**Kingdom of Cambodia**

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# Draft
# National Artificial Intelligence Strategy
# 2025-2030

Prepared by the Ministry of Post and Telecommunications

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# Foreword

# Preface

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## List of Acronyms

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|---|---|
| **AI** | artificial intelligence |
| **CADT** | Cambodia Academy of Digital Technology |
| **CDC** | Council for the Development of Cambodia |
| **DGC** | Digital Government Committee |
| **DL** | Deep Learning |
| **GDP** | Gross Domestic Product |
| **MAFF** | Ministry of Agriculture, Forestry, and Fisheries |
| **MInfo** | Ministry of Information |
| **MISTI** | Ministry of Industry, Science, Technology, and Innovation |
| **MFAIC** | Ministry of Foreign Affairs and International Cooperation |
| **ML** | Machine Learning |
| **MLVT** | Ministry of Labor and Vocational Training |
| **MoC** | Ministry of Commerce |
| **MoEYS** | Ministry of Education, Youth, and Sports |
| **MoI** | Ministry of Interior |
| **MPTC** | Ministry of Post and Telecommunications |
| **UNESCO** | United Nations Educational, Scientific and Cultural Organization |

# I. Introduction

"Artificial Intelligence" has been studied, researched, developed, and deployed for many decades, but in the last two decades this technology has significantly evolved due in part to the abundance of data and computing power and in part to the emergence of more effective techniques for training models. Notably, since late-2022, artificial intelligence has gained mainstream global attention due to the capabilities of a category of AI that can compose texts, audio, images, code, etc. resembling those created by humans. The advances and ubiquity of these technologies bring with them both opportunities and risks to society and the economy.

That is why both the public and private sectors and the people in many countries hurriedly find ways to respond to this new trend according to their own capacities. Big technology companies invest hundreds of millions of dollars to gain technological dominance and capture market share, whereas many governments adopt policy measures, each with their own vision corresponding to their economic status and national strengths. A report by Stanford University shows that as of 2023, 75 countries had a national AI strategy or a similar document.

In this context, Cambodia must seize the new opportunities offered by global trends and manage the risks posed by AI. Existing national digital transformation policies and some sectoral policies have introduced measures with respect to AI, but there is no national document that systematically addresses this technology. This National AI Strategy compiles and compliments existing measures to form a vision and set the national direction, while sending a clear message to the public to pay attention to this technology and mobilizing collaboration from all stakeholders, to enable Cambodia to maximize the benefits of AI for economic and social development.

To align stakeholders' views and actions, it is helpful to start with some common understandings about the technology and its status. To provide a starting point for elaborating the Strategy, the following is a brief run through of what AI is, its status in Cambodia, and key ideas in promoting AI adoption and development in Cambodia.

## What is Artificial Intelligence?

**Artificial intelligence** can be defined broadly or rigorously in scientific, technical, or legal contexts, among others. Succinctly, artificial intelligence refers to the discipline or technology aimed at enabling computers to perform tasks requiring cognitive abilities. Within AI, Machine Learning (ML) serves as a crucial subset, focusing on algorithms that allow machines to learn from data without explicit programming, enabling them to make predictions or decisions based on patterns identified within the data. Deep Learning (DL) further refines ML by utilizing artificial neural networks, inspired by the human brain, to analyze complex data, excelling in tasks like image and speech recognition. Finally, Generative AI (GenAI), a more recent development within AI and often leveraging DL, concentrates on the creation of new content, such as text, images, or music, by learning the underlying patterns of existing data. Applications such as ChatGPT, Gemini, and DeepSeek are generative AI applications.

Before the proliferation of generative AI, predictive or analytical AI applications have been gradually introduced into people's everyday lives such that many are using or interacting with AI without knowing (See Box 1). To date, generative AI are surprisingly capable; governments, companies, and the public are still grasping with their capabilities and have not yet fully realized the potential of the technology. Recently, there are growing attentions to and discussions on agentic AI and physical AI (or embodied AI). AI agents are, generally speaking, the results of orchestrating one or more AI models with other technology components to form an application or a system capable of perceiving its environment, process information, and perform tasks autonomously to achieve defined objectives. Physical AI refers to the integration between AI models that can process physical phenomena and physical elements systems to form a smart mechanical system.

