

# Entrepreneurship, Startups and Innovation (E-S-I) in ASEAN and East Asia:

Shaping The Post-Pandemic Recovery

*Lessons from ERIA E-S-I episodes 1-5*

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## Abstract

In 2021, the Economic Research Institute for ASEAN and East Asia (ERIA) – together with Curated Connectors, a Singapore based start-up – hosted a webinar series to discuss how innovation, start-up creation, and entrepreneurship at large are contributing to shape the (in-pandemic) and post-pandemic recovery. The discussions in each episode of the webinar series brought in innovators, ‘start-uppers’, and entrepreneurs from the Association of Southeast Asian Nations (ASEAN) and its Dialogue Partners as well as experts from international organisations, non-governmental organisations (NGOs), and foundations, and policymakers. This report summarises the key messages and trends that arose from the first half of the webinar series.

## Acknowledgements

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# KEY ISSUES

- **New ideas, new thinking, new business models, and new collaborations are needed for the post-pandemic recovery.**
- **Business creation, in particular through high-growth innovative start-ups, is one of the channels to speed up the recovery and reduce unemployment.**
- **The development of multidisciplinary skill sets which combine digital skills with collaborative, open, adaptable, and agile mindsets is key for entrepreneurship, start-ups, and innovation (E-S-I) ecosystems to continue thriving.**
- **Increasing the number of women entrepreneurs, innovators, and disruptors remains a critical factor for an inclusive post-pandemic recovery across the Association of Southeast Asian Nations (ASEAN) and East Asia.**
- **Strong tripartite partnerships between governments, the private sector, and people have the potential to play a catalytic role for the E-S-I ecosystems in the region.**

# INTRODUCTION

The Association of Southeast Asian Nations (ASEAN) exhibits a growing dynamism in terms of innovation, entrepreneurship, and start-up creation. As the region is still fighting the pandemic and at the same time is preparing for a post-coronavirus disease (COVID-19) world, innovation, entrepreneurship, and new business creation have a fundamental role to play in shaping the recovery.

The pandemic has proven to be an accelerator and catalyser of pre-existing trends in the region. These trends will likely contribute to shaping the recovery through innovation and business creation across the region. According to the first half of the Entrepreneurship, Start-Ups, and Innovation (E-S-I) webinar series, the following trends are to be taken into account by policymakers, policy shapers, and relevant stakeholders of E-S-I ecosystems across the region:

- **Continued regional economic integration** (Oikawa et al., 2021). The recently signed Regional Comprehensive Economic Partnership (RCEP) trade agreement (one of the largest globally) will contribute to integrating the region further through the development of even tighter supply chains. This will bring new market opportunities for entrepreneurs and innovators across ASEAN.
- **Booming digital economy** (Ajmone Marsan and Sabrina, 2020a). Accelerated by social distancing and pandemic lockdowns, the digital economy is reshaping business models – putting pressure on entrepreneurs to move to digital marketplaces. Growing numbers of digital consumers and business models will also bring new challenges, for instance in relation to cybersecurity and privacy.

- **New skills and mindsets** are needed to be successful ‘start-uppers’ and innovators. In an increasingly uncertain and unpredictable context, digital-related skills (e.g. science, technology, engineering, and mathematics (STEM)) need to be coupled with other types of skills to embrace complexity and navigate uncertainty. Skills such as being able to work in a collaborative environment, being receptive to experiment with new and different approaches, listening to different points of views, and being agile and adaptable are all crucial and increasingly relevant.
- **Changing patterns of consumer preferences**, especially in new generations. Globally and particularly across ASEAN (McKinsey trends), younger generations (Millennials and Gen Z consumers) pay growing attention to issues such as sustainability and inclusion, and are ready to pay more for sustainable and inclusive products and services. The growing cohort of individuals with these evolving preferences has to be taken into account by innovators and start-uppers.
- **Women entrepreneurs** have the potential to play a key role in the post-pandemic recovery. Women have been disproportionately affected by the pandemic. At the same time, many women across ASEAN own and manage businesses. Equipping women entrepreneurs with the skills and the tools to compete and thrive in the digital economy has the potential to be a key driver of the post-pandemic recovery (Ajmone Marsan and Sey, 2021; ASEAN, 2020).

## ● Section 1

### **An introduction to E-S-I in ASEAN and East Asia – Contributing to and shaping the post-pandemic recovery**

The dynamism of ASEAN in terms of start-up creation is evident. The region is home to 12 unicorns located in four ASEAN Member States (five in Indonesia, four in Singapore, two in Viet Nam, and one in Malaysia) (Reyes, 2020); and this figure is projected to grow in the coming years. According to a recent article by CB Insights (2021), more than \$90 billion of investments went into nearly 5,800 deals to tech start-ups based in the Asia-Pacific region in 2020. A separate report by Bloomberg (Lee, 2021) highlighted that Southeast Asian tech start-ups raised about \$8.2 billion in 2020, outperforming most other emerging markets.

This phenomenal growth has inspired the birth of many entrepreneurs and start-ups in the region, despite the pandemic causing a mild dent in 2020 compared with previous years. With vaccination programmes beginning to accelerate, the focus in 2021 has shifted to the post-pandemic recovery as both governments

and businesses review and refine policies and strategies for the new normal.

Of growing importance in the equation of recovery is the continued support to encourage entrepreneurship and innovation – allowing for new ideas, new thinking, new business models, and new collaborations to be birthed.

During the dialogues taking place during E-S-I 1–5, it was noted that for the public sector, both in policy and implementation, more was needed to ensure that:

- innovation and digital technology be used to promote inclusive development within societies and economies, especially to address potential rural–urban as well as gender divides; and
- emphasis be placed on encouraging, promoting, and developing entrepreneurship and innovation amongst the younger generations, with policies and programmes

developed and integrated into education cycles.

