Accelerating AI skills
Preparing the Workforce for Jobs of the Future

February 2024

Artificial Intelligence (AI) is increasingly solidifying its foothold on the tasks that we perform today and is expected to be even more pervasive in the next five years.

To better understand the unfolding of AI technologies in the workspace, Access Partnership collaborated with Amazon Web Services (AWS) to survey over 1,600 employees and 500 organisations in Germany. Findings show that AI will be a big booster for the German economy and a disrupter of job tasks, but there is a lack of AI-skilled talent to fully harness this potential.

Artificial Intelligence (AI) leverages the power of computers and machines to mimic the problem-solving and decision-making capabilities of the human mind, such as visual perception, speech recognition and translation of languages.

Top Takeaways:

1 **Nearly every organisation will become an AI business by 2028**

89% of employers are optimistic about the impact of AI on their organisations, and 86% expect to use AI-powered tools throughout their firms by 2028. Employers expect the Information Technology (IT) department (78%) to be the greatest beneficiary of AI solutions-followed by the sales and marketing (75%) and the business operations department (74%). In addition, 60% of employers identified task automation to be the top benefit of AI.

2 **Generative AI will transform how we work, with over 78% of respondents expecting to use such tools in five years' time**
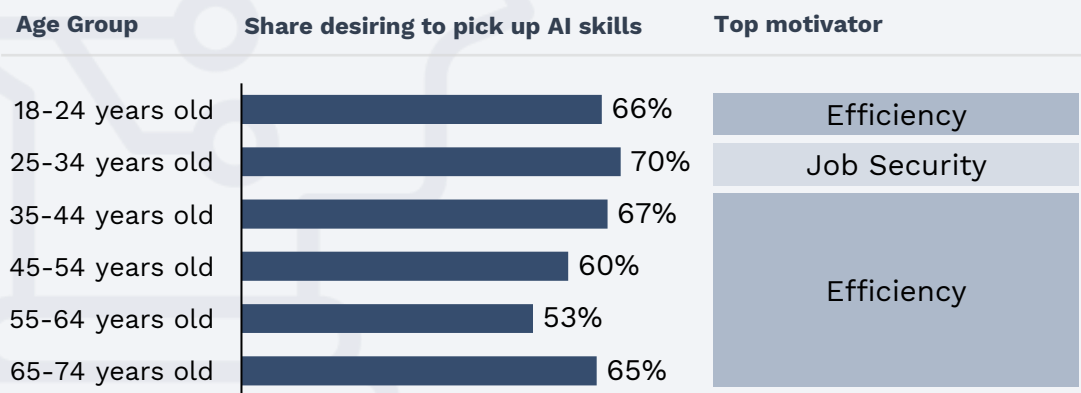
At least 78% of surveyed employers and employees expect to either "somewhat" or "significantly" use generative AI in their organisations in the next five years. Additionally, at least 95% of surveyed employers and employees can identify at least one benefit from generative AI, even if they don't plan on using it.

Generative AI refers to a type of AI that can help create new ideas and content in the form of conversations, stories, images, videos, music and more – unlike traditional AI systems which are designed to recognise patterns and make predictions.

3 **Acquiring AI skills can boost pay and career benefits**

Surveyed employees in Germany feel positively about the impact of AI, and six in 10 are keen on developing AI skills for career advancement. Top motivators to pick up AI skills vary slightly across age groups, with employees aged 25-34 years being most motivated by the desire to increase job security. This is in contrast with employees of other age groups who listed increasing work efficiency as the top motivator. In addition to increasing job security and work efficiency, AI skills can also increase salaries for workers, as employers are willing to pay up to 26% more in salaries for AI-skilled workers.

