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**APEC 2020 Background Paper – Priority Area 2:
Inclusive Economic Participation Through Digital
Economy and Technology**

Purpose: Consideration
Submitted by: Malaysia



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A. INTRODUCTION

Digital economy and technologies such as big data, Internet of Everything, Artificial Intelligence, robotics, blockchain and cloud computing, among others, provide a wide spectrum of opportunities to APEC economies in catalysing innovation and prosperity. The advancement of society propelled by digital technology will be the enabler for achieving balanced, inclusive, sustainable, innovative, and secure growth.

Despite this, APEC economies are at risk to face shortage of digitally skilled workers directly leading to downward trend to labour productivity growth¹. 75 per cent of respondents of a survey undertaken by Wiley reported a significant skills mismatch that may lead to workers losing job to automation if digital expertise left unattended². Widespread job loss, reduced wage growth, limited social protection coverage and expansion of income inequality are concerns brought about by automation due to rapidly evolving technology³.

APEC economies acknowledge that women often face significant obstacles to full participation in the global economy and recognise the untapped potential of women's contributions to the region's economy. In 2018, APEC Ministers explored meaningful ways APEC can respond to the challenges by empowering women to participate in the digital economy, promote women's leadership by use of innovative technologies to promote gender balanced entrepreneurship and market opportunities.

In addition, digital economy is opening up new horizons of business opportunities and increasing demand for newer economic model that is appealing to the women, younger and also elderly population. Alternative work arrangements like freelancing, independent contracting and gig economy allow workers in APEC economies to gain clients and establish foothold in the market from anywhere through digital platform. The size of gig economy in gross volume exceeds USD200 billion and expected to more than double to USD455 billion by 2023⁴. APEC has to have the agility to adapt to this changing nature of job.

¹ APEC Policy Support Unit (2018), APEC Regional Trend Analysis, Digital Productivity Paradox, November 2018

² Wiley Education Services, & Future Workplace. (2019). Closing the skills gap 2019. Louisville, KY: Wiley edu, LLC

³ OECD (2019), Society at a Glance: Asia/Pacific 2019, OECD Publishing, Paris

⁴ Mastercard and Kaiser Associates (2019), Mastercard Gig Economy Industry Outlook and Needs Assessment: The Global Gig Economy: Capitalizing on a ~\$500B Opportunity, May 2019

The onset of the Industrial Revolution 4.0 gave birth to innovative start-ups in the APEC region that facilitates job creation and has the potential to increase international trade that benefits APEC member economies. However, the current environment and institutional inflexibility remain a challenge and require APEC economies' close coordination and cooperation.

Realising the sweeping changes brought about by the digital economy and technology, the APEC Leaders in 2017 called for economies to strengthen human resources development that among others emphasise on preparedness for the digital age. The APEC Internet and Digital Economy Roadmap (AIDER) that was endorsed in 2017, facilitate technological and policy exchanges among member economies and to promote innovative, inclusive and sustainable growth, as well as to bridge digital divide in the APEC region.

Government and firms play crucial role in building professional capacity within APEC to address the opportunities and challenges the digital economy presents. To reap the benefits from digital economy and technology, especially for women, youth, start-ups and social enterprises, APEC member economies will have to adopt a more inclusive policy.

Therefore, Malaysia will focus on enabling a larger segment of society to participate in the economy by taking advantage of digital economy and technology by facilitating discussion on the following key areas:

- I. APEC Virtual Institute of Digital Economy;
- II. Women Empowerment and Leadership;
- III. Future of Work;
- IV. Conducive Ecosystem for Start-ups and Social Enterprises; and
- V. Development of Work Programme for AIDER under the DESG.

B. APEC Virtual Institute of Digital Economy

It is important that policymakers are able to understand the key issues in the digital economy and technology sphere so they may be able to enact programs and policies to close the digital skills gap and create a favourable environment for growth. A key challenge faced by APEC policy professionals is coordinating engagement with APEC's own community of technology entrepreneurs, venture

capitalists, and global digital leaders while ensuring that no one is left behind in the age of disruption.

