

ITU

Committed to connecting the world

ITU Project Supported By DFAT:

**Enhancing the Development of Standards and Frameworks
for Critical Technologies in Southeast-Asia**

ITU Regional Office for Asia and the Pacific

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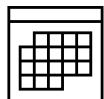
Introduction

International Telecommunication Union (ITU), supported by the **Department of Foreign Affairs and Trade (DFAT)** under Australia's Cyber and Critical Tech Cooperation Program, has been initiating a project called

*“Enhancing the Development of **Standard and Frameworks for Critical Technologies in Southeast Asia**”*

Scope:

- **Critical Technology:** Artificial Intelligence (AI)
- **Standard & Framework:** Gender and Social Based Standard and Policy



Timeline: June 2021- June 2024

Focus countries:

- Indonesia



- Malaysia



- Thailand



- The Philippines



*The rest of the ASEAN countries are secondary beneficiary countries

What are Critical Technologies?

Australian Government, Department of the Prime-Minister 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).”

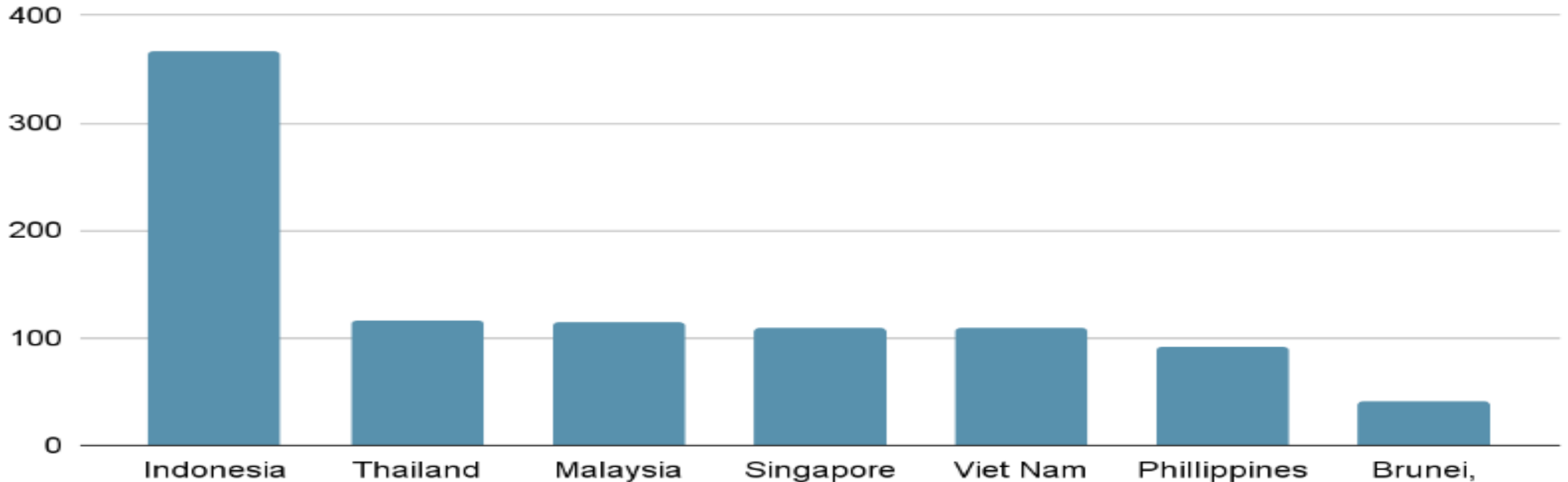
A Critical Technology that is integral to Southeast Asia's Future is **Artificial Intelligence (AI).**

- The COVID-19 pandemic has only accelerated the trend of digitization in the region.
- *By 2025, most of ASEAN's citizens will be digital natives, fully empowered to use high-tech tools, especially **Artificial Intelligence** to enhance their personal and professional lives. (AT Kearney, 2020).*
- *Governments in ASEAN region have emphasized the importance of developing and using digital technologies, including **Artificial Intelligence**. (Giulia Marsan, 2021)*

Why AI Matters in South-East Asia?