These technologies are capable of assisting humans in many ways, including assisting people with everyday tasks, teachers with student assessment, physicians with diagnosis, and scientists with

pharmaceutical research. Along with its immense potential, artificial intelligence also brings about disadvantages, which sometimes arise from technical risks or the inherent nature of the technology, and some other times arise from the misuse and abuse of the technology.

| Box 1: Examples of Every Day use of Analytical or Predictive AI |
|---|
| • Applications like YouTube, Facebook, and TikTok use artificial intelligence to predict which videos, articles, or images are most relevant to a user's interests or what the user is looking for. This prediction is based on data that these apps collect from users, including demographic data (age, gender, etc.), usage data (how long they have been using the app, images or videos they have watched, images or videos that the user has liked, etc.), and other data such as geographic region, device type, etc.<br>• Face-scanning or fingerprint-based attendance systems use artificial intelligence to match a scanned face or fingerprint with a face or fingerprint in the database to identify which employee the face or fingerprint belongs to.<br>• Some smartphones have smart assistant apps (such as Siri on the iPhone or Bixby on Samsung) that use artificial intelligence to "listen" to human commands to search for information, make phone calls, or set the alarm, etc.<br>• Some apps like Google Maps and Grab use artificial intelligence to predict travel times from one point to another and then recommend the fastest route to a designated destination. |

## Artificial Intelligence for Cambodia

Phase I of the Pentagonal Strategy positions "Technology" as its fifth Key Priority, recognizing the role of technology—especially digital technology—as a powerful means for national development. As AI is an emerging digital technology, AI initiatives need to viewed in the context of national digital transformation agenda. Likewise, digital transformation should be framed within the context of the overall socio-economic development of Cambodia.

### *Existing Policies*

After the COVID-19 pandemic, the Royal Government of Cambodia adopted measures to restore economic growth and protect vulnerable sections of the population. In the face of rising uncertainties in the global economy, Cambodia intensifies efforts to strengthen growth resilience by investing in physical infrastructure, human development, and economic diversification, especially in industry and service sectors whose contribution to the national GDP are increasing. The digital sector is considered as both a new source of growth and an enabler for other sectors' growth. In addition, digital technologies have the potential to support the strengthening of governance for an effective sector and better public service delivery. The Cambodia Digital Economy and Society Policy Framework 2021-2035 and the Cambodia Digital Government Policy 2022-2035 elaborate key policy measures and priority actions on these areas. Before recent developments in AI, these two documents had already outlined measures for AI adoption and development, focusing on infrastructure, public-sector adoption, promotion policies, talent development, and standardization. Alongside these, AI adoption is also included in some sectoral policies, such as the Cambodia Financial Technology Development Policy 2023-2028.

### *Role of the National Artificial Intelligence Strategy*

In the context of rapid development and the existing policy framework, the preparation of the National Artificial Intelligence Strategy is aimed at:

1. Complementing existing measures at the national level, by adopting strategic priorities and strategic measures addressing horizontal activities and ecosystem dimensions.
2. Promoting sectoral AI adoption and management, by showcasing sectors with high levels of readiness and determining strategic directions for sectors that have untapped potential of

adoption, together forming the bases for line ministries to determine the necessary measures or adopt sectoral promotion strategies, if necessary.

3. Increasing synergy between the national AI ecosystem and sectoral adoption promotion, by setting mutually reinforcing priorities.
4. Mobilizing multi-stakeholder participation in line with strategic priorities and measures at the national level and strategic directions at the sectoral level.