As governments manage the E-S-I ecosystems at the policy and implementation levels, the private sector will have to remain agile and relevant for the post-pandemic recovery. During the E-S-I 1–5, it was highlighted that:

- continued upskilling remains important for entrepreneurs to be relevant – besides hard (technical) skills, it is equally important to acquire soft skills (i.e. skills associated with teamwork and collaboration, communication and presentation skills, leadership and team building, and management, etc.);
- embracing an open mindset to

remain adaptable and agile – and identifying and seizing opportunities amidst challenges and changes – is key for new generations of entrepreneurs and innovators;

- continued engagement with all relevant stakeholders is critical to spur the generation of new ideas; and
- in a post-pandemic world, collaborations and partnerships across all levels of society (public, private, and people) will become key to driving economic and social development in the region, spurring greater growth in the E-S-I ecosystems.

## ● Section 2

### Entrepreneurial mindsets and skills – Going beyond technical-only skills and knowledge

The COVID-19 pandemic and the subsequent rapid changes in the workplace, including the booming of the digital economy, have accelerated the need for new skill sets amongst workers across ASEAN (Ajmone Marsan and Sabrina, 2020b). Since the pandemic began, the remote working system has leveraged the urgency for employees to

be equipped with various types of skill sets – not only to get the work done, but also to evolve with the rapidly changing industry priorities.

Skills development is a key element not only for increasing labour productivity and economic growth, but also for maximising social well-being,

empowering individuals, and increasing standards of living. Skills development across different groups of individuals is a key building block of inclusive societies and economies. For the post-pandemic recovery to be inclusive, it is necessary that as many individuals as possible across ASEAN have the opportunity to acquire relevant skills for the future of work. This applies especially to rural communities, which are generally less connected to high-growth economic hubs, and women.

Building a learning society requires a multi-stakeholder approach, with the involvement of all relevant actors in E-S-I ecosystems – from formal learning institutions (including schools and universities) to the public sector, private sector, non-governmental institutions, local communities, and other relevant stakeholders (Ra, Jagannathan, and Maclean, 2021). Multi-stakeholder cooperation allows the promotion of learning for all, regardless of age, race, work status, or cultural background.

Entrepreneurial skills and mindsets are those skills associated with innovation and start-up creation. These skills are particularly important in times of change and disruption, like during the pandemic. Not only entrepreneurs can develop entrepreneurial skills – these types of skills

can be developed across society to bring change and innovative ideas within any type of organisation.

Entrepreneurial skills include skills associated with the ability to work in a team and develop networks, navigate uncertainty and cope with complex problems, see connections across different disciplines by ‘connecting the dots’, combine different approaches, and listen to different points of view. Another fundamental element in the development of entrepreneurial skills and mindsets is the ability of ‘Learning to Learn’. A growing body of research (see, for instance, a global survey from McKinsey (2021)) indicates that more is needed than just equipping individuals with basic digital skills. To drive innovation and entrepreneurship, digital skills need to be combined with social and emotional skills, covering leadership, critical thinking, decision-making, and project management skills.

To activate entrepreneurial skills, multi-stakeholder cooperation is necessary, e.g. linkages between universities and industries can provide a platform to provide students with real-life experience and to prepare for future work. Investing in entrepreneurial skills development can also be done through peer-to-peer learning, to

allow team members to learn through team engagement in the workplace, obtaining key elements beyond technical skills, including an open mindset, the willingness to ask for help, and being adaptive. Interestingly, according to some recent research, companies that applied peer learning,

training and re-skilling show a higher rate of resilience to thrive and succeed from the disruptive pandemic (McKinsey, 2021).

### ● Section 3

## Deep tech as an enabler for the future economy, and the need for human intervention to ensure inclusiveness and avoid biases and discrimination

The acceleration of the digital economy across ASEAN is bringing many opportunities to entrepreneurs and innovators (Ajimone Marsan and Sabrina, 2020b). According to recent estimates, the number of new digital users between 2015 and 2020 across the six largest ASEAN markets (Malaysia, Singapore, Indonesia, Thailand, the Philippines, and Viet Nam) was 140 million; and the digital economy is projected to reach \$300 billion by 2025 (Google, Temasek, and Bain & Company, 2020).

Thanks to digital technologies, it is now possible for start-uppers and young entrepreneurs to connect globally to customers, suppliers, and other businesses from the very early

stages of business creation. Digital technologies have also allowed innovators and entrepreneurs to stay afloat and in some cases thrive during the pandemic, as many consumers have been moving online and experimenting with e-commerce solutions. Digital technologies have also disrupted traditional consumer experiences, bringing in many innovations enabled by new tools and services.

Deep-tech start-ups are new ventures whose services or products are based on sophisticated scientific and engineering methodologies, including artificial intelligence, machine learning, and big data analytics. Many deep-tech start-ups are being

developed in leading innovation hotspots across ASEAN, and in several cases are attempting to provide solutions to complex social challenges such as providing better tech-based healthcare solutions, using technologies for sustainable and more efficient agriculture, or monitoring and fighting climate change.

However, several risks are associated with new deep tech, and it will be important to monitor them and intervene when necessary. The first risk is cybersecurity. With a growing number of individuals going online for a variety of tasks and activities, including working from home, the risk of being the target of cybercrime increases. These cybersecurity breaches include fraudulent e-commerce and e-payment transactions, cyberbullying, and the theft of digital data and identities. Companies across ASEAN need to start preparing and investing to fight various forms of cybercrime when moving activities online. At the same time, policymakers need to monitor trends and adapt legislation to make these kinds of crimes punishable.

Another issue, especially associated with big data analytics and data-intensive business models relying on personal data,

is related to the protection of the privacy of individuals (Zuboff, 2019). Customers and consumers need to become increasingly educated and vigilant as to how companies use their data, and be able to express consent regarding the way the data are harvested and analysed. Entrepreneurs need to integrate data privacy into their business models, especially as younger tech-savvy generations of consumers are likely to become increasingly demanding when it comes to the privacy of personal data. Given the complexity of the topic, it is important to develop public-private partnerships to discuss different approaches and solutions, especially as both the public and private sectors have important roles to play in designing, developing, and enforcing privacy policies related to digital data.

