AI FOR ALL

BUILDING AN AI-READY WORKFORCE IN ASIA-PACIFIC

April 2025

AI Opportunity Fund: Asia-Pacific
with support from Google.org and Asian Development Bank (ADB)

Executive Summary

The rise of artificial intelligence (AI) is one of the defining global trends of the 21st century. In the Asia-Pacific (APAC) region, where emerging economies are rapidly adopting AI, the transition holds enormous potential for economic growth—AI is projected to contribute up to USD 3 trillion to the region's GDP by 2030.[1] Given the size of APAC's workforce, already substantial at 2 billion workers as of 2023 and projected to grow by approximately 15 million annually, greater awareness and access to AI upskilling and reskilling opportunities stand to yield significant benefits as we shift to an AI-driven future.[2]

To address this growing potential, AVPN conducted a comprehensive, multi-language analysis of over 400,000 public resources and surveyed nearly 3,000 end-beneficiaries across eight focus countries and territories. This study is the most expansive AI-powered analysis to date, aimed at understanding the existing AI skilling landscape and identifying key gaps and needs. Leveraging this extensive dataset, the report provides an in-depth analysis of trends, challenges, and opportunities in AI-driven workforce development, outlining a pathway toward an AI Just Transition.

Redefining AI Workforce Development

This study analyses 400,000+ resources and surveyed 3,000 beneficiaries across eight countries—the largest AI-powered analysis yet. The report identifies key gaps and opportunities for an AI Just Transition.

According to the research, at least 160 distinct skills could be transformed by AI, including data entry, compliance monitoring, code writing, and digital marketing. Building capabilities in generative AI, machine learning, and natural language processing can help workers remain relevant in this evolving landscape. Clerical tasks such as data entry, scheduling, and correspondence—primarily associated with administrative and support roles—are the most impacted by AI-driven automation, accounting for over 30% of media discussions on the impact of AI across different professions. With a significant portion of these positions being represented by individuals from communities with unmet needs, there is a crucial need for targeted reskilling initiatives to ensure improved workforce adaptability and access.

1 Google. AI Opportunity Fund. 2024.
2 ILO. Asia-Pacific Employment and Social Outlook 2024. 2024.

AI's Impact on the Workforce

Transformation

Sectors Impacted: Retail, Marketing, Finance, Manufacturing, Automotive

Key Points: AI-driven automation could transform these sectors

Benefit: Reskilling provides new skills for the future of work

Adaptation

Human Augmentation: AI systems assist, not replace

Key Points: Improves efficiency, decision-making, and problem-solving

Benefit: Enables complex roles, aids communities with unmet needs

Access

Equitable AI: Inclusive skilling and building anti-bias measures into AI technologies

Key Points: Promotes equal opportunities and diverse group empowerment

Benefit: Leads to just and sustainable growth

Eight distinct groups are poised to benefit most from an AI Just Transition. These include workforce transitioners (e.g. job seekers and recent graduates), low socio-economic groups, workers facing digital barriers and low digital literacy, and the experienced workforce adapting to AI.

Target end-beneficiary survey data revealed a critical need for tailored and accessible AI skilling initiatives that address the diverse needs and concerns of different demographics and sectors. A total of 2,840 responses were collected, the most extensive survey of its kind, distributed as follows across non-exclusive categories: 51% women, 43% young adults, 18% mature workforce, 16% job seekers, 11% people with low digital literacy, and 5% racial and ethnic minorities.

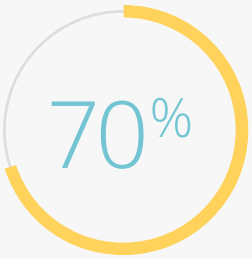
Young adults entering the workforce show strong enthusiasm for AI skilling, with 1 in 5 survey respondents already participating in related programmes. There is an opportunity to engage this community further, as well as the remaining 4 out of 5 who are not yet fully capitalising on the potential of AI. At the same time, respondents from the mature workforce are 1.6 times more likely to indicate concerns about AI trustworthiness and twice as likely to identify language barriers as a key challenge. This suggests that AI skilling initiatives should be customised to address the unique concerns of different workforce demographics, fostering a more empowered and adaptive workforce for the AI-driven future.

1 in 5 young adults have already participated in AI-skilling programmes

There is a clear link between education level and AI familiarity. Only 23% of respondents with a high school degree or less are familiar with AI and its tools, compared to almost 50% of those with a graduate degree who are familiar or very familiar with AI tools. Across education levels, greater AI familiarity is linked with stronger optimism about its potential to enhance jobs, with 4 in 5 data annotators and software developers—typically holding graduate degrees—expressing optimism about AI's potential. However, greater AI familiarity also correlates with increased awareness of job displacement risks, with 4 in 5 of the aforementioned workers indicating a high awareness of potential job displacement as a consequence of the AI transition. In contrast, only 2 in 5 skilled tradespersons, such as carpenters, welders, and machinists, show concern about AI replacing their jobs, even as industries increasingly adopt smart manufacturing and automation.

4 in 5 workers with higher education levels see AI's potential

Perceived implications of AI on job performance and displacement vary across sectors, with around 70% of respondents from the education, healthcare and public sectors recognising AI's potential to improve job performance. Respondents from the education sector also showed the highest awareness of AI skilling activities, with 49% knowing about them and 19% participating—the highest rate across all sectors. In contrast, 69% of respondents from the consumer and service-oriented sectors expressed concern about AI-related job displacement. Respondents in healthcare and the public sector showed the least concern about AI replacing jobs, with 41% stating no concern.