### *Status of AI in Cambodia*

From Novembre 2024 to May 2025, the Cambodia Academy of Digital Technology (CADT) in collaboration with UNESCO, with support from the Ministry of Post and Telecommunications (MPTC), conducted UNESCO's Readiness Assessment Methodology (RAM) to assess Cambodia's current AI preparedness, identify gaps and ensure responsible and ethical AI development. From the public sector, 26 ministries and institutions participated in providing data, input, and feedback on 176 qualitative and quantitative questions across five dimensions: legal, social and cultural, scientific and educational, economic, and technological and infrastructure. Detailed results of the assessment is available in the **"Report on the Assessment of AI Readiness in Cambodia"**. In addition, through various collaborations, CADT has conducted surveys to focus on some dimensions, such as AI adoption in the education sector and access to computing resources.

In summary, the result of the assessment shows that Cambodia is at an early stage of AI adoption and development. Fundamental resources for AI adoption and development in Cambodia, including data, computing resources, and talents are still limited. Adoption is still nascent among the public sector, the private sector, and citizens. Nonetheless, Cambodia stands at a positive starting point, as demonstrated by good use cases, such as the text-to-speech platform used in digital government, AI adoption by established firms and startups in finance and logistics, and widespread AI adoption among university students. In addition, ministries and institutions have begun collaborating to support AI research, development, and innovation, such as in education and healthcare.

It is worth noting that a few public higher education institutions in Cambodia have put in efforts on AI talent development, research and development, and accumulation of technology resources for several years. Among them, the former National Institute of Post, Telecommunications, and ICT, the predecessor of CADT stands out as the leading institution, who has produced publications, hosted regional conferences, and pioneered Khmer NLP development in the country. More recently, more players, including Techo Startup Center, are contributing to the process.

Turning to AI risks, there has not been a thorough assessment of the technical risks of AI in Cambodia, but there are well-known anecdotal cases of AI being used in frauds and competent ministries and institutions have all contributed to raising public awareness on this issue.

On regulation, Cambodia does not have a comprehensive AI law, but Sub-Decree 110 dated 21 July 2017 on ICT Licensing Regime applies to the supply side of artificial intelligence, including importers, distributors, and developers of AI. MPTC has also completed the Draft Law on Personal Data Protection and the Draft Law on Cybersecurity, which are undergoing interministerial review processes.

To strengthen the AI ecosystem in Cambodia, MPTC has been working with partners across the public sector, the private sector, and international partners to implement key projects, including:

- Talent development initiatives in the AI and data skill track to achieve the targets set in the Cambodia Digital Skills Development Roadmap 2024-2035.
- Establishment of the National AI and Data Science Lab.
- Data collection for the development of Khmer LLM.
- Preparation of the Data Governance Policy and the Cloud-First Policy to promote production and circulation of high-quality data and increase the availability of computing resources in diverse forms in the country.

- Establishment of a Digital Park, to bring together diverse partners, provide incentives, support research, development, and innovation, and build national capacity in digital technology, especially artificial intelligence.

In brief, although the adoption, development, management, and ecosystem of AI in Cambodia are still at a nascent stage, Cambodia has suitable foundation along with high-level political support and robust collaboration among stakeholders, all of which are favorable for the adoption and development of AI in Cambodia. Amidst the rapid development of the global AI industry and rising uncertainties in the global economy, now is the time for Cambodia to adopt a national strategy for artificial intelligence to chaperone all stakeholders into collaboration that unleash the potential of the technology to serve Cambodia's economic and societal development and resilience.

# II. Vision and Aims

## Vision

The National Artificial Intelligence Strategy's vision is to "leverage artificial intelligence to increase productivity and generate added values, uplifting citizens' quality of life, strengthening and broadening the bases of sustainable and inclusive economic and social development, and building a prosperous future of Cambodia's digital technology."

## Aims

1. **Improve Citizens' Literacy and Skills:** Integrate AI knowledge and skills into educational and training efforts to enable the national workforce to participate in the digital economy and society of today and the future.
2. **Leverage AI for enhancing Digital Government:** Promote the adoption and development of AI to contribute to the strengthening of governance, efficient public service delivery, and improving the accessibility of public services.
3. **Promote Economic Development:** Promote the adoption and development of AI for uplifting productivity, competitiveness, economic growth, and economic resilience.
4. **Enhance the AI Ecosystem:** Invest on essential components of the ecosystem to support the adoption and development of AI, responding to current demands and preparing for future market development.
5. **Manage AI Risks:** Implement social, technical, and regulatory measures to ensure ethical and responsible AI design, development, deployment, and use, taking into account sustainability and inclusiveness.

