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Accelerating AI skills
Preparing the Workforce in Singapore for Jobs of the Future

March 2024

Artificial Intelligence (AI) is reshaping the workforce in Singapore - from how organizations operate to how work gets done. Despite varying levels of AI adoption across sectors and organizations in Singapore, AI will be a game-changer over the next five years.

To better understand emerging AI usage trends and where workplaces might be headed, Access Partnership collaborated with Amazon Web Services (AWS) to survey over 1,600 workers and 500 organizations in Singapore. Findings show that having AI skills could boost productivity, salaries, and career growth for workers, but there's a lack of AI-skilled talent to harness the full potential of AI.

> **Artificial Intelligence (AI)** taps into 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 translating languages.

Top Takeaways:

1 Most organizations will use AI by 2028 and expect big benefits

94% of surveyed employers in Singapore expect their organizations will use AI-powered solutions and tools by 2028. While most employers (91%) believe their IT departments will be the biggest beneficiary of AI, they also expect business operations (90%), research and development (89%), finance (89%), sales and marketing (86%), legal (83%), and HR (81%) departments to benefit too. In addition, 68% of employers expect task automation to be the top benefit of AI.

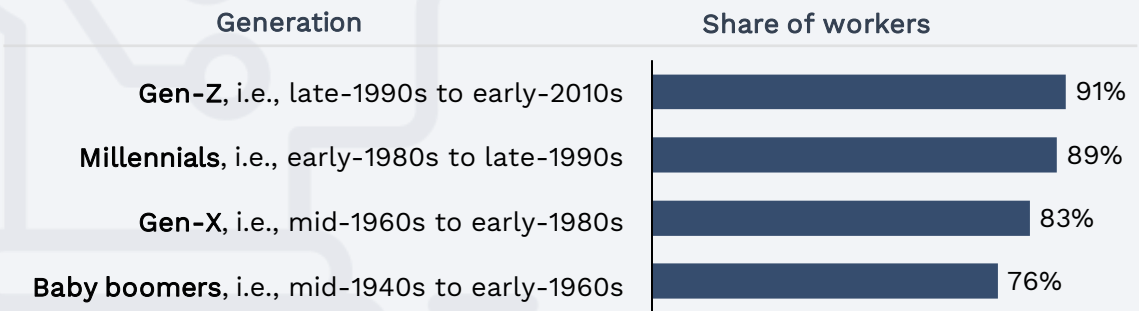**2 Generative AI will transform how we work**

The results show a largely positive outlook on the impact of generative AI, with 95% of employers and 94% of workers in Singapore expecting to use generative AI in their organizations in the next five years. This fast-developing technology will be used by workers of all levels of technical knowledge – 68% of 'tech-specialists' expect to use it significantly, followed by 49% of 'tech-adjacent' workers, and 21% of 'non-tech' workers.

> **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 recognize patterns and make predictions.

3 Acquiring AI skills could boost pay and create other career benefits for workers

Employers in Singapore value workers with AI skills and are willing to pay at least 25% more to hire them. Workers, on the other hand, have signaled a strong desire to develop AI skills to advance their careers, with 87% showing a keen interest. The top motivations for acquiring AI skills include increased job efficiency, improved job security, and greater job satisfaction. Some notable stats include 85% of female respondents and 76% of baby boomers showing a keen interest in picking up AI skills to advance their careers.

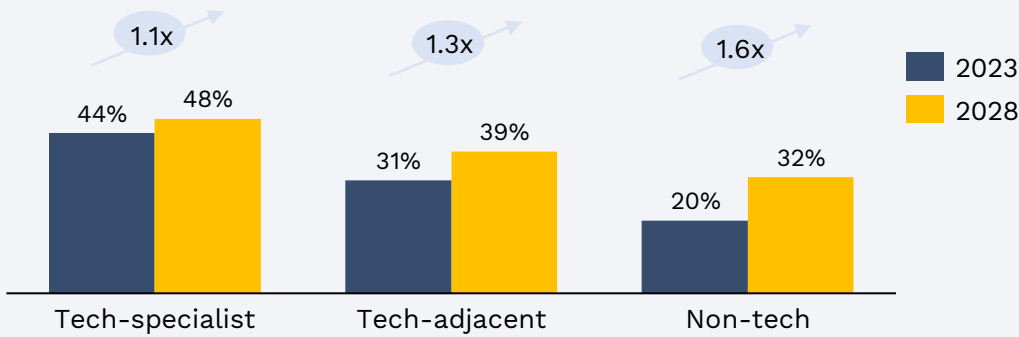Share of surveyed workers interested in developing AI skills to advance careers, by generation