Finally, E-S-I ecosystem actors and citizens need to become increasingly aware of biases leading to potential missed opportunities and, even more worryingly, discrimination against certain groups of individuals. Data-intensive tools are trained on large data sets to work. However, if the data sets they are trained with are not sufficiently representative (e.g. they do not include data from certain ethnic groups,

do not include enough data on women and girls, or are not representative of certain communities), they risk developing highly biased algorithms and as a consequence highly biased solutions or services (UNESCO, 2021). This can lead to discrimination against certain groups and can negatively affect some groups around ASEAN, such as women, refugees, and vulnerable

communities. Given the importance of this issue in the context of emerging digital activities and for building back better, all E-S-I ecosystem actors (the business sector, policymakers, educational institutions, and beyond) need to think seriously about how to prevent discriminatory biases in the tools they are developing and using.

## ● Section 4

### Women Entrepreneurship in ASEAN and East Asia – Engagement, Education, and Empowerment

Women worldwide and across ASEAN have been disproportionately affected by economic downturns caused by the pandemic. Most women entrepreneurs across Southeast Asia run or manage micro, small, and medium-sized enterprises (MSMEs), which face more difficulties staying afloat during economic downturns. Women also tend to be employed in less digital-intensive sectors (such as tourism or the textile industry) across ASEAN (Sey, 2021), which are at higher risk of automation and less equipped to compete and thrive in the digital marketplace.

and East Asia (ERIA) has shown how the booming digital economy across ASEAN is increasing the risk of a widening digital gender divide: men, often in hyper-connected ASEAN megacities, have better tools to compete and access highly paid jobs in the digital economy than women, especially women in rural areas (Ajmone Marsan and Sey, 2021). Available data also show how while ASEAN girls and women are relatively well represented in STEM education, representation decreases in digital-related careers and jobs, especially in leadership positions.

Moreover, recent analysis from the Economic Research Institute for ASEAN

Increased participation of women in entrepreneurship and innovation

ecosystems represents a tremendous economic opportunity for the post-pandemic recovery in the region. Even if a growing cohort of well-educated women entrepreneurs and innovators is becoming active in the region, there is still a long way to go before achieving gender equality. Women continue to face several obstacles when it comes to access to venture capital (Bedi, 2021), career opportunities, and skills development, especially in less advanced areas of ASEAN.

A positive development is the number of recent initiatives that policymakers, the private sector, non-governmental organisations (NGOs), and international organisations have been taking to support women entrepreneurs and innovators. ASEAN recognised women's economic empowerment as an important component of its ASEAN Comprehensive Recovery Framework (ASEAN, 2020) as a key pillar of an inclusive post-pandemic recovery. Governments across ASEAN have started to support policies in this direction.

Beyond policymaking, a number of incubators and accelerators dedicated to women entrepreneurs are flourishing across ASEAN Member States

and Dialogue Partners. Interesting examples include She Investments in Cambodia, WeHub in India, and the Women's Initiative for Start-ups and Entrepreneurship (WISE) in Viet Nam. Across ASEAN, foundations and NGOs are also active in the field. A leading example is the Go Digital ASEAN initiative, a partnership between the ASEAN Secretariat and the ASEAN Foundation to train and upskill ASEAN MSMEs, specifically targeting women entrepreneurs.

According to the discussion held during E-S-I No. 4, leaders of organisations active in E-S-I ecosystems recognise the importance of training and empowering women who own and manage MSMEs, especially in rural areas, lacking the necessary skills to access digital marketplaces. Dedicated funding instruments and mentoring programmes are also an important component of incubation services for women entrepreneurs.

## ● Section 5

### **Partnerships critical for success – Paradigm shifts are required for greater tripartite collaboration and success**

Public–private–people (PPP or the 3Ps) partnerships are becoming an important driver for the development of inclusive innovation ecosystems.

The OECD (2019) shared the outcomes and governance processes in place in OECD countries that focused on a people-centric approach to policymaking and service delivery. It defined ‘people centricity’ as taking the needs and voices of people into account when designing, delivering, implementing, and evaluating public policies and services.

Across ASEAN, the involvement of people and citizens as part of the policymaking process varies across countries. In small advanced countries like Singapore, the government has been very deliberate in building ‘tripartite’ partnerships involving the 3Ps. Between 2012 and 2013, more than 47,000 Singaporeans participated in a series of national conversations conducted by the government. Gathering citizen

sentiment across a spectrum of topics, the exercise inspired several key national policy initiatives.

Interesting examples can be found in other ASEAN Member States. For instance, in Cambodia, the United Nations Development Programme (UNDP) partnered with the Ministry of Interior as well as Cambodian civil society entities to promote democratic governance initiatives and a peaceful, inclusive, and equitable society by expanding opportunities for inclusive civic engagement through dialogue (UNDP Cambodia, 2021). Successful 3Ps also take place at the city level. For example, in Indonesia, the Surabaya Clean and Green Initiative, which started in 2005, saw successful 3Ps collaboration – transforming the city and improving its waste management (Lee Kuan Yew World City Prize, 2018).

As discussed during E-S-I No. 5, leading organisations across ASEAN

have already started to put collaboration at the heart of their activities. For example, for international organisations such as the Asian Development Bank (ADB), partnerships and collaborations were key to programmes and development strategies. Engagement with the public sector on the need for skills development, training, and education ensured that the programmes introduced were relevant and met the needs on the ground.

In individual ASEAN Member States such as Brunei, collaborations between public and private enterprises have empowered entrepreneurs with skills and knowledge, including a greater understanding of public policies and related laws and regulations. These partnerships created opportunities for access to industry mentors and widening of business networks.

3Ps collaborations are at the heart of innovations in urban contexts, such as nascent smart cities across ASEAN, where citizen engagement is a critical factor for success. Many smart city development strategies emphasise the development of digital and tech-based solutions and services. However, without dialogue and the involvement of citizens (who are the end users), the risk is low usage and adoption of these services by the population or the development of services that are not relevant or fit for purpose.