# III. Strategic Priorities

To support the aims and vision above, this strategy outlines 6 strategic priorities comprising of 41 strategic measures. These priorities and measures complement one another to help Cambodia achieve the short-term target of becoming a **skillful adopter of AI** and the long-term goal of **participating in the AI development** market. Under each strategic priority, flagship activities are listed, which will be prioritized for implementation.

## Strategic Priority 1 – Human Resource Development

To serve both short-term and long-term goals of adoption and development, Cambodia must strengthen its human resources at multiple levels, according to the target groups as follows:

- **Leaders:** Leaders of ministries, institutions, private enterprises, and other organizations need to understand the advantages and disadvantages of AI and the opportunities and challenges in harnessing it to serve their institutional missions, whether those missions are governance, economic, or social in nature. The use of artificial intelligence can take many different forms.

Currently, using existing software and integrating existing models, slightly adapting them for specialized use, is the most feasible option. Modifying existing models or developing new models requires varying levels of resources, techniques, and time, depending on the type and complexity of the model. Each institutional leader needs to implement the right strategy for their organization, in order to deploy limited resources correctly to achieve their goals and proportional returns.

- **Technical Talents:** Every organization that decides to use AI needs different levels of expertise to support it, including experts for user training, integrating models into existing systems, fine-tune existing models for specific purposes, or developing new models, etc. In addition to AI experts, the use and development of AI also require supporting expertise, including digital professionals (data science, cybersecurity, personal data protection, etc.) and experts in the humanities (law, ethics, culture, etc.). Ministries, relevant institutions, the private sector, educational and research institutions, and civil society all have their own roles to play in increasing the availability of AI and related talents in the country.
- **Professionals:** Various professionals, including teachers, those working in the fields of advertising, marketing and audiovisual production, lawyers, financial analysts, etc., are all those who can readily benefit from artificial intelligence. Training on the use of artificial intelligence for professional use will help increase the adoption of artificial intelligence in the short term and increase the demand leading to an expanding market for artificial intelligence experts and products for long-term development in this area.
- **Citizens:** Increasing citizen's basic AI literacy, including strengthening basic knowledge about the advantages and disadvantages of AI and the skills to use AI ethically and responsibly and protect oneself from risks, is a task that public institutions must fulfill and all parties must participate in the form of a national campaign and widespread systematic dissemination. Among members of the public, students and youth are the priority groups for whom additional education and training should be provided to increase their adoption and prepare them to participate in AI development. Generally, students at all levels should receive support in strengthening critical thinking and collaborative use of AI to protect against entire reliance on AI. Beside this, skills and knowledge in mathematics and science need to be strengthened to increase the number of students capable of joining the AI talent pool. In addition, stakeholders need to pay particular attention to groups who are vulnerable to changes in the labor market at the national, regional or global level, to mitigate impacts on their livelihoods. Special attention should be given to increase participation from women and girls at all levels, including female students and employees, as well as people with disabilities and people with limited means to access digital technologies.

**Strategic measures under Strategic Priority 1 include:**

1.1. Promote and support AI training for leaders of private enterprises and relevant institutions.

1.2. Train 1000 technical talents in AI, data science, and related areas.

1.3. Promote the development and support the delivery of degree and certificate programs in AI, data science, and related areas.

1.4. Explore the possibilities of attracting and nurturing high school students with the right predispositions to build a career in AI, data science, or related areas. Female students should be given particular encouragement to participate.

1.5. Coordinate and conduct supply-demand matchmaking between providers and deployers of AI solutions and related products (including training services for professionals) and relevant professional communities.

