

APEC Roadmap to Closing the Digital Skills Gap by 2030

INTRODUCTION

Research suggests the world risks a growing shortage of digitally skilled workers, including in Asia Pacific Economic Cooperation (APEC) economies, where workers represent nearly 60% of the global workforce.¹ A digitally skilled workforce is essential to economic growth and development. The 2017 25th APEC Economic Leaders' Meeting Statement called for "...up- and re-skilling to increase workers' employability...and preparedness for the digital age... skills training and development."

The "APEC Roadmap to Closing the Digital Skills Gap by 2030" responds to this call by laying out a common definition of digital skills, setting aspirational targets, and detailing APEC-wide actions on a multi stakeholder basis (governments, employer, and academia) to closing the digital skills gap and achieve lifelong employability. This Roadmap was informed by inputs from governments, employers and academia from 16 economies at the 2019 "APEC Closing the Digital Gap Forum".

DEFINITIONS

Under the Roadmap "digital skills" are defined broadly. They include skills required for workers in areas such as data science and analytics (DSA)², artificial intelligence, cybersecurity, digital literacy, and for jobs that do not exist yet, using technologies that have not yet been invented.³

"Digital skills gap" is defined as the gap between the demand and supply of workers with the digital skills sought by employers.

"Digital skills readiness" is defined as the level of preparedness for jobs in the digital age to upskill and reskill workers for the digital age.

Importantly, employers continue to seek "21st century skills" among their digital workers. APEC Project DARE (Data Analytics Raising Employment) defines these workers as those who "Exhibit crosscutting skills essential for DSA at all levels, including but not limited to: collaboration, communication and storytelling, ethical mindset, organizational awareness, critical thinking, planning and organizing, problem solving, decision making, customer focus, flexibility, business

¹ International Labour Organization, [Global Employment Trends 2012: Preventing a deeper jobs crisis](#)

² In 2017 APEC Project DARE (Data Analytics Raising Employment) convened an Advisory Board of employers, universities, and governments from 14 economies to identify a set of industry-driven [Recommended APEC Data Science & Analytics Competencies](#) and Recommendations for Action.

³ This Roadmap's definition of digital skills is focused on digital skills specialists rather than non-specialists.

fundamentals, cross cultural awareness, social and societal awareness, dynamic (self) re-skilling, professional networking, and entrepreneurship.”

TARGETS

To facilitating closing the digital skills gap by 2030 we set the following targets:

- Measuring the digital skills gap by 2020, decreasing the digital skills gap by 50% by 2025, and closing the digital skills gap by 2030.
- Understanding the state of digital skills readiness by 2020, improving digital skills readiness by 50% by 2025, and achieving full digital skills readiness by 2030.

We recognize the differences in economic and social circumstances across APEC economies and are determined to cooperate in adapting these targets where appropriate.

APEC-WIDE ACTION

We seek to advance the following APEC-wide actions, in many cases building on existing or planned work:

1. Increasing understanding of the digital skills gap, including first by helping to measure the gap between the demand and supply of workers with the digital skills sought by employers. Further, we must help policy makers, employers of all sizes, and academics to understand the key issues so they may be able to enact programs and policies to close the digital skills gap.

2. Enhancing understanding of best practices, such as credit programs to encourage individuals to take ownership of their skills development and lifelong employability and other fiscal measures that incentivize academia, employers, and other relevant stakeholders to invest in relevant training and trainers.

3. Increasing coordination among government, employers, and academia, including by sharing which digital skills are emerging.

4. Building the capacity of governments, employers, and academia to leverage the digital skills provider ecosystem, including promoting awareness of available resources – from data providers to training providers and career advice service providers – and how to efficiently and effectively partner and work with providers.

5. Facilitating a reduction in skills mismatches, including by developing tools such as labour market information systems to help employers anticipate and articulate the digital skills they seek and clarify digital skills definitions.

IMPLEMENTATION

Given the rapidly evolving nature of digital skills, this Roadmap is intended to serve as a living document. Additional APEC-wide actions can be agreed at any time in order to achieve the objective of closing the digital skills gap.

We aim to track progress to 2030, reporting on an annual basis to the “APEC Closing the Digital Skills Gap Forum” under the APEC Human Resources Development Working Group.

The APEC Human Resources Development Working Group will have overall responsibility for monitoring and evaluating progress under the Roadmap.

We commend the key role that employers, academia and other critical stakeholders have played in the development of the Roadmap, particularly those who participated in the 2019 APEC Closing the Digital Gap Forum and the 2018 and 2017 meetings of APEC Project DARE (including co-chairs Business Higher Education Forum and Wiley), the APEC Business Advisory Council (ABAC), and the Association of Pacific Rim Universities (APRU). We encourage further collaboration with relevant organizations as we implement this Roadmap.