1. Economic Advantage

Economic Impact of AI in ASEAN, 2030 (USD Billion)

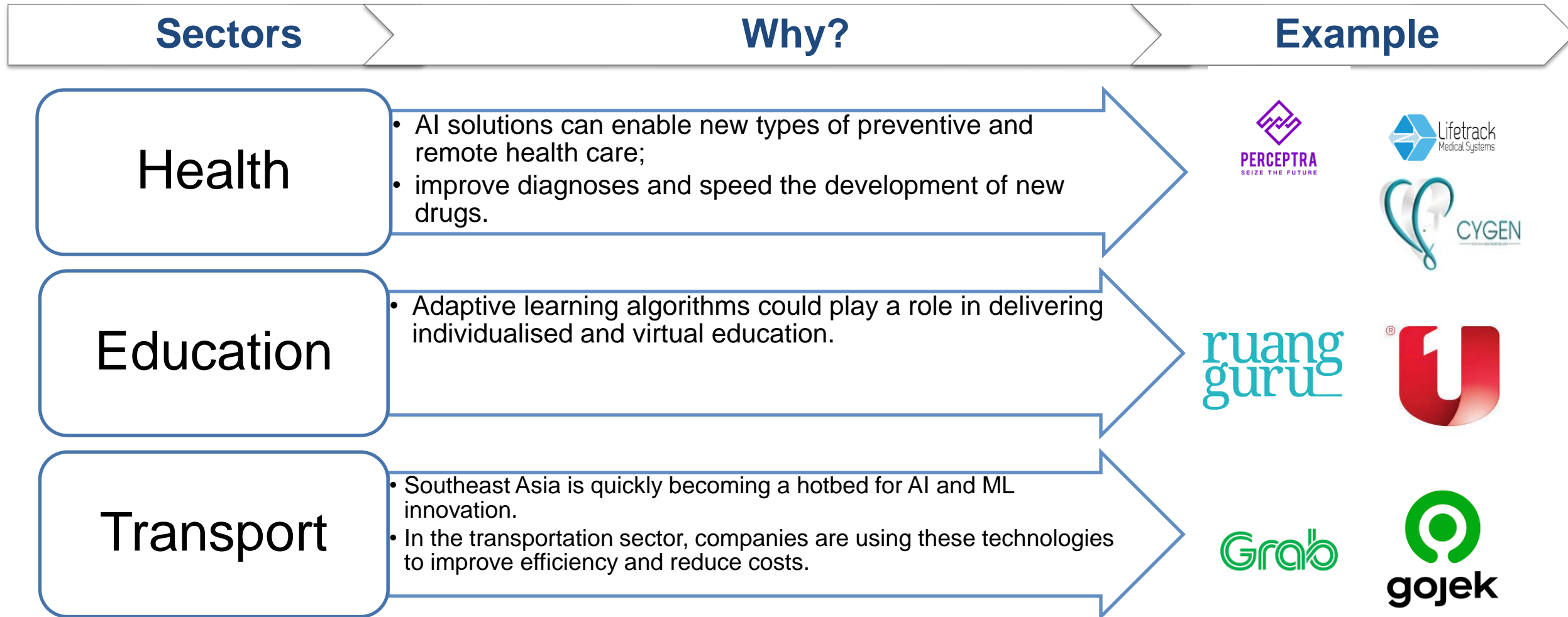


AT Kearney (2020) predicted AI's strong overall impact up to nearly \$1 trillion across Southeast Asia by 2030.

Source: AT Kearney, *Racing Toward the Future: Artificial Intelligence in Southeast Asia* (2020).

Why AI Matters in South-East Asia?