In 2014, The APEC Leaders endorsed the APEC Initiative of Cooperation to Promote Internet Economy and instructed Ministers and officials to discuss the Internet Economy further, promote member economies' cooperation on developing the Internet Economy, and facilitate technological and policy exchanges to bridge the digital divide. Following this, the AIDER has identified one out of eleven key focus areas that encouraged APEC economies to pursue policies that promote the growth of the Internet and Digital Economy including, by coordinating with and involving public and private stakeholders so that all sectors have the opportunity to contribute to policy development.

In view of this, Malaysia is proposing for APEC to work together in creating conducive environment for policymaking, through focused set of opportunities to engage experts on the digital economy, conduct research, and participate in active learning. This will be undertaken by building on the APEC-wide actions for multi-stakeholders collaboration and draw in digital economy experts, entrepreneurs, academia, corporations, venture capitalists, legal professionals, and policy experts to engage with APEC policy professionals. This interaction would encourage transfer of knowledge and provide a platform to understand other professional groups that are crucial in the policymaking process.

Activities and Outcomes:

- To establish a Virtual Institute of Digital Economy in the second quarter of 2020
- To provide selected APEC policy professionals with a focused and structured, 2-3 weeks fellowship at key innovation centres within APEC designed to expand their networks

C. Women Empowerment and Leadership

In 2017, women's global internet penetration rate is about 45 per cent, which corresponded to having 250 million fewer women than men online⁵. The 2018

⁵ ICT Facts and Figures 2017, <http://www.itu.int/en/ITU/Statistics/Documents/facts/ICTFactsFigures2017.pdf>.

World Economic Forum data shows that women leadership roles are lower (33 per cent) than men. Digital disruption and IR4.0 is predicted to widen the gender gap by contributing to higher job losses for women. Industry barriers to hiring women to leadership roles particularly in the technology sector include: lack of female role models, more competitive and qualified incoming talents, and, lack of confidence and aspirations. Empowering women, especially through digital economy and digital technology is an important agenda for APEC.

Acknowledging that women are important contributors to economic growth, APEC Ministers in 2018 urged economies to continue to explore ways towards creating opportunities for women to participate in the global economy. This can be done through fostering conducive environments for women to start and run businesses; promoting women-owned MSMEs and women entrepreneurship in the digital economy; improving access to quality employment; advancing skills and resources, such as digital literacy and identity protection; and developing policies to improve access to finance, markets, start-up capital, and capacity building.

Notwithstanding, the Santiago Roadmap for Women and Inclusive Growth encouraged APEC to take action among others on improving access of women to leadership positions in all levels of decision-making. Taking all these into consideration, Malaysia will continue the efforts in women empowerment and build upon existing programmes and work plan in advancing policies relating to women and leadership in APEC.

Activities and Outcomes:

- To develop implementation plan for Santiago Roadmap for Women and Inclusive Growth
- To conduct Women and Technopreneurship - Digital Agility for Women in Leadership: Capacity-building Program to Shape Women Leaders and Role Models for Industry 4.0
- To conduct Symposium on Gender Mainstreaming and Women Empowerment to Fight Corruption

- To conduct Developing Community-Based Entrepreneurship (CBE) in Rural Tourism through Digital Empowerment
- To conduct Sharing of Best Practices on Returning of Women Talent in Work Force (Career Comeback Programme)

D. Future of Work

Gender inequality is likely to be exacerbated by the development of disruptive technology. Women, who are mostly employed in low skilled jobs and non-executive positions, tend to be more affected by this situation than men⁶. Women are also mostly employed in non-executive roles that have seen stagnation in growth of wages since the great recession (2007-2009). Within the APEC region, for every 100 men, 77 women are in the labour force. This is higher than 67 women per 100 men in the rest of the world. By this comparison, one can say that initiatives implemented by APEC have played important role in closing the gap, and this statistics can be improved by taking into consideration the advancement of the digital economy and technology and its role in providing employment opportunities to women.