During E-S-I No. 5, it was also mentioned that the business sector often moves faster than governments and regulators. Therefore, the role of business and innovative start-ups is to 'educate the market through local communities' to explain the potential of innovative solutions to solve local and national problems.

## POLICY RECOMMENDATIONS

- **E-S-I ecosystems will continue to drive the post-pandemic recovery.** Policymakers need to understand and monitor nascent ASEAN E-S-I ecosystems and develop flexible policy support adapted to their context-specific features.
- **The skills driving entrepreneurship and innovation are a combination of digital and STEM skills and a more complex portfolio of skills connected to the ability to navigate uncertainty and complexity, be agile and adaptable, bridge different disciplines, and learn how to learn.** Policymakers need to reflect on how to contribute to developing these skill sets in educational cycles by going beyond narrowly defined concepts of digital skills.
- **Digital technologies provide immense opportunities for entrepreneurs and innovators across ASEAN. However, they also create complex new challenges.** Policymakers need to be aware of these benefits but also of the challenges of the new technologies: in particular, the risks of cybercrime, cyber-violence, privacy breaches, and discrimination arising from biases in the digital sphere.
- **Supporting and increasing the number of women entrepreneurs and innovators participating in E-S-I ecosystems is a fundamental channel to promote a more inclusive post-pandemic recovery.** It is also a tremendous opportunity for economic growth. Policymakers, together with other E-S-I ecosystem actors, need to develop programmes to support more women and girls undertaking these types of careers
- **Collaborations and multi-stakeholder approaches are essential to E-S-I ecosystems.** Policymakers need to work together and keep the dialogue open with the private sector and local communities of individuals to support the development of inclusive E-S-I ecosystems across ASEAN

## REFERENCES

- Ajmone Marsan, G. and L.M. Sabrina (2020a), ASEAN MSMEs in a COVID-19 World: Lessons from ERIA MSMEs Talks 1–5, ERIA Event Report. Jakarta: Economic Research Institute for ASEAN and East Asia. <https://www.eria.org/publications/asean-msmes-in-a-covid-19-world-lessons-from-eria-msmes-talks-1-5/> (accessed 28 June 2021).
- Ajmone Marsan, G. and L.M. Sabrina (2020b), ASEAN MSMEs in a COVID-19 World, Lessons from ERIA MSMEs Talks 6–10: Innovation and Skills for the Post-Pandemic Recovery, ERIA Event Report, <https://www.eria.org/publications/asean-msmes-in-a-covid-19-world-lessons-from-eria-msmes-talks-6-10/> (accessed 28 June 2021).
- Ajmone Marsan, G. and A. Sey (2021), 'Women's Participation in the Digital Economy: Improving Access to Skills, Entrepreneurship, and Leadership Across ASEAN', ERIA Policy Brief, No. 2020-09. Jakarta: Economic Research Institute for ASEAN and East Asia. [https://www.eria.org/uploads/media/policy-brief/Women%E2%80%99s-Participation-in-the-Digital-Economy\\_1203.pdf](https://www.eria.org/uploads/media/policy-brief/Women%E2%80%99s-Participation-in-the-Digital-Economy_1203.pdf) (accessed 2 July 2021).
- Ambashi, M. (2020), 'ASEAN Development and Innovation Strategy in the Era of New Industrialisation', ERIA Policy Brief, No. 2020-06. Jakarta: Economic Research Institute for ASEAN and East Asia. <https://www.eria.org/uploads/media/policy-brief/ASEAN-Development-and-Innovation-Strategy-in-the-Era-of-New-Industrialisation.pdf> (accessed 2 July 2021).
- ASEAN (2020), ASEAN Comprehensive Recovery Framework. Jakarta: ASEAN Secretariat. [https://asean.org/storage/ASEAN-Comprehensive-Recovery-Framework\\_Pub\\_2020\\_1.pdf](https://asean.org/storage/ASEAN-Comprehensive-Recovery-Framework_Pub_2020_1.pdf) (accessed 5 July 2021).
- Bedi, S. (2021), 'Why Venture Capital Should Commit to Gender Balance', World Economic Forum, 16 July. <https://www.weforum.org/agenda/2021/07/venture-capital-commit-gender-balance/> (accessed 5 July 2021).
- CB Insights (2021), 'Startup Continent: The Most Well-Funded Tech Startups in Asia & the Pacific', 11 February. <https://www.cbinsights.com/research/asia-startups-most-well-funded/> (accessed 5 July 2021).
- Google, Temasek, and Bain & Company (2020), e-Economy SEA 2020: At Full Velocity: Resilient and Racing Ahead. <https://economysea.withgoogle.com/> (accessed 6 July 2021).
-