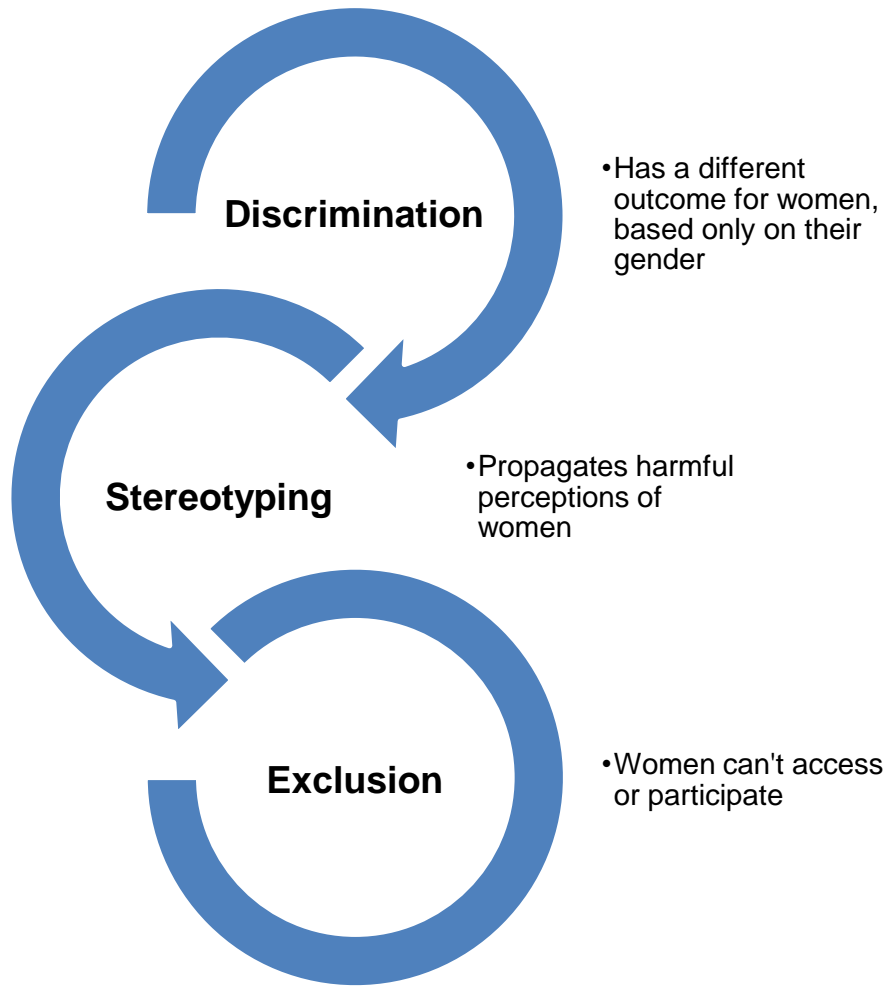
2. Social Advantages



Source: Mckinsey, *Artificial Intelligence and Southeast Asia Future* (2017).

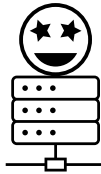
Despite the potentials, AI is susceptible to risk of bias





DISCRIMINATION

- Facial recognition algorithms had a high accuracy of 99% in detecting male faces.



- However, the system's ability to recognize women (esp. black women) was significantly lower at only 65% of the time. (Buolamwini, 2019)

STEREOTYPING



- Natural Language Processing (NLP), a critical ingredient of common AI systems like Amazon's Alexa and Apple's Siri, among others, has been found to show gender biases.
 - Like a game of word-association, these systems can often associate 'man' with 'doctor' and 'woman' with 'nurse'. (Harvard Business Review, 2019).

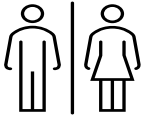
EXCLUSION



- Only 22% of professionals in AI and data science fields are women and they are more likely to occupy jobs associated with less status (Stanford Review, 2021).
 - Gender bias occurs during Machine learning (in dataset), If there's not enough women contributing, then there will be holes in the AI's knowledge, and this is why bias errors happen.

Why is it important to overcome bias in AI?

“To better serve business and society, fighting algorithmic bias needs to be a priority. Through 2022, 85% of AI projects have delivered erroneous outcomes due to bias in data, algorithms or the teams responsible for managing them. This is not just a problem for gender inequality but also undermines the usefulness of AI”



(Gartner, 2018)

1. AI bias could put women’s lives at risk (Forbes, 2020):

This can particularly be of concern when AI technology is supposed to diagnose skin cancer for which the accurate detection of skin color and its variances matter.

2. Missed Opportunities (Cheng, 2023)

- Limited perspectives/diversity
- Economic Impact
- Fewer role model

3. Psychological Impact (Bias)

The voice assistant systems (Amazon Alexa, or Cortana, or Siri), by default have female voices-> this also gives the psychological impact of someone who is submissive, who has to follow orders (Mckinsey, 2021).



Key Areas of Action Six

- Supporting Global Cooperation on AI

Key Areas of Action Five

- Ensuring the protection of human right in Digital Era

- What needed in Southeast Asian Countries?
- Coordination Mechanism?
- AI Capacity Building Project
- Ethical Aspect related Project
 - gender/social aspect, from Policy standpoint

Source: UN SDGs, 2023 and UN Secretary General Roadmap for Digital Cooperation, 2020

What has the project been doing so far?



2021

2022

2023



- i. ITU Global Conferences
 - WTSA: 1 fellow supported from Thailand to attend
 - WTDC: 1 fellow each supported from Indonesia and Malaysia to attend
- ii. 14 Participants from all focus attend *Study tour and Co-creation workshop* in May 2022.



