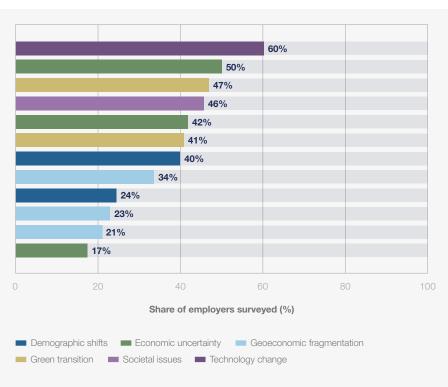
1.1 Expected impact of macrotrends on business transformation

FIGURE 1.1

Macrotrends driving business transformation

Share of employers surveyed that identify the stated trend as likely to drive business transformation.

Broadening digital access Rising cost of living, higher prices or inflation Increased efforts and investments to reduce carbon emissions Increased focus on labour and social issues Slower economic growth Increased efforts and investments to adapt to climate change Ageing and declining working-age populations Increased geopolitical division and conflicts Growing working-age populations Increased restrictions to global trade and investment Increased government subsidies and industrial policy Stricter anti-trust and competition regulations



Source

World Economic Forum, Future of Jobs Survey 2024.

Technological change

More employers – 60% – expect broadening digital access to transform their business than any other trend, with similar proportions of employers across

all regions selecting this trend. This growing digital access is a critical enabler for new technologies to transform labour markets (Figure 1.1).

The Future of Jobs Survey asked employers how advances in nine key technologies are transforming their business. Of the nine technologies, three stand out as being expected to have the greatest impact. Robots and autonomous systems are expected to transform 58% of employers' businesses, while energy generation and storage technologies are expected to transform 41%. But it is artificial

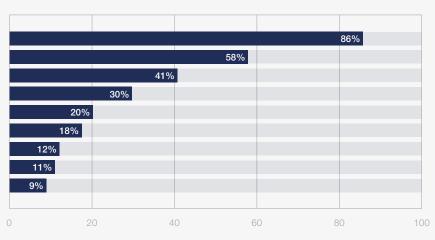
intelligence (AI) and information processing technologies that are expected to have the biggest impact - with 86% of respondents expecting these technologies to transform their business by 2030 (Figure 1.2).

FIGURE 1.2

Technology trends driving business transformation, 2025-2030

Share of employers surveyed that identify the stated technology trend as likely to drive business transformation

Al and information processing technologies Robots and autonomous systems Energy generation, storage and distribution New materials and composites Semiconductors and computing technologies Sensing, laser and optical technologies Quantum and encryption Biotechnology and gene technologies Satellites and space technologies



Share of employers surveyed (%)

Source

World Economic Forum, Future of Jobs Survey 2024.

Generative AI (GenAI), in particular, has witnessed a rapid surge in both investment and adoption across various sectors. Since the release of Chat GPT in November 2022, investment flows into Al have increased nearly eightfold.3 This influx of capital has been accompanied by investment in the physical infrastructure needed to support these emerging technologies, including servers and energy generation plants. By leveraging natural language processing technology, GenAl enables users to interact with it as though they were conversing with a human, considerably reducing barriers to usage and the need for specialized technical knowledge.4 Accordingly, the demand for GenAl skills by both businesses and individuals has also grown significantly (Box B1.1).

Although more generalized adoption of Al applications remains comparatively low, with only a small fraction of firms using it in 2023, adoption is growing rapidly, albeit unevenly across sectors. The information technology sector is leading the way in Al adoption, while industries such as construction are lagging behind.⁵ This disparity mirrors broader trends, with advanced and middleincome economies experiencing unprecedented diffusion of generative AI technologies among individual users, while low-income economies remain largely on the margins, with currently minimal use of this technology.6

While the full extent of long-term productivity gains from the technology remains uncertain, workplace studies have identified various initial ways for generative AI to enhance human skills and performance. Some of these studies have highlighted ways for generative AI to enhance human core skills, or to substitute for tacit knowledge among newer or average performing workers.^{7,8} Other studies have shown generative AI can enhance knowledge work if applied appropriately within its capability, but risks producing adverse outcomes where users unknowingly stretch it beyond its capability.9

Looking further ahead, some observers argue generative AI could empower less specialized employees to perform a greater range of "expert" tasks – expanding the possible functions of roles such as Accounting Clerks, Nurses, and Teaching Assistants. 10 Similarly, the technology could equip skilled professionals such as Electricians, Doctors or Engineers with the world's forefront knowledge - enabling them to solve complex problems more efficiently. 11 Outcomes such as these – which create genuine shifts in the quantity or quality of output – are more likely to come about if technology development is focused on enhancing rather than substituting for human capabilities. 12 However, without appropriate decision-making frameworks, economic incentive structures and, possibly, government regulations, there remains a risk that technological development will be focused on replacing human work, which could increase inequality and unemployment.

While currently seen as less transformative than GenAl, robots and autonomous systems have seen steady growth of around 5-7% annually since 2020.13 In 2023, global average robot density reached 162 units per 10,000 employees, double the number measured seven years ago. 14 Currently robot installations are heavily concentrated, with 80% of installations occurring in China, Japan, United States, the Republic of Korea, and

Germany. 15 This is partially reflected in Future of Jobs Survey data, which shows significant expectations for the transformative impact of these technologies in these five countries (more than 60% of respondents in each); but much lower expectations among employers headquartered in Sub-Saharan Africa (39%), Central Asia (45%) and the Middle East and North Africa (44%).

BOX 1.1 Demand for generative AI skills

In collaboration with Coursera

Coursera data generated for the Future of Jobs Report 2025 reveals significant growth in demand for Generative AI training among both individual learners and enterprises (Figure B1.1). Demand for AI skills has accelerated globally, with India and the United States leading in enrolment numbers. However, the drivers of demand differ. In the United States demand is primarily driven by individual users, whereas in India, corporate sponsorship plays a significant role in boosting GenAl training uptake.

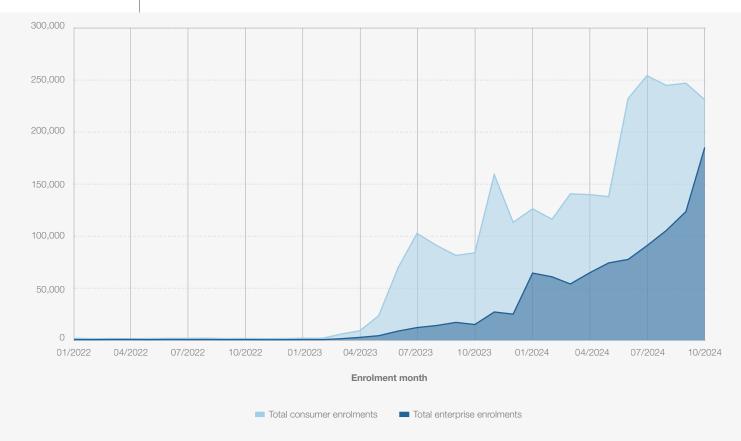
Globally, individual learners on Coursera have focused on foundational GenAl skills and

conceptual topics, such as prompt engineering, trustworthy Al practices, and strategic decisionmaking around Al. Institution-sponsored learners, on the other hand, emphasize practical applications within the workplace, including leveraging AI tools to enhance efficiency in Excel or leveraging the technology to develop applications. These trends reflect a tailored approach to GenAl learning, where individuals focus on foundational knowledge-building while organizations prioritize training that delivers immediate workplace productivity gains.

FIGURE B1.1

Demand for generative AI skills

Generative AI enrolment trend 2022-2024.



Source

Coursera analysis.