- Lee, Y. (2021), 'Southeast Asia Tech Startups Ride Out 2020, Raising \$8.2 Billion', Bloomberg News, 26 March. <https://www.bloomberg.com/news/articles/2021-03-26/southeast-asia-tech-startups-ride-out-2020-raising-8-2-billion>] (accessed 6 July 2021).
- Lee Kuan Yew World City Prize (2018), 'Surabaya in Pictures: A Modern Kampung City', 26 October. <https://www.leekuaneyewworldcityprize.gov.sg/resources/in-pictures/surabaya/> (accessed 6 July 2021).
- McKinsey (2021), 'Building Workforce Skills at Scale to Thrive During – and After – the COVID-19 Crisis', 30 April. <https://www.mckinsey.com/business-functions/organization/our-insights/building-workforce-skills-at-scale-to-thrive-during-and-after-the-covid-19-crisis> (accessed 7 July 2021).
- Oikawa, K., Y. Todo, M. Ambashi, F. Kimura, and S. Urata (2021), 'Economic Policies to Take Advantage of the Vigorous Private Dynamism in AMS and India During the COVID-19 Crisis', ERIA Policy Brief, No. 2021-02. Jakarta: Economic Research Institute for ASEAN and East Asia. <https://www.eria.org/uploads/media/policy-brief/Economic-Policies-Vigorous-Private-Business-ASEAN-India-during-Covid-19.pdf> (accessed 2 July 2021).
- Ra, S., S. Jagannathan, and R. Maclean, eds. (2021), *Powering a Learning Society During an Age of Disruption, Education in the Asia-Pacific Region: Issues, Concerns and Prospects*, Volume 58. Manila: Asian Development Bank. <https://www.adb.org/sites/default/files/publication/704196/powering-learning-society-during-age-disruption.pdf> (accessed 5 July 2021).
- Reyes, M. (2020), 'Unicorns of Southeast Asia', Cognito Labs. <https://cognito.substack.com/p/unicorns-of-southeast-asia-> (accessed 5 July 2021).
- OECD (2019), 'Towards People-Centric Public Services', in *Government at a Glance 2019*. Paris: Organisation for Economic Co-operation and Development, pp.25–48.
- Sey, A. (2021), 'Gender Digital Equality Across ASEAN', ERIA Discussion Paper Series, No. 358. Jakarta: Economic Research Institute for ASEAN and East Asia. <https://www.eria.org/uploads/media/discussion-papers/Gender-Digital-Equality-Across-ASEAN.pdf> (accessed 2 July 2021).
- UNDP Cambodia (2021), *Building Capacities for Civic Engagement, Peacebuilding and Inclusive Dialogue: Towards Inclusive and Participatory Governance*. <https://www.kh.undp.org/content/cambodia/en/home/projects/building-capacities-for-civic-engagement--peacebuilding-and-incl0.html> (accessed 7 July 2021).
-

UNESCO (2021), Elaboration of a Recommendation on the Ethics of Artificial Intelligence.

<https://en.unesco.org/artificial-intelligence/ethics> (accessed 7 July 2021).

Zuboff, S. (2019), *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power*. New York: Public Affairs.

**ANNEX:  
ORGANISERS &  
SPEAKERS BIOS**

## Webinars Series – Entrepreneurship, Start-ups, and Innovation (E-S-I) in ASEAN and East Asia: Shaping the Post-Pandemic Recovery

### Series Organisers and Host

**Giulia Ajmone Marsan, Director of Strategy and Partnership, ERIA.** Giulia works closely with Association of Southeast Asian Nations (ASEAN) policymakers as well as regional and global organisations to support the ASEAN process of socio-economic integration. Before joining the Economic Research Institute for ASEAN and East Asia (ERIA), she worked as an innovation economist at the Organisation for Economic Co-operation and Development (OECD), where she led and contributed to the activities of the OECD Centre for Entrepreneurship, SMEs, Regions and Cities and the OECD Directorate for Science, Technology and Innovation. Her analysis focuses on innovation systems, the digital economy, science and higher education policy, entrepreneurship, and start-up creation. She has led international projects on innovation ecosystems covering a wide range of countries in Europe, Latin America, North America, Africa, and Asia. Giulia holds bachelor and master's degrees in applied mathematics from the Polytechnic University of Turin, Italy and a doctorate in economics and complex systems jointly awarded by the École des Hautes Études en Sciences Sociales (EHESS) in Paris, France and the IMT Institute for Advanced Studies Lucca, Italy.

**Ooi Tiat Jin (TJ), Founder and Principal Consultant, Curated Connectors.** TJ's passion to connect and empower micro, small, and medium-sized enterprises (MSMEs) stems from his earlier career in the Singapore chemical industry, both as secretary of the Singapore Chemical Industry Council and then general manager of a local chemical distribution company, Absotech. He managed industry programmes and chaired an industry committee focused on small and medium-sized enterprises (SMEs). His interest grew and expanded to the region during his brief tenure as director for the Asia Pacific MSME Trade Coalition (AMTC), a regional association focusing on trade empowerment of MSMEs. TJ firmly believes that every small business has the ability to impact and empower lives as they grow and flourish. Hence, Curated Connectors was set up with the vision of empowering lives through connecting businesses. TJ has a bachelors' degree in electrical and electronic engineering from the University of Manchester, United Kingdom.

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**Lina Maulidina Sabrina, Programme Officer, ERIA.** Lina is program officer of the Strategy and Partnership as well as the Capacity Building Programmes of ERIA. She has extensive experience in developing and managing international development programmes with a wide range of stakeholders in the Asia-Pacific region. Her interest in development issues began when she worked at several civil society organisations in Indonesia, focusing on providing innovative solutions for the national education ecosystem. She is passionate about uncovering multidisciplinary issues to promote regional socio-economic development, particularly those related to digital upskilling in the digital economy ecosystem through policy analysis and engagement. She holds a bachelor's degree in English language education from the State University of Jakarta, Indonesia.

Thursday, 4 March 2021 | E-S-I Episode No. 1

## Futurecasting: E-S-I in ASEAN and East Asia – 2021 and Beyond

[Link](#)

### Speakers

#### **Jonathan Wong, Chief of Technology and Innovation, United Nations ESCAP**

Jonathan Wong is the chief of technology and innovation at the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP). He joined ESCAP from the Department for International Development of the United Kingdom (DFID), where he was the inaugural head of innovation. He has led the establishment of several high-profile innovation initiatives, including the Global Innovation Fund – a partnership between the Omidyar Network and the governments of the United States (US), United Kingdom (UK), Sweden, Australia, and South Africa. He has extensive experience in social innovation and entrepreneurship, impact investing, and tech for good. He also has substantial technology and innovation policy expertise, having advised governments across Europe, Africa, Asia, and the Pacific. Before joining DFID, he was a founding partner of a technology and innovation venture capital fund and supported the establishment of the UK NHS Institute for Innovation and Improvement. Mr Wong has also served on the Asia-Pacific Economic Cooperation (APEC) E-commerce Business Alliance Expert Council, and is a Rockefeller Foundation Policy Fellow and a World Economic Forum Schwab Fellow.