- AI Socialization in 4 countries
 - Bangkok (Feb 2023)
 - Jakarta & Yogyakarta (March 2023)
 - Kuala Lumpur (March 2023)
 - Manila (March 2023)
- Asia Media Summit: AI Session (Bali, May 2023)
- Girls in ICT: AI Training (Manila, June 2023), including online AI training for ASEAN girls

- AI Socialization**
 - Research Dissemination
 - Women Dialogue Series
 - Networking Lunch
- AI Trainings**
 - Training on AI & Gender Bias
 - Training on AI Standard

The Asia and the Pacific Regional Dialogue on Digital Transformation

Information Session on DFAT Project

"Enhancing the Development of Standards and Frameworks for Critical Technologies in Southeast Asia"

8 December 2021, 11:00hr - 12:00hr (BKK Time/ +7 GMT)

Join us online! <http://itu.int/go/DG9H> #ASPRD2021



Output 2: Strategic Training plan developed for Policymakers and stakeholders in Southeast Asia on AI policies and standards, including their gender and social biases

2021

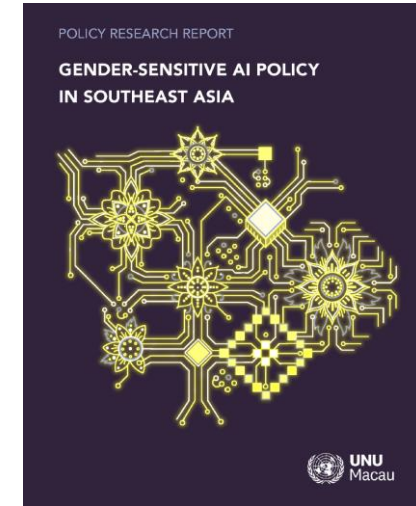
2022

2023

Output 1: Research Report on AI Policies, including gender and/or social biases, in Southeast Asia produced

Output 3: Established Networks of Female Multi-stakeholder group in AI (national & Regional)

Research Report (January 2023):
[Gender Sensitive AI Policy in Southeast Asia](#)



LinkedIn group for the [Women AI Policy Network in Southeast Asia](#) (July 2022)

- AI Socialization 2023: Women Dialogue Series & Networking
- Girls in ICT day 2023

2022

2023

Study tour and Co-creation workshop in May 2022.

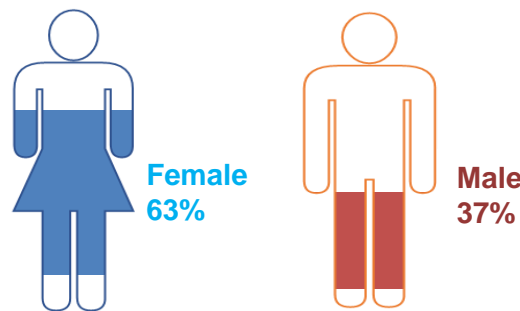
- 14 policy makers participant (10 female)/ project focal point agencies attended

Behavioral Change survey conducted in Early 2023 (6 months after the workshop)

- 100% participants reported increased knowledge of AI concepts, policy framework and AI standards, understanding of internationally recommended standards, frameworks, policies, and initiatives and understating the potential risks of AI;
- **78%** participants reported increased knowledge of techniques to develop AI standards and critical gaps in AI policies;
- 100% increased understanding in National Contexts and Priorities on AI Policies, Strategies, and Initiatives in South-East Asia.
- 67% noted that they now advocate for inclusive AI policy standards in their respective countries due to the training they received in the project.

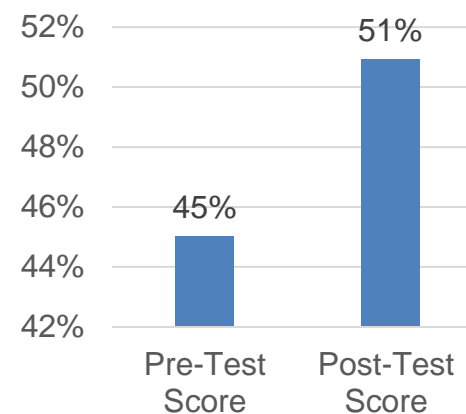
Indicator 1.1: By 2024, 70% of project participants report positive behavioral changes in advocacy and participation in AI policy formulation, implementation, and monitoring

AI Socialization & Training in 4 countries

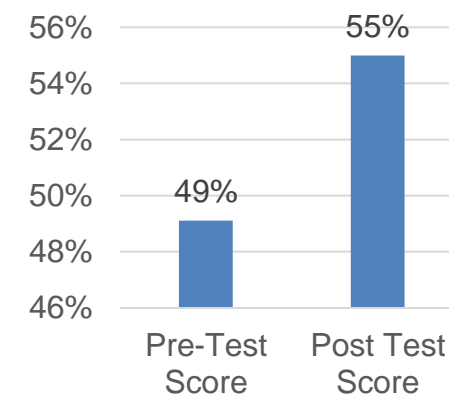


Overall Participation: 222 (10% with disability)

