





Artificial Intelligence Readiness Assessment Report

# Diagnosis of Cambodia's Artificial Intelligence Landscape

Cambodia is on the important milestone in the development of the country's artificial intelligence (AI) ecosystem. With the rapid evolution of AI, Cambodia recognises AI as a pivotal tool and catalyst for economic diversification and innovation as part of the country's broader digital transformation agenda. Although the country is still in the early stages of AI development, several key strategies, policy frameworks and regulations were established to lay the foundation for AI development and deployment. The Royal Government of Cambodia (RGC) through the Pentagonal Strategy – Phase I positions "Technology" as its fifth Key Priority, recognising the role of technology, especially digital technology, to accelerate digital transformation of Cambodia's economy and society, as well as to meet the needs for enhancing economic productivity, as the important foundation and mean for achieving Cambodia Vision 2050. The Cambodia Digital Economy and Society Policy Framework 2021–2035 and the Cambodia Digital Government Policy 2022–2035 outline AI-related initiatives, focusing on infrastructure, public-sector adoption, promotion policies, talent development, and standardization.

Recently, the RGC has established a clear division of responsibilities among its key ministries for AI development. The Ministry of Post and Telecommunications (MPTC) is mandated to lead work related to AI backbone infrastructure and AI governance, and coordination with relevant ministries and institutions to develop policy frameworks and strategies on AI governance. The Ministry of Industry, Science, Technology & Innovation (MISTI) is responsible for leading the work related to AI research and development (R&D) efforts and coordination with relevant ministries and institution to prepare a R&D roadmap. Concurrently, the Ministry of Education, Youth and Sport (MoEYS) is tasked with leading and coordinating AI-related education across various sectors. The RGC also assigned all ministries and institutions to promote the research, development, and adoption of AI within the competency of their respective sectors.

Cambodia began implementing the RAM on November 12, 2024, with CADT leading efforts in collaboration with UNESCO and the MPTC. The initiative is designed to rigorously assess the nation's digital and AI ecosystem against the ethical principles enshrined in the UNESCO 2021 Recommendation on the Ethics of AI and develop a robust national AI strategy based on RAM recommendations.

## The Implementation of RAM in Cambodia

Research Consortium	Participated Ministries in Data Collection	Questionnaires Addressed	Consultation & Validation Workshop
19 members 5 institutions	<b>26</b> ministries and agencies	<b>176</b> questions <b>5</b> dimensions	<b>300+</b> government, academia, industry, and civil society stakeholders

# Cambodia's Artificial Intelligence Landscape based on the UNESCO-RAM Dimension



Legal and Regulatory Dimension



- Cambodia is developing a National AI Strategy (NAIS) and drafting key policies and regulations such as personal data protection law, cybersecurity law, access to information law, and data governance policies.
- Challenges: The Open Data Inventory (ODIN) score is low, availability and accessibility of open data is limited. Absence of AI procurement regulations and liability for AI-related harms is unclear.



Social & Cultural Dimension

#### 2. Social & Cultural Dimension:

- Cambodia is promoting AI ethics and "AI for Good" initiatives (e.g., Khmer Braille project). The open-source Khmer Large Language Model (LLM) is being developed, AI has been applied in different sectors such as health, culture, finance, to name a few.
- Challenges: Gender gap remains in STEM and digital technology fields, risking bias algorithms and limit innovation. Broader public awareness is needed to inform citizens about Al's benefits and risks (like deepfakes and scams), as well as protection for children and vulnerable groups.



Scientific & Educational Dimension

#### 3. Scientific & Educational Dimension:

- Al is a key priority in Cambodia's digital skill development roadmap. The growing bachelor's, master's degree programs, and research output in Al and data science include Al ethics. Adoption of Al tools is high among students and lecturers in higher education.
- \* Challenges: R&D expenditure remains low (0.09% of GDP). Many schools and universities lack adequate digital and AI infrastructure. Curricula need updating



**Economic** Dimension

#### 4. Economic Dimension:

- AI is seen as key to Cambodia's national development goals. Pilot AI projects are being deployed in the public sector, like TranslateKH and Sarika. Despite the absence of data on AI adoption and application, AI applications are seen in sectors like finance, agriculture, tourism, and MSMEs.
- Challenge: Limited data exists for thorough economic assessment, especially on Al's labour market impact and investments. The low R&D expenditure indicates a lack of investment crucial for fostering a robust innovation ecosystem.

#### 5. Technical & Infrastructural Dimension

- Cambodia has made strong progress in connectivity, with high mobile and internet penetration, widespread 4G coverage, and nearly universal electricity access.
- Challenges: The limited number of data centres and computing power hinder Al growth. The complexities of the Khmer script also pose challenges for Khmer natural language processing development. While government digital systems are fragmented, hindering a unified national data platform. Cambodia lacks representation in Al standardisation bodies and robust statistical infrastructure.



Technical & Infrastructural Dimension

## **Recommendations for Ethical** Al Governance in Cambodia



#### **Institutional Framework for AI Governance**

- Finalise and execute the National Al Strategy
- Establish Multistakeholder Governance
- Strengthen International Cooperation and Standards Adoption



#### **Laws and Regulations**

- Adapt regulations to integrate Ethics of Al: enact the draft Law on Personal Data Protection, Access to Information Law, and revise and update the Procurement law and Criminal Code
- Implement AI Regulatory Sandboxes



#### Responsible AI, Inclusion and Well-being

- Elaborate and deploy Sectoral Guidelines for an Ethical Use of Al
- **Conduct Public Awareness Campaigns**
- Protect and prepare Children for an AI-**Powered World**
- Advance Gender Equality in the AI Ecosystem



#### Infrastructure, Data, and Capacity Building

- Expand connectivity infrastructure
- Enhance data collection and data sharing ecosystem and policies
- Create and foster Al Basic Literacy
- Introduce progressive approach to strengthen AI Skills



#### Research, Development and Innovation Ecosystem

- Foster and increase Investment and Expenditure in Research and Development
- Create an Al Resource Centre
- Develop AI-focused Sectoral Policies



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