#### **Veronica Low, President, ABYA, Singapore**

Veronica is the president of the ASEAN Business Youth Association (ABYA). As the binding force of the team that founded ABYA, she is passionate about the growth in the ASEAN region, and hopes to promote the value of ABYA as a platform for individuals to act on their interests – to learn about and bond over the rich culture and recent

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developments in Southeast Asia. Veronica has been vice president and director of operations at the Business China Youth Chapter and is a former academic fellow at the YSEALI Academic Spring Fellowship on Social Entrepreneurship and Economic Development. While she is highly active in the social entrepreneurship sector, she also dedicates her time outside work to loved ones, church, and community work.

### **Adna Rahman, Head, Entrepreneurship Innovation Centre, Ministry of Education, Brunei Darussalam**

Adna Rahman is the head of the Ministry of Education's Entrepreneurship and Innovation Centre in Brunei Darussalam. He has more than 20 years of experience in entrepreneurship from his former roles as an entrepreneur, mentor, entrepreneurship educator, and ecosystem builder. Before his current role, Adna was involved in the creation of a multidisciplinary platform for student-entrepreneurs and start-ups at the University of Brunei Darussalam. Since 2014, Adna has incubated more than 300 student-entrepreneurs (including community start-ups) in Brunei Darussalam and Southeast Asia, where his mentoring philosophy was to enable student-entrepreneurs to take (and learn from) failure as a means to success. More than 30% of his student-entrepreneurs have been able to sustain their businesses to date. Adna was project executive director for the National Entrepreneurship Agenda from 2014 to 2019, where he led several multi-institutional teams to build an entrepreneurial ecosystem for the education industry in Brunei Darussalam. Adna benefited immensely from his involvement and educational participation in the Asia-Europe Meeting (ASEM) and the Asia-Europe Foundation (ASEF), as well as entrepreneurial hubs in Southeast Asia including Harvard University, Babson College, and the University of California San Diego. His current goal is to embed an entrepreneurial and innovative mindset and culture for a sustainable future for the students. Adna resides in Brunei Darussalam with his beloved family of four: Lenny, Aiman, and Mia.

### **Ravindra Ngo, Co-Founder and CEO, Invest in Cambodia; Founder, The ASIAN Network, Hong Kong/Cambodia**

Mr NGO Ravindra is the co-founder and chief executive officer (CEO) of Invest in Cambodia,

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an investment advisory firm located in Hong Kong promoting digital/tech, real estate, and impact investment opportunities in Cambodia/Southeast Asia. He is also a founder of the ASIAN Network, a digital community dedicated to connecting like-minded individuals who can inspire the younger generation through speakers' series, webinars, and virtual conferences on topics related to the Fourth Industrial Revolution such as artificial intelligence, fintech, education 4.0, smart cities, robotics, and cybersecurity. Ravindra is also the founder of the Cambodian Society, a global non-profit organisation for people with an interest in Cambodia across three pillars: art and culture, business, and social impact. He also sits on the advisory board of the Pacific Basin Economic Council and was selected for the World Economic Forum's 'ASIAN Expert' Network in February 2020.

**Nur Kaser, CEO, KnowledgeHive International, Malaysia**

Nur Kaser is the CEO of KnowledgeHive International, a professional conference organiser and human capital development firm. She also manages DigitalHub International, a training and consulting firm that focuses on helping Malaysian MSMEs in their digital transformation journey. Her career started with Malaysia Airlines, where Nur worked her way to senior cabin crew and completed the 'finishing school' in grooming and etiquette, hospitality, and customer service. An avid speaker, passionate trainer, and serial entrepreneur, Nur Kaser believes in empowering aspiring entrepreneurs and giving back to society. To that end, she volunteers with Yayasan Raja Zarith Sofiah (Negeri Johor), where she helps underprivileged schoolchildren through the non-governmental organisation's 'B40 Sponsor a Child's' Education Program.

Thursday, 1 April 2021 | E-S-I Episode No. 2

## From Resilience to Success – Entrepreneurial Mindsets and Skills

[Link](#)

### Speakers

**Jeff Sandhu, Head, FutureX Talent, Sunway iLabs, 42 Kuala Lumpur, Malaysia**

Jeff Sandhu is the head of Sunway FutureX Talent, a division under Sunway iLabs to reshape the talent development space in Malaysia. He currently oversees a new innovative edutech initiative called 42 Kuala Lumpur, based on the successful Ecole 42 in Paris and 42 Silicon Valley – a school with no teachers, no classes, and absolutely free for anyone above 18 years old. Before joining Sunway FutureX Talent, Jeff was the executive producer for BFM Media, a business-focused media house in Malaysia, and was in charge of identifying new innovative start-ups and creating a vibrant entrepreneurship ecosystem from 2010. During his tenure, he interviewed more than 6,000 entrepreneurs and innovative thinkers, quickly becoming one of the most recognisable figures in the thriving start-up ecosystem. In 2015, Jeff was the first Malaysian representative of the ASEF Young Leaders Summit to foster a better relationship between Asia and Europe in entrepreneurship and education. In 2019, he was a participant in the US Department of State Edward R Murrow Program on leadership and journalism. Jeff believes that while technology has accelerated many industries, education is a sector that has been left behind – and this needs to change.

**Raffaele Trapasso, Economist, OECD**

Raffaele Trapasso is an economist and international civil servant concerned about higher education, skills policies, and regional development. He currently works with the OECD Centre for Entrepreneurship, SMEs, Regions and Cities, where he coordinates OECD work on Higher Education Innovate (HEInnovate) and The Geography of

Higher Education (GoHE). Mr Trapasso has published in peer-reviewed journals and has co-authored several OECD reports focusing on skills policies, the green economy, regional development, and open government, amongst others. He is a frequent speaker at conferences, seminars, and webinars. Before joining the OECD, he served as a policy adviser to national and local governments. Trapasso has a doctorate in economic policy from the Catholic University of the Sacred Heart of Milan and a degree in economics from the University of Naples Federico II, both in Italy. A native of Catanzaro, Calabria, Raffaele is based in Paris, is married, and is the father of two boys.