AI training with Local Universities



Gender Based AI Standard with IEEE



2022

2023



172 members
(May 2023)

LinkedIn group for the [Women AI Policy Network in Southeast Asia](#) (July 2022)

ITU Global Conferences

1. WTSA: 1 Fellow from Thailand
2. WTDC: 1 Fellow from Indonesia and 1 Fellow from Thailand

3
Female
Fellows

3. Study tour and Co-creation workshop in May 2022

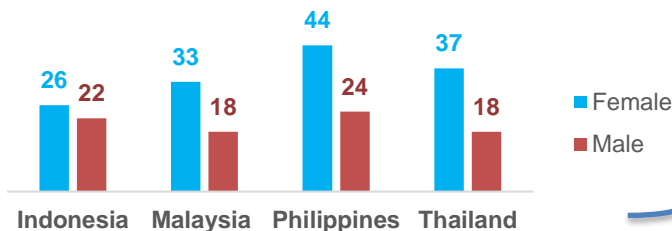
- 14 policy makers participant /project focal point agencies attended

14
Participants
• 10 F, 4 M

4. AI Socialization in 4 countries

Overall participation by country and Gender representation

The Philippines had the highest number of participants and majority 63% were female across the four countries



222
Participants
• 63% F
• 37% M

5. Asia Media Pre- Summit in Bali

- 90 Participants

90
Participants
• 61 F, 29 M

6. Girls in ICT (GICT)

- PH GICT: 77 F, 33 M
- ASEAN GICT: 124 F, 37 M
- AI Training: 57 F, 5 M

333
Participants
• 258 F, 75 M

TOTAL (May 2023)
• 9 events
• 834 total participants

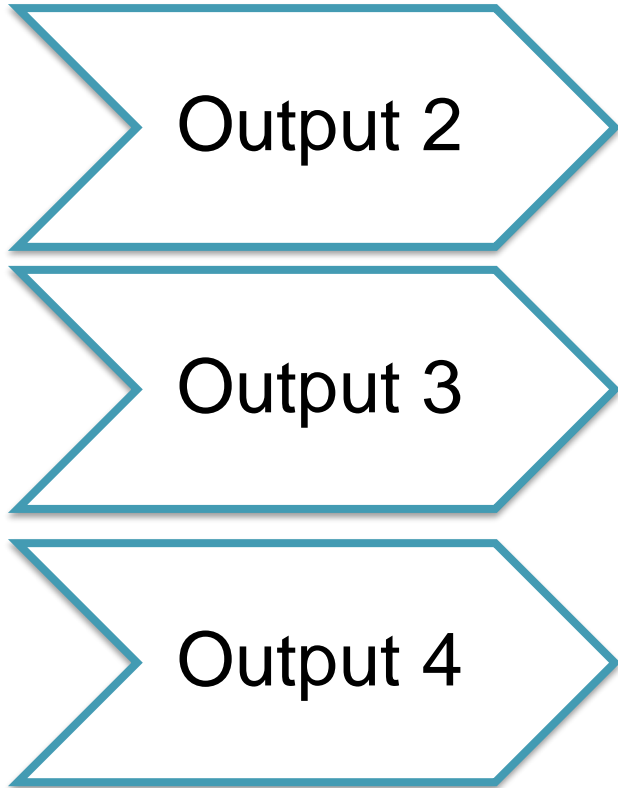
Indicator: By 2024, there is **evidence of engagement** between officials from beneficiary countries coordinated both domestically or internationally with other related AI technology standards and policy frameworks stakeholders

Next Step?



2023

2024



- AI For Good Summit (Geneva, July 2023)
- APriIGF (Brisbane, August 2023)
- RDF (Bangkok, September 2023)
- IGF (Kyoto, October 2023)



- ITU Academy Course (Online)

- Expert Dialogue Series with ASEAN, UNESCO, EU, etc
- AI Readiness Index with UNESCO



LinkedIn Group!

- This group aim to identify key stakeholders and create a regional network of female policy makers, regulators, and delegates in Southeast to share good practices and lessons learned as well as coordination and cooperation.

Come Join Us!



Women AI Policy Network in Southeast Asia

Listed group

Rules

Criteria to join this group:

AI related stakeholders coming from government, private, academia, civil society in Southeast Asia. Priority will be given to female stakeholders in Indonesia, Malaysia, Thailand and the Philippines.



Thank you!

United Nations specialized agency for information and communication technologies – ITU



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