Besides this, skills formation among young people leads to the deterioration or the failure to augment their human capital and decreased productivity. In 2016, there were an estimated 22.6 million youths aged 15-24 years old unemployed across the APEC region. This is much more than the global average of 12.8 per cent. Young graduates within the region are employed in low-skilled low-paying jobs with little opportunity for development. APEC economies are also facing skill gaps.

According to the World Economic Forum Report in 2016, the most in-demand occupations today did not exist 5 to 10 years ago, and the same report predicted that 65 per cent of primary school students today would be working in jobs which do not exist yet. As the result of exponential growth of technology, there could be an increase in the numbers of nomadic workers and digital freelancers. The World Economic Forum's Future of Jobs Report 2018 predicted that creativity, innovation and ideation will be key skills for the workforce of the future. These soft skills, which sit alongside analytical thinking and problem-solving, would be prerequisites for workers in adapting to the automation of jobs. Creative economy and the digital economy correspond vice versa as main key drivers of innovation in the global economy and in society. Thus, digital and creative economy could be one of the strategies in creating

⁶ OECD (2019), Employment Outlook 2019, OECD, Accessed August 1, 2019. <http://www.oecd-ilibrary.org/docserver/fbf42313-en.pdf?expires=1564732659&id=id&accname=guest&checksum=C0995518D8902E13E61E5BD3404887D9>.

inclusive economic opportunities through digital economy and digital technology for the women, youths and other segments of the society.

Taking heed of the APEC Framework on Human Resources Development in the Digital Age adopted by Leaders in 2017, Malaysia will identify the missing links and bridge the gap between the different frameworks that already exist in APEC to develop a document that can be a referral for APEC economies on Future of Work in the digital age.

Activities and Outcomes:

- To develop APEC Strategies on Future of Work in the Digital Age
- To conduct #mydigitalmaker APEC Challenge
- To conduct APEC Expert Meeting and Workshop on Gig/Freelance Economy and its impact to cross-border economic system
- To conduct Workshop on Innovative Regulatory Policy Development: APEC Economies' Approaches on Sharing Economy

E. Conducive Ecosystem for Start-ups and Social Enterprises

While many initiatives have been undertaken across APEC member economies, the road to technological innovation is increasingly being paved by innovative start-ups, working in partnership with multinational corporations, the objective of which was to scale-up the newly developed technology across borders. Corporate venture capital (CVC) is playing more important role in facilitating the environment. The data from 2017 APEC Corporate Start-up Innovations Study shows that although 95 per cent of start-ups wish to develop long-term corporate partnerships, only 45 per cent have done so⁷. The setbacks are scaling up, finding talents, and accessing funding and markets.

Making capital and funding accessible to startups is key to ensuring that these startups can continue to innovate, gain new knowledge and practices, create employment opportunities, pay taxes and ultimately contribute substantially and meaningfully to the economy. Being one of the main drivers of start-up ecosystem in the region, Malaysia plans to support start-ups through establishing an innovative start-up ecosystem; including by ensuring access to resources and building start-up networks and partnership. This will allow for exchange of know-hows and cross-learning to facilitate the effort in creating conducive and integrated startup funding/investment landscape among the APEC economies.

⁷ For more details refer to 2017 APEC Report on 'Initiative on Promoting Innovative Start-Ups'. Retrieved from: https://www.apec.org/Meeting-Papers/Sectoral-Ministerial-Meetings/Small-and-Medium-Enterprise/2017_sme/annex-a

A social enterprise is a business that pursues a social mission through an entrepreneurial approach⁸. It is seen as the stimulus to crafting more responsible, inclusive and sustainable businesses with positive social and environmental impact with potential to resolve various social and economic issues. This is an alternative model for economic growth that APEC economies can pursue in ensuring a more inclusive and sustainable development in meeting the 2017 Economic Leaders' Statement on 'Economic, Financial and Social Inclusion in a Globalized World', Statement, where grassroots, women, under-privileged and aging population benefits from integration and progress. Malaysia would like to initiate discussion on development of policies and programmes for more conducive social enterprise ecosystem in APEC.