#### **Stefan Ye, Events Experience, Compass Events, Singapore**

Stefan Ye took over Compass Entertainment at a deficit and managed to turn the company to profitability within a year. Within 3 years, the company evolved from a talent management company to a full-fledged events management company specialising in conferences and exhibitions. The company landed its first major project within a year and has clients in its portfolio such as Vertex Ventures, Deloitte, IHH, and the Institute of Banking and Finance (IBF).

#### **Sinn Chanserei Sophea, Managing Director, SinnC Creative Solutions, Cambodia**

Sophea is the founder and managing director of SinnC Creative Solutions in Cambodia. Before that, she worked as marketing and communications manager at several international companies based in Cambodia. She holds a bachelor's degree in finance and marketing from Curtin University, Australia.

Thursday, 29 April 2021 | E-S-I Episode No. 3

## Deep Tech and the Future Economy

[Link](#)

### Speakers

**Cortilia Lin, Co-Founder, Head of Strategy and Marketing, Kyalio, Singapore**

Cortilia Lin co-founded Kyalio Pte. Ltd. in Singapore and set up operations in Singapore, Taiwan, and the Netherlands. Kyalio specialises in mixed reality and artificial intelligence for medical education. With 13 years of healthcare experience in the US, Europe, and Asia-Pacific, she brings comparative viewpoints on entrepreneurship and corporate ‘intrapreneurship’ to more than 27 countries, from the perspective of both multinational corporations and start-ups. Before her current role, Cortilia led new product development for The Economist Intelligence Unit to integrate data science with market-intelligence-as-a-service. She also worked at Philips International BV to create a customer-centric solution design programme. Her work on revolutionising the customer experience with data science was featured in the Harvard Business Review (Traditional Chinese Edition). Cortilia specialises in applying data science for new product design, healthcare portfolio management, and innovative sales/marketing strategy; and translating insights into real top-line gain.

**Souliyo Vongdala, Chief Executive Officer, LOCA Company; Vice President, Lao ICT Commerce Association (LICA), Lao PDR**

Souliyo is the CEO of LOCA, a tech start-up he co-founded in 2018. A ride-hailing service application, LOCA envisions being a platform of convenience for traveling and commerce by providing high-quality services to its users. He is also vice president of the Lao ICT Commerce Association (LICA) and a board member of the American–Lao Business Association. His entrepreneurial journey started more than a decade ago, arising from his love for technology and solving problems. As recognition of his passion and achievements,

Souliyo received the award for start-up and innovation-driven entrepreneur at the ASEAN Business Awards 2019 and was named founder of the year (country level) at the Rice Bowl Awards 2017.

**Xelia Tong, Managing Partner, Investor Relations and Partnerships, ScaleUp Malaysia**

Xelia is managing partner of ScaleUp Malaysia, an accelerator for Malaysian companies and start-ups poised for growth and regional expansion. The organisation and its experienced team of entrepreneurs, professionals, and investors has founded nine companies, exited seven companies, and coached 1,000+ start-ups and scale-ups. Xelia is known for her role in helping to develop funding for the start-up ecosystem through her work from Malaysia Debt Ventures Berhad to Cradle Fund, where she headed investments and angel tax initiatives. At ScaleUp Malaysia, she works with our companies to help connect them to the right investors. A live wire by nature, Xelia's cheerful disposition and charm are the kind of support you need during difficult times.

**Kohei Kurihara, Chief Executive Officer, Privacy by Design Lab, Japan**

Kohei is the co-founder and CEO of Privacy by Design Lab, a not-for-profit organisation that collaborates with multiple stakeholders (government, corporates, and individuals) to provide practical research, education, networking, and more importantly, the building and implementation of sound data governance structures and policies. Before this, he was involved in blockchain and identity technology, and was president of the Tokyo Chapter of the Government Blockchain Association. Kohei has worked with a major Japanese e-commerce company and has extensive experience in education and non-profit organisations.

**Aimi Ramlee, Director of Digital Innovation and Growth, Tyne Solutions, Brunei Darussalam**

Aimi is the co-founder and director of Digital Innovation and Growth at Tyne Solutions – an award-winning tech consultancy specialising in bridging gaps in organisations. She also co-founded [www.southeastasiawomen.org](http://www.southeastasiawomen.org) and is a consultant with Fund Boards Council

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UK and Women’s Fund Asia. Aimi is an active advocate of gender equality as well as cultural and natural heritage conservation. She is co-chair of the US–ASEAN Women’s Leadership Academy Alumni Network, Obama Foundation Leader, and Climate Reality Leader. Aimi also speaks regularly on women’s issues in Brunei, and mentors female entrepreneurs through local and international mentoring programmes.

Thursday, 27 May 2021 | E-S-I Episode No. 4

## The Evolving Role of Women Entrepreneurs, Innovators, and Disruptors

Link

### Speakers

#### **Samira Tollo, Co-founder/CTO, Elbaite, Australia**

Samira Tollo, chief technology officer and co-founder of Elbaite, has always been passionate about innovation through technology. Samira, alongside Mortaza Tollo, co-founded Elbaite, the world's first non-custodial digital assets exchange that combines peer-to-peer (P2P) with escrow functionality. Samira has a background in electrical engineering, focused on renewable power generation and the internet of things. Samira's journey into entrepreneurship has included multiple successful raise rounds and team expansions, during which she has learnt many lessons. She is now an advocate for blockchain innovation in Australia, while expanding Elbaite's operations.

