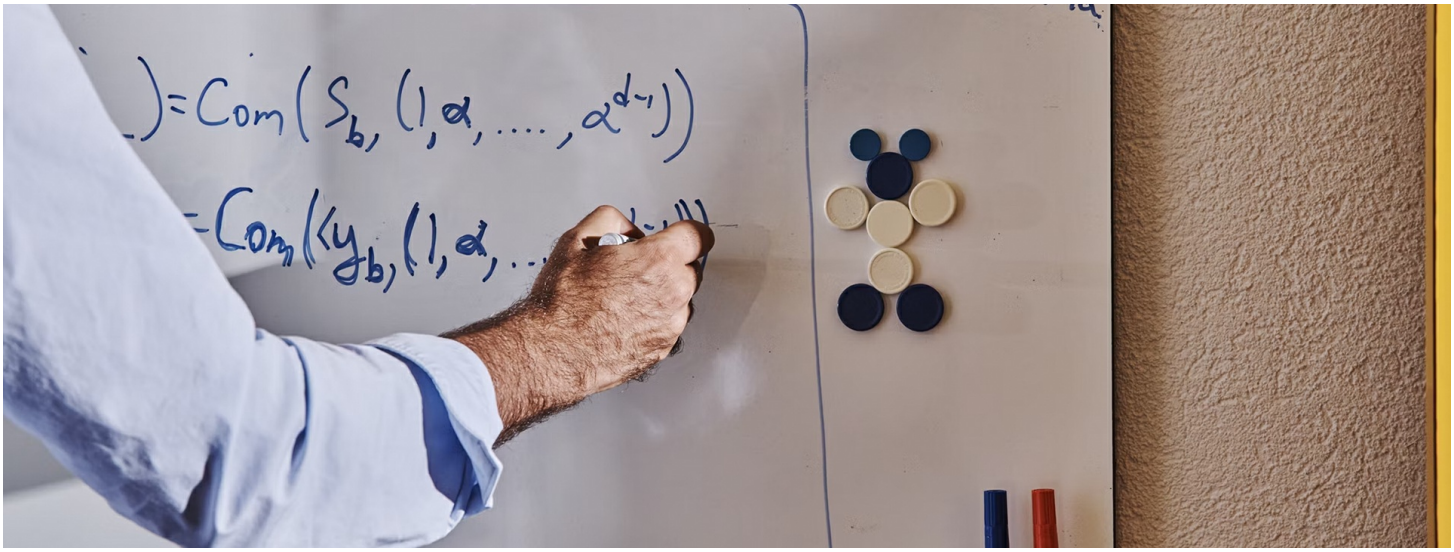
IBM UK Newsroom

Addressing the AI Transition in Skills and Jobs: A Strategic Report for the Future of Education and Training

Report finds 60% of UK workers' skills are mismatched for their job and 43 million will need upskilling by 2030



Milan and London, January 24, 2025

As the global adoption of AI is poised to revolutionise industries worldwide, a new report titled "Educational Pathways for the AI Transition in Skills and Jobs" reveals critical insights into the importance of education and training in preparing the workforce for the AI transition.

Published by TEHA Group and commissioned by IBM, the report highlights that despite the growing use of AI solutions, a significant skills shortage remains a major barrier to effective adoption. To address this gap, the report outlines key recommendations and emphasises the urgent need for educational pathways to equip workers for the AI-driven future.

Guided by a high-profile advisory board of global leaders in education and workforce development, the report focuses on six countries—France, Germany, Italy, Japan, the United States, and the United Kingdom—and the challenges related to demographic and labor market shifts.

Key insights from the report include:

The current AI adoption landscape and the skills shortage

- AI is projected to boost global productivity by up to 1.5% annually, potentially driving significant GDP growth.
- By 2030 approximately 729 million people are expected to utilize AI tools, up from 314 million today. Additionally, AI will influence over 83% of tasks in major job groups analyzed, with more than 60% being augmented rather than automated (among those potentially affected by AI).
- To fully leverage AI's potential, we must address the skills mismatch impacting about 50% of workers on average in the six countries, rising to 60% in the UK , many of whom lack the necessary technical skills to adapt to new AI-driven roles.

Education and training pathways are critical

- Over 450 million workers will need upskilling by 2030 (43 million in the UK) with more than 30% (136 million) relying on non-traditional educational pathways (11 million in the UK), like online courses and digital credentials.
- Traditional academic courses – provided by universities and research institutions – in AI are increasing by an average of 22% from 2017 to 2023, but 80% still focus on traditional STEM fields and economics disciplines, reflecting a trend towards technical and analytical fields.
- This narrow focus poses a challenge, as AI's transformative potential extends to humanities, social sciences, arts, and health sciences; integrating AI into these non-STEM pathways is essential for creating a well-rounded, tech-savvy workforce.

The report makes key recommendations addressing the global skills gap

- **Promote AI education at all levels:** Introduce AI concepts in educational curricula, focusing on critical thinking, ethics, and problem-solving skills that are relevant across various industries. It is critical that the deployment of AI in education is done in partnership with teachers and educators. Clear strategies, funding, and guidance will be needed to embed AI at all levels of the education system. To be resilient and benefit from developments in AI, individuals need a combination of technical but also human-centric skills.
- **Empower small/medium enterprises:** Offer resources and guidance for AI training by promoting high-quality standards, evaluating digital and AI skills, encouraging innovation through networking, and helping business leaders build their AI knowledge. In order to maximize the benefits of AI in the workplace, it is essential to provide clear guidance on the evolution and opportunities that AI brings, while ensuring funding opportunities for AI-related training activities.
- **Encourage lifelong AI learning:** Create accessible learning pathways for individuals at all stages of their careers, particularly for low-skilled workers and seniors, with initiatives to raise awareness of AI's relevance and impact on different sectors. This could be accomplished through partnerships that promote access to free and low-cost AI fundamentals courses. AI literacy courses should be tailored to the diverse social and professional needs of the population in terms of content but also format, for example providing flexible and easily accessible courses in a variety of ways
- **Establish a trusted credentialing system:** Develop standardized, widely recognized credentials for AI-related education, ensuring that employers and individuals have a reliable way to measure skills and expertise. Public-private partnerships are key in aligning educational content with industry needs, ensuring that AI training programs are both relevant and adaptive to technological advancements.

Lorenzo Tavazzi, Senior Partner and Head of Scenarios and Intelligence at TEHA Group, stated, "AI has the potential to redefine the future of work. However, realizing these benefits requires a comprehensive approach to education and skills development, ensuring that no segment of society is left behind."

IBM's Justina Nixon-Saintil, Vice President of Chief Impact Officer stated:

"Collaboration among public schools, universities, polytechnics, community colleges, nonprofits, and governments is essential for expanding access to AI education and bridging the skills gap. As we look ahead to 2025, we know a skilled workforce is vital for unlocking AI's full potential, which is why we're committed to training 2 million learners by the end of 2026. This report highlights the need to broaden our collaborations, and we invite others to join us in this important effort."

For more information about the study and to access the full report, please visit TEHA websitelink.

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