Fact Sheet

1 September 2023

IMDA leads nationwide AI skilling to build AI talent pool

1.   In October 2022, the Infocomm Media Development Authority (IMDA) launched the Jobs Transformation Map (JTM) for the Information and Communications (I&C) workforce in preparation for increasing digitalisation in our economy, and emerging tech trends that will transform jobs and could result in displacements. Some of these trends include 5G and Internet of Things (IoT), Cloud Computing, Artificial Intelligence (AI) and Analytics. Of these, AI has the most transformative potential, and with its advent, one key challenge is that the breadth and depth of talent cannot keep up with demand. Given the rapid development of technology, skills acquisition may not always come through formal training but also through independent experimentation and learn-by doing. There is therefore a need to build AI proficiency through a combination of deep skills development and ground-up learning.

2.   The target is to reskill about 18,000 talent in tech roles over the next three years. With support from SkillsFuture Singapore (SSG) and Workforce Singapore (WSG), IMDA is working with five JTM Training Partners to scale reskilling and upskilling efforts in AI and Analytics with an emphasis on Generative AI and two other in-demand areas – Software Engineering, Cloud and Mobility – which are complementary to AI. The JTM Training Partners are National University of Singapore (NUS), Ngee Ann Polytechnic (NP), NTUC LearningHub (NTUC LHUB), Singapore University of Social Sciences (SUSS) and a consortium formed by Temasek Polytechnic-Republic Polytechnic-Generation Singapore (TP-RP-Gen). The Training Partners will assist the companies with course fee funding provided by SSG and work with programme partners of WSG's Career Conversion Programmes to identify their training and reskilling needs.

3.   The JTM Training Partners will develop courses to teach new capabilities required by AI adopters in the I&C workforce, such as programmers who use AI coding tools to be more productive or data engineers who use AI to manipulate data. These professionals will need new skills such as prompt engineering, responsible AI programming, data generation and augmentation, and enterprise risk management for AI adoption. The JTM Training Partners will also equip the rest of the I&C workforce with foundational AI skills.

4.   As an ongoing effort, IMDA has been working closely with industry partners to run structured on-the-job training and development, through the TechSkills Accelerator (TeSA) initiative, which has placed and trained more than 20,000 Singaporeans into tech jobs and trained 190,000 individuals in tech skills since 2016.

5.   We invite companies to join these employers who are working with the Training Partners to reskill existing employees in key tech areas:

- Apar Technologies
- Enable Professional Services
- FairPrice Group
- Fast Co Pte Ltd
- Frontier Force Technology Pte Ltd
- Geco Asia Pte Ltd
- GXS Bank
- HSBC Singapore
- InfoCepts
- Korn Ferry
- NCS Pte Ltd
- NTUC First Campus (NFC)
- National University Health System
- OCBC Bank
- Palo IT Singapore
- Schroders Investment Management (Singapore) Ltd
- SPH Media
- The Ascott Limited
- Zenith Infotech (S) Pte Ltd

6.   The following Industry Partners are working with the JTM Training Partners to share their expertise in developing and/or delivering training content, and we encourage more technology companies to collaborate with:

- Alteryx
- Amazon Web Services Singapore Pte Ltd
- Dell Technologies
- Betterdata
- Cognizant Singapore
- CompTIA Singapore
- Microsoft Singapore
- Oracle Corporation Singapore Pte Ltd

- Outsystems
- Qlik
- Salesforce
- SimplifyNext
- Squirro
- Tribe
- VMware
- Xoogler

Quotes from JTM Training Partners

National University of Singapore

Professor Susanna Leong, Vice-Provost (Masters' Programmes & Lifelong Education) and Dean, NUS SCALE, said, "NUS is committed to supporting local talent stay ahead amidst disruptions and we are honoured to be appointed as an IMDA JTM Training Partner. Through the NUS ICT Academy we will build an ecosystem that equips our workforce with concrete in-demand skills to meet the constantly shifting needs of the industry. The Academy aims to bridge knowledge and skills gaps at the regulatory, sectoral, and enterprise levels. Its slate of meticulously curated programmes offers ICT professionals multiple, flexible, and stackable pathways to broad skilling and deep skilling, so they stay ahead in this highly competitive landscape. NUS looks forward to making significant contributions to the ongoing advancement of Singapore's Digital Economy."

