

Committed to connecting the world

ITU Regional Office for Asia and the Pacific

Contact e-mail: ituasiapacificregion@itu.int

Website: www.itu.int/itu-d/sites/asiapacific





@ITUAsiaPacific in ITU Regional Office for Asia and the Pacific



Digital Transformation in Asia Pacific

- Accelerated by COVID-19, Asia and the Pacific is amid rapid digital transformation.
 - Shifting social and economic activities online has resulted in a significant increase in data traffic in Asia Pacific (GSMA, 2020).
 - Platform businesses in Southeast Asia experienced a surge in new users in 2020.
 - And more than one in every three digital service consumers started using a new digital service due to COVID-19.
- Governments across Asia and the Pacific have accelerated their use of online services in response to Covid-19.

Digital technology will have a significant part to play in Asia Pacific's post pandemic turn towards Industry 4.0 and a Digital Societies (GSMA, 2020).



Digital transformation can potentially propel
Asia and the Pacific toward achieving the
SDGs, but it is not without the risk of
amplifying inequalities.



Digital Transformation is Involving Critical Technologies

Australian Government, Department of the Prime-Minster and Cabinet: "Critical technologies are current and emerging technologies with the capacity to significantly enhance, or pose risk to, our national interests (economic prosperity, social cohesion and/or national security)."



Digital Transformation is Involving Critical Technologies

Australian Government, Department of the Prime-Minster and Cabinet: "Critical technologies are current and emerging technologies with the capacity to significantly enhance, or pose risk to, our national interests (economic prosperity, social cohesion and/or national security)."



The Growth of AI, Facial Recognition and Surveillance Technologies

- A survey of 176 countries found that (Feldstein, 2019)
 - Al was being used actively for surveillance purposes by seventy-five out of 176 countries surveyed globally.
 - Fifty-six countries were using sensors that transmit real-time data to facilitate service delivery, city management, and public safety.
 - Sixty-four countries of the 176 surveyed countries are using facial recognition technology.



Covid-19 and Critical Technologies

- COVID-19 has provided various new use cases for governments
 - E.g.:. technology that restricts individuals at a high risk of been exposed to COVID-19 from entering certain buildings, AI systems in several cities in the region that identify those not wearing a mask.
 - In Singapore, the city-state's government led the development of a system that traces the movement of COVID-19 patients using facial recognition and public transportation records.



Critical Technologies are not Necessarily Unbiased

- Critical Technologies are vulnerable to various biases such as gender.
 - Some private sector companies have discontinued the use of a recruiting algorithm that was unfairly discriminating against women.
- All and facial recognition algorithms can also be subject to unconscious bias in terms of race and ethnicity.
 - Researchers from MIT and Stanford University found that three commercial facial analysis programmes from major technology companies demonstrated both skin-type and gender biases.



Digital Transformation Could Amplify Risks

- The transformation towards industry 4.0 and the growth of smart cities in Asia Pacific is potentially amplifying the challenge of biases in critical technologies.
- The increasing reliance on big data and the conception of big data as presenting reality, neglects how inequities between genders, and social groups could be embedded in the data and reinforced by algorithms.



ITU Project Supported By DFAT: Enhancing the Development of Standards and Frameworks for Critical Technologies in Southeast

- The project deploys a multi-stakeholder consultative and capacity development approach, particularly focusing on female stakeholders.
- The project further aims to build awareness among policy and lawmakers of the gendered dimension of critical technology and the importance of effective governance.
- Ultimately leading to the development of standards, frameworks, policies, and initiatives for implementation at national and regional levels to mitigate biases, build trust and create inclusive economies in Southeast Asia.



Theory of Change (Subject to Amendment)

CCTCP Impact

Southeast Asian countries develop and implement critical technology standards, frameworks, policies, and initiatives that foster interoperability, innovation, transparency, diverse markets and security by design with the participation of various stakeholders.

Impact

Government, Industry, and Civil Society Stakeholders in Southeast Asia **develop and implement** internationally recommended and industry-led critical technology standards, frameworks, policies, and initiatives at regional and national levels across Southeast Asia, which consider diverse stakeholders needs and the gender/social implications

End of Project Outcome

Enhanced Southeast Asian government, industry and civil society engagement with critical technology standards

Assumption: Standards created are agreed upon by all stakeholders and countries in Southeast Asia.
Standards take into account gender/social implications. No other organization creates internationally or regionally recognized critical tech standards

Stakeholders are interested and have the political will to create these standards. Stakeholders can come to agreement on these standards

If Assumption does not hold: No agreement on creating critical technology standards, or ineffective standards created

Output 1

Research outputs on the state of Southeast Asia in critical technology standards, frameworks, policies, and initiatives, including the capacity gaps among stakeholders.

Output 2

Training/Workshops and knowledge sharing activities that increase participant capacity and awareness on critical technology policy and standards in Southeast Asia

Output 3

Effective Multistakeholder Network of Female Policy Makers group created at the subregional, regional, and global levels

Output 4

Country specific policy support assists policymakers and regulators in the development and implementation of standards, frameworks, policies, and initiatives

Assumption: Stakeholders are interested in this subject and have the political will, knowledge, and ability to join these capacity building sessions

If Assumption does not hold: No change in commitment, engagement, or capability by stakeholders



Next Steps for 2022

- 1. Research outputs on the state of Southeast Asia in critical technology standards, frameworks, policies, and initiatives, including the capacity gaps among stakeholders.
 - Gap analysis with recommendations for policy, regulatory measures and capacity development.
 - Cast Study Development in Indonesia, Malaysia, the Philippines, Thailand
- 2. Implement Training/Workshops and knowledge sharing activities on critical technologies for policy makers in primary beneficiary countries in Southeast Asia
 - Linked to:





- 3. Creating stakeholder awareness raising on critical technologies and standards
 - Launch Network of Female Policy Stakeholders

Project will work closely designated focal points from each country



Focal Point Organizations

- 1. Indonesia
 - Ministry of Communication and Information Technology
- 2. Malaysia
 - Ministry of Communications and Multimedia
- 3. The Philippines
 - Department of Information and Communications Technology
- 4. Thailand
 - Digital Economy Promotion Agency





Thank you!



United Nations specialized agency for information and communication technologies - ITU

Contact Us

ITU Regional Office for Asia

and the Pacific:

Twitter URL: Official LinkedIn account: https://twitter.com/ITUAsiaPacific ITU Regional Office ituasiapacificregion@itu.int

for Asia and the Pacific



Official Twitter account: @ITUAsiaPacific