AI at Work

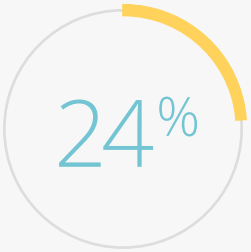
70% of respondents in education, healthcare, and public sectors see AI improving job performance.

AI Training

40% prefer real-world, contextual AI training over advanced expertise.

AI Knowledge

30% say better understanding is needed to overcome challenges in adopting or utilising AI.

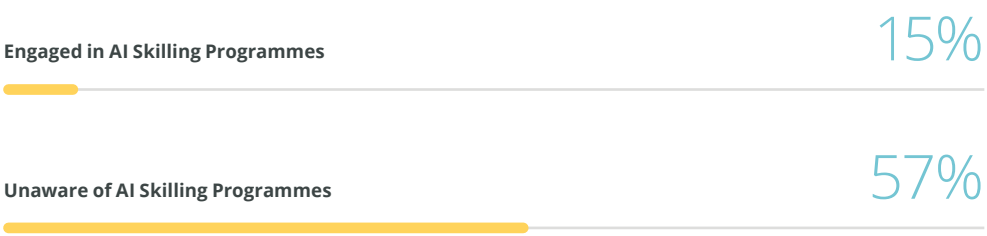


Skill Growth

24% highlight the need for continuous skill development.

Almost 40% of respondents indicated a preference for contextual training with practical, real-world applications over advanced AI expertise. Some challenges faced in adapting to or utilising AI include a need for better AI understanding (30%) and continuous skill development (24%). Prioritising these considerations can ensure that AI skilling initiatives are better designed to effectively equip workers to thrive in an AI-driven workforce, helping them remain relevant and adaptable.

Bridging the AI Skilling Gap



There are approximately 20,000 digital skilling initiatives with AI components, led by nearly 6,000 organisations across Asia-Pacific, reflecting significant efforts by both local and international providers to empower workers for the future. However, only 15% of survey respondents have engaged in AI skilling programmes, with more than half (57%) unaware of their existence. This highlights a significant opportunity to continue expanding access to AI skills training programmes.

Micro, Small and Medium Enterprises (MSMEs), making up 96% of APAC companies, are poised to benefit from an AI Just Transition.[3] These MSMEs, which provide employment for 50 to 80% of the local workforce, have the potential to leverage AI to enhance efficiency and drive innovation.[4] However, many struggle with AI skill development due to limited training accessibility, lack of access to digital infrastructure, and constrained financial resources. These barriers hinder their ability to fully adopt and benefit from AI. Skilling workers and equipping MSMEs to be AI-ready to absorb an AI-equipped workforce will scale the productiveness and competitiveness of MSMEs across the region.[5]

This is why an AI Just Transition is crucial. It means actively addressing skill gaps by providing accessible AI education and training to ensure that all workers are equipped with the necessary knowledge and tools to benefit from an AI-driven future.

3 AVPN. Strengthening and Scaling Gender Diverse MSMEs in Asia. 2024.
4 SME Finance Forum, Role of SME's in Asia's Economic Growth, 2022.
5 Ibid.

Building a Pathway to AI Skilling for All

The AI Opportunity Fund: Asia-Pacific emerges as a timely solution, given the unique and evolving dynamics of this region.[6] It endeavours to maximise the opportunities for economic growth and workforce transformation presented by AI by partnering with nearly 60 local organisations to deliver AI skilling that is needs-based, context-sensitive, and accessible to 500,000 workers. By surfacing timely insights and enabling close collaboration with various stakeholders, AVPN aims to ensure that all workers, including those in MSMEs, can fully participate in an AI Just Transition.

This report explores AI's transformative potential and its impact on the workforce in APAC to better inform AI-skilling initiatives in the region by:

- Analysing how AI is reimagining essential skills and reconstituting tasks and roles through three lenses: Transformation, Adaptation and Access, it surfaces eight essential skilling clusters. These clusters emerge as crucial prospects for targeted skilling initiatives so that all workers can benefit from AI-driven opportunities.
- Surfacing case studies on targeted and effective AI-skilling initiatives by analysing available digital skilling initiatives with AI components.
- Exploring the AI landscape in eight key countries and territories in the region—Australia, India, Indonesia, Japan, South Korea, Singapore, Taiwan, and Vietnam—to underscore the need for market-specific strategies to maximise the impact of AI skilling initiatives.
- Surfacing target end-beneficiary perspectives on navigating the evolving AI landscape.
- Drawing out seven design principles by analysing AI skilling best-practice case studies. These include ensuring access, being targeted, measuring outcomes, fostering job readiness, including an ethical lens, enabling continuity and leveraging collaboration.

These insights will provide a guide to all stakeholders looking to support an AI-driven future which benefits everyone. The opportunity is immense, and the imperative is clear: *To build a future where AI's transformative power benefits everyone*.

6 Google. AI Opportunity Fund. 2024.

info@avpn.asia

avpn.asia

171 Tras Street, Union Building, Level 10, Singapore, 0790252

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