Generation	Share of workers
Gen-Z, i.e., late-1990s to early-2010s	91%
Millennials, i.e., early-1980s to late-1990s	89%
Gen-X, i.e., mid-1960s to early-1980s	83%
Baby boomers, i.e., mid-1940s to early-1960s	76%

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

Surveyed employers in Singapore believe that AI can boost productivity by **44%**, while workers find that AI can make tasks **43%** more efficient. The full extent of AI productivity gains is expected to be felt in 2028, with workers across all levels of technical knowledge[1] anticipated to contribute. In particular, the use of AI solutions and tools by 'non-tech' workers is projected to increase **1.6x** by 2028.

Use of AI solutions and tools by non-tech workers expected to increase 1.6x by 2028

Expected share of job tasks completed using AI-powered solutions and tools by type of tech worker in 2023 and 2028
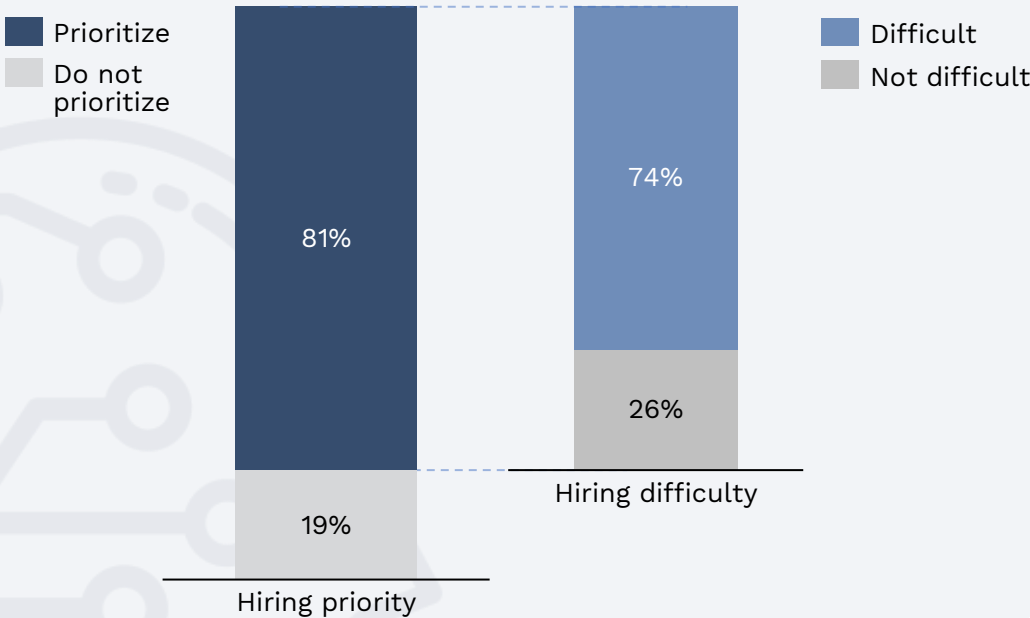

Legend: ■ 2023 (dark blue) ■ 2028 (yellow)

	Tech-specialist	Tech-adjacent	Non-tech
2023	44%	31%	20%
2028	48%	39%	32%
	1.1x	1.3x	1.6x

5   **The AI skills gap can be reduced through more awareness of training programs**

Hiring AI talent is a priority for over **eight in 10 (81%)** employers in Singapore, of which **74%** can't find the AI talent they need. The research also uncovers a training awareness gap, whereby **82%** of employers don't know how to implement an AI workforce training program. And **78%** of workers aren't sure about the relevant career paths where AI skills would be useful.

74% of surveyed employers who prioritize hiring AI talent find it difficult to hire skilled workers

Share of surveyed employers responding to each option

Legend: ■ Prioritize (dark blue) ■ Do not prioritize (grey) ■ Difficult (light blue) ■ Not difficult (grey)

Hiring priority: Prioritize 81%, Do not prioritize 19%
Hiring difficulty: Difficult 74%, Not difficult 26%