Share of surveyed employees interested in AI upskilling and motivations, by age
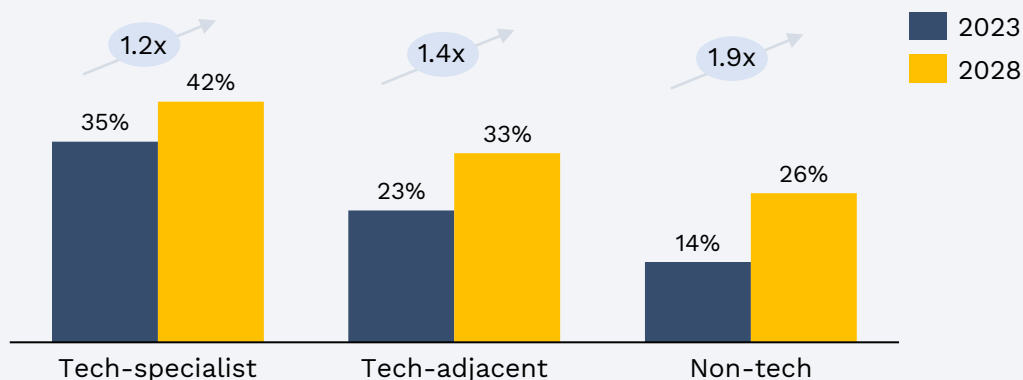
Age Group	Share desiring to pick up AI skills	Top motivator
18-24 years old	66%	Efficiency
25-34 years old	70%	Job Security
35-44 years old	67%	Efficiency
45-54 years old	60%	
55-64 years old	53%	
65-74 years old	65%	

4 **The productivity gains from an AI-skilled workforce could be immense**

In our survey, employers in Germany believe that AI can boost productivity by **32%** , while employees believe that AI can make tasks **33%** more efficient. The full extent of AI productivity gains are expected to be felt in 2028, with all levels of tech workers expecting to contribute. In particular, the use of AI tools by non-tech workers is expected to **double** by 2028 – the highest increase across all levels of tech workers[1].

Use of AI tools by non-tech workers expected to double by 2028
Expected share of job tasks completed using AI-powered tools by type of tech workers in 2023 and 2028

| | 2023 |
| | 2028 |

Tech-specialist: 1.2x — 35% / 42%
Tech-adjacent: 1.4x — 23% / 33%
Non-tech: 1.9x — 14% / 26%

5 **AI skilled talent is scarce, despite high demand from employers**

More than 60% of surveyed employers prioritise hiring AI talent. However, **85%** of them face difficulty in finding skill-ready talent due to challenges that include the lack of complementary skills among the existing workforce, such as critical and creative thinking which are essential to using AI tools effectively. Other challenges also hinder AI upskilling efforts, such as employers' lack of knowledge of the AI skills required by employees **(67% citing as a top barrier)**, and employees' lack of awareness of available AI training programs available **(60% citing as a top barrier)**.

85% of surveyed employers who prioritise hiring AI talent find it difficult to hire skilled workers
Share of surveyed employers responding to each option

Prioritise
Do not prioritise

Difficult
Not difficult

64%
36%
Hiring priority

85%
15%
Hiring difficulty
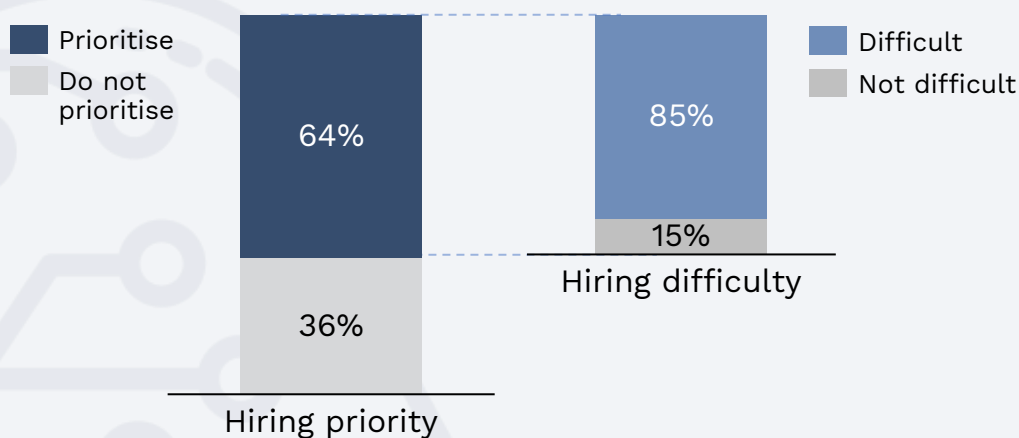
1.   Three types of workers were surveyed: (1) Tech-specialists: employees who develop new technologies and use specialised tech knowledge, (2) Tech-adjacent workers: employees dealing with technological products and services, (3) Non-tech workers: employees who do not require advanced tech knowledge and skills.

SOURCE: Survey of 514 employers and 1,626 employees in Germany; Access Partnership analysis