Activities and Outcomes:

- To conduct APEC Startup Investment Forum: Building a Holistic Startup Funding Landscape To Boost Economic Growth
- To conduct Workshop on Crowdfunding: An Alternative Economic Tool to Promote Innovation in this Digital Era for Inclusive Growth
- To conduct APEC Policy Dialogue on Social Enterprise Framework: Creating Social Impact Catalysing Inclusive and Sustainable

F. Promoting Smart Living for Aging Population

In 2017, about 10 per cent of the population in APEC was aged 65 and above, and the number will increase to 25 per cent by 2050⁹. The rapidly changing and evolving technology, emergence of disruptive technology, as well as digitalisation have posed challenges for the ageing population to run their daily life. Their health might be at greater risk if they are left to cope with the fast pace of technology without further assistance by younger and able population or necessary hard and soft infrastructure which should be provided by the Government.

The 9th APEC High-Level Meeting on Health and the Economy held on 20-21 August 2019 in Puerto Varas, Chile highlighted the importance of integrating preventative approached and creating age-friendly environments across a variety of sectors in addition to health, including long-term care, elder home care, transportation, housing, labour, and social protection and support¹⁰. While advancement of the technology has been successful in health sector and

⁸ Noya, A. and E. Clarence (eds.) (2007), *The Social Economy: Building Inclusive Economies*, OECD, Paris

⁹ Chomik R., Piggot J, and McDonald P. (2017), *The Impact of Demographic Change on Labour Supply and Economic Growth: Can APEC Meet the Challenges Ahead?*, ARC Centre of Excellence in Population Ageing Research (CEPAR), University of New South Wales, Sydney, Australia

¹⁰ 9th APEC High-Level Meeting on Health and the Economy Joint Statement, "Healthy Economies in an Aging World", 2019

providing assurance to the ageing population in addressing their medical needs in greater precision, their daily life needs adjustment and enhancement as well, to enable them to adapt to the smart living lifestyle.

In APEC, economies have started to discuss the need for smart living for ageing society through various fora. Economies have agreed on the important role of digital technologies and innovation for ageing society. Despite the current hurdles for them in adopting digitalisation including limited internet access, lack of awareness and inadequate facilitation and design, there is a need for a standardisation in the areas of security, data transfer and communication to support and enhance their living standards¹¹.

Realising this need for APEC to work towards embracing smart living for ageing population, Malaysia would like to continue promoting and mainstreaming the cross-cutting efforts. The discussion that will follow through should be holistic and comprehensive, covering areas including smart cities and housing; and nursing care and e-health. The following fora have been identified to champion potential collaboration and initiatives:

- i) Health Working Group (HWG)
- ii) Policy Partnership on Science, Technology and Innovation (PPSTI)
- iii) Telecommunications and Information Working Group (TELWG)
- iv) Friends of the Chair (FotC) on Urbanisation

G. Development of work program on AIDER under the DESG

Following the adoption of the AIDER in 2017, a new governance mechanism through Digital Economy Steering Group (DESG) was established in 2018. In 2019, the DESG agreed to its terms of reference. Malaysia will continue to undertake the work for DESG for 2020 by discussing the way forward in implementing and monitoring the AIDER.

Activities and Outcomes:

- Prepare a comprehensive work programme on future implementation of the Roadmap with contributions from the Committees and sub fora, as appropriate.

¹¹ APEC Workshop on the Role of Standards and Innovation for Driving APEC's Silver Economy, June 2017