Ngee Ann Polytechnic

Mr Patrice Choong, Senior Director of Technology, Innovation & Entrepreneurship and Director of the School of InfoComm Technology, Ngee Ann Polytechnic, said, "NP's partnership with leading industry players AWS, Alteryx, Cognizant, Outsystems, Tribe and Xoogler to upskill infocomm technology professionals in the areas of software engineering, analytics and artificial intelligence reinforces our commitment to be in the forefront of ICT training. We are delighted to be appointed as IMDA's training partner, through which we will launch NP's Tech Skills Advancement Office to spearhead the development of tailored programmes for organisations. Beyond equipping employees with skills in emerging technologies to achieve organisational goals, we are confident that our efforts will contribute to the digital transformation of Singapore's economy."

NTUC LearningHub

Mr Anthony Chew, Chief Core Skills Officer of NTUC LearningHub, said, "NTUC LearningHub is excited to be one of the JTM Training Partners for the Information, Communications and Technology (ICT) sector. NTUC LearningHub will leverage our unique position within the

tripartite ecosystem with the Labour Movement, Government, and employers to tap on a strong network of partners to develop relevant skills training and job placement opportunities. We are committed to championing the ICT sector and will continue to uplift workers and transform businesses for the digital economy."

Singapore University of Social Sciences

Professor Tan Tai Yong, President of Singapore University of Social Sciences, said, "Technological advancements have a profound impact on job roles including Infocomm Technology (ICT) professionals such as software testing engineers, code writers and code reviewers, just to name a few. It is timely for ICT professionals to take proactive steps to manage their career pathways and equip themselves with the necessary skills and knowledge to stay relevant in the job market by upskilling and reskilling themselves as technology advances. SUSS is pleased to be appointed as one of IMDA's Training Partners. Empowered by the IMDA grant, SUSS aspires to develop and deliver relevant and practical training interventions to meet the demands of an ever-evolving Digital Economy for our nation."

Temasek Polytechnic-Republic Polytechnic-Generation Singapore

Dr Kwan Kian Hoong, Director, Temasek SkillsFuture Academy said: "We are thrilled to be part of this pivotal initiative, alongside IMDA and our partners Republic Polytechnic and Generation Singapore and other like-minded partners such as Accenture and Udacity. The Jobs Transformation Map sets a promising direction for our Information and Communications workforce, especially amidst the sweeping changes brought about by digitalisation and emerging technologies like AI and Analytics. At Temasek Polytechnic, we are deeply committed to fostering an environment where skills acquisition goes beyond formal classroom training, encouraging actual and contextualised training environments. With a focus on Generative AI, Software Engineering, and other key areas, this partnership enables us to offer a robust set of programmes that will not only equip tech professionals with industry-specific skills, but also empower our broader workforce with foundational AI literacy. We believe this collaboration is a monumental step towards sustaining a future-ready Singapore."

_____

About Infocomm Media Development Authority

The Infocomm Media Development Authority (IMDA) leads Singapore's digital transformation by developing a vibrant digital economy and an inclusive digital society. As Architects of Singapore's Digital Future, we foster growth in Infocomm Technology and Media sectors in concert with progressive regulations, harnessing frontier technologies, and developing local talent and digital infrastructure ecosystems to establish Singapore as a digital metropolis.

For more news and information, visit www.imda.gov.sg or follow IMDA on Facebook (IMDAsg) and Twitter (@IMDAsg).

For media clarifications & interviews, please contact:

Shamana MENON
Manager, Communications and Marketing, IMDA
DID: (65) 9694 2579
Email: shamana_menon@imda.gov.sg