#### **Jolene Lum, Founder and CEO, Urban Tiller, Singapore**

Jolene is the founder and CEO of Urban Tiller and is dedicated to its mission of reimagining what next-generation food supply chains can look like in cities. Urban Tiller is Asia's first integrated farm-to-table agri-tech start-up that delivers fresh produce within 8 hours of harvest. The business is committed to supporting sustainable agricultural methods and smallholder farmers, giving consumers a truly safe and sustainable way to eat directly from the source. While in the space of agri-logistics, Urban Tiller also focuses on integrated customer experiences that provide farmers with real-world data, and support with increasing the efficiency and sustainability of agricultural practices in cities. Urban Tiller was founded in Singapore in August 2020 and began operations in Hyderabad, India, in December 2020. It looks forward to expanding to 20 more cities in the Asia-Pacific and South Asia regions in the coming

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years. Jolene graduated from Yale–NUS College and United World College of the Adriatic, and entered the agri-food space after organising a series of programmes in agri-food tech in her previous education tech venture.

### **Swapda D. More, State Chairperson, Confederation of Indian MSMEs (Maharashtra), India**

Swapna is a successful serial entrepreneur, realtor, restaurateur, educator, wife of a Wing Commander from the Indian Air Force, and mother of two kids. She is the co-founder of several businesses and is state chairperson (Maharashtra) of the Confederation of Indian Micro, Small and Medium Enterprises. She has been instrumental in nurturing large teams to success with her adept understanding of human behaviour and organisational requirements. Her inimitable style of leadership has won accolades from her colleagues in the realty and hospitality industry alike. As a woman in the realty business, she defied pressure with elan and steered the businesses to success. Her efforts have led to many accolades and recognitions of her achievements and more importantly, her desire to empower women.

### **Celia Boyd, Co-founder, SHE Investments, Cambodia**

Celia is a co-founder of SHE Investments, Cambodia's first business incubator and accelerator that applies a gender and cultural lens. Since launching SHE 7 years ago, the social enterprise has grown from three co-founders to a team of more than 35 across five provinces, becoming a leading organisation supporting women entrepreneurs to scale and create economic, social, and environmental impact for communities. Celia's background is in international development, having worked with projects across multiple areas and geographies. She has been based in Cambodia for the past 6.5 years, focusing on building SHE Investments and specialising in women's economic empowerment through entrepreneurship. In 2021, Celia is stepping back as managing director of SHE in Cambodia, handing over leadership to an amazing Khmer woman who will continue to lead the team forward in Cambodia, while she focuses on SHE's vision of supporting women-led MSMEs to scale across the region.

Thursday, 24 June 2021 | E-S-I Episode No. 5

## Critical Partnerships for Success – Public, Private, and People

[Link](#)

### Speakers

**Kris R. Villanueva Libunao, Executive Director and Chief Sustainability Officer, SmartCT (SmartCitiesPH, Inc.), Philippines**

A pioneer in the smart city space in the Philippines, Kris R. Villanueva-Libunao, an internationally certified sustainability practitioner and project management professional, is the executive director and chief sustainability officer at SmartCT (Smart Cities PH, Inc.). She trained under the ASEAN Smart Cities Leaders Programme of the ASEAN Foundation and in data stewardship under The Gov Lab of New York University. She is also a Smart Sustainable Cities Instructor with the IoT Academy and the International Telecommunication Union Academy (ITU-Academy). With almost a decade of policy research consultancy experience with government agencies, international organisations, and private companies, Kris's current commitment is to create a movement transforming how the world thinks, does, and plans smart cities in the Philippines and developing countries.

**Dhabit Firdaus, CEO and Co-Founder, BP Media, Brunei Darussalam**

Dhabit is a graduate student, serial entrepreneur, and advocate to the local start-up community. He founded his first start-up, HoldasMedia, in 2015, specialising in digital marketing and ad-tech. Being a graduate from a start-up bootcamp and accelerate programme co-hosted by Darussalam Enterprise and Golden Equator Singapore, along with his experience, mentorships, and a solid foundation in entrepreneurship, he founded HoldasDesign (interior design and building construction) and Holdas.Co (mobile e-commerce), where he merged everything under one roof with a co-

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founder, now known as Holdas Group & Partner. In 2020, he also co-founded an online news publication, The Brunei Post.

### **Shanti Jagannathan, Principal Education Specialist, Asian Development Bank**

Shanti Jagannathan is principal education specialist in the Sustainable Development and Climate Change Department of the Asian Development Bank (ADB). She works on ADB education sector policies and strategies, and provides technical advice to ADB's lending and non-lending education operations in Asia and the Pacific. Shanti has more than 25 years of experience with education sector transformation initiatives in school education, technical and vocational education, and training and higher education in Asia. She has led policy research studies on skills for greening economies, Asia's knowledge-based economies, innovation, and the implications of Industry 4.0 on education and training, amongst others. Her recent work includes a guidance note on education and COVID-19 in Asia and the Pacific, designing hackathons for digital reskilling and upskilling for displaced workers, and co-editing a book on powering a learning society during an age of disruption. She has more than a dozen publications from her work at ADB. Shanti has contributed to international cooperation in education at policy and operational levels; and has been on advisory bodies, steering committees, and working groups on education development, gender equality, the elimination of child labour, democracy and human rights, and scholarships for underprivileged students. Before ADB, Shanti worked with the European Union as development adviser, where she developed and implemented programmes in health, education, and rural livelihoods in South Asia as lead task manager. Before that, she worked with a think tank, the Indian Council for Research on International Economic Relations.

### **Dwina M. Putri, Co-Founder and Chief Operating Officer, Mau Belajar Apa, Indonesia**

Dwina M. Putri, from Jakarta, has sought sanctuary in art since childhood. She studied craft design at Bandung Institute of Technology (ITB), where she met a friend who became a business partner. Together, they created Dwel Pottery ceramic studio, based in Jakarta. After graduating with honours (cum laude), she worked as a consultant designer and

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programme associate for various large companies. In 2016, she joined MauBelajarApa.com, the largest workshop directory platform in Indonesia. Her main reason for joining the team is the good mission and vision of this start-up company. In the coming year, she hopes that MauBelajarApa can keep its anchor to inspire Indonesians or even the world.