1.6. Instill a broad understanding of the general concepts, advantages, disadvantages, basic use, ethical and responsible use, and self-protection from the risks of artificial intelligence technology.
1.7. Compile and disseminate self-learning materials on AI and data literacy in various forms.
1.8. Integrate materials related to AI, data science, and related lessons into all levels of education.
1.9. Conduct a study on the potential impact of AI on the labor market and propose risk mitigation measures, including protection, upskilling, and providing alternative opportunities for groups likely to be affected by AI, with special attention paid to women and other vulnerable groups.
1.10. Explore the possibilities of using, promoting, and supporting open-source resources or other forms of open technologies (e.g., open weight models)

| Flagship Activities | Strategic Measures Addressed |
|---|---|
| **(1) - Provide Master's degrees in AI and data science**<br>- CADT acts as the key HEI<br>- Partner HEIs to participate | 1.3 |
| **(2) - Establish the AI Professional Community under the Digital Professional Association/Society**<br>- MPTC and MoEYS collaborate to establish the community<br>- The private sector, digital professionals, and students are encouraged to participate | 1.2, 1.3, and 1.5 |
| **(3) - Organize the National AI Literacy Campaign**<br>- MPTC leads in the implementation, with participate from relevant ministries/institution<br>- All ministries and institutions, the private sector, academia, civil society, and citizens have a responsibility to participate | 1.6 |
| **(4) - Launch the National AI Information Hub, ai.gov.kh, which includes self-study materials for the general population, students, professionals, leaders, and policymakers.**<br>- MPTC administers the platform<br>- All ministries and institutions and partners can contribute content<br>- Participate with domestic and international partners<br>- Relevant stakeholders and the public are encouraged to utilize and further disseminate the content on the platform | 1.6 and 1.7 |

## Strategic Priority 2 – Data, Infrastructure, and Key Technologies

Abundant high-quality data, supporting infrastructure (especially computing resources), and key technological resources (especially models) are as indispensable as human resources for the adoption and development of artificial intelligence in Cambodia, both for current needs and for strengthening capabilities for the future.

### *Data*

Data is food for AI, as it is necessary for both development and deployment stages. All institutions in all sectors should properly and securely collect and store data of their institutions and sectors for the benefit of AI adoption and development within the institution or the sector. But in addition to serving their own institutions and sectors, data in an institution or a sector can also be useful for other institutions and sectors. Therefore, all institutions in all sectors should consider the possibility of releasing the data opely

or sharing some of it in various ways. In this regard, MPTC has been preparing a "Draft Data Governance Policy" and preparing to establish a national open data platform.

In addition to sectoral data, Cambodia lacks language data to serve the use and development of artificial intelligence technologies for the Khmer language. All stakeholders should participate in increasing and disseminating high-quality Khmer language data and data related to Khmer society and culture to support the development of AI technologies for the Khmer language. In this regard, MPTC has been collecting Khmer language data to advance the development of a large language model for the national language, Khmer LLM.

*Infrastructure and Key Technologies*

Besides general infrastructure and technology resources required for digital transformation at large, advanced AI technologies, especially AI content creation, require specialized or more computing resources than usual to be developed and deployed. The level of additional infrastructure and digital resources required depends on the use case and the deployment model of each individual or institution. For example, institutions that need to train or fine-tune pre-trained foundation models will need more computing resources than those simply using an existing specialized model or integrating an existing model or adjusting it to a small amount of institutional data. Those that use existing software in its entirety will need even less computing resources. Overall, Cambodia needs to increase computing resources for the training or fine-tuning of AI models and maintain the availability of computing resources and AI models in the market to meet the needs (of adoption) at an economically viable level for users. At the same time, Cambodia needs a number of key technologies to serve large-scale use cases and research, development, and innovation.

**Strategic measures under Strategic Priority 2 include:**

2.1. Induce public and private institutions in all sectors to properly collect and manage the data in their institutions and sectors.

2.2. Support, coordinate, and encourage open data and data sharing initiatives.

2.3. Promote the increase and sharing of Khmer language data and data related to Cambodian culture and society, as well as data in each sector.

2.4. Promote the use of cloud technology to contribute to increasing access to computing resources and technology component for AI adoption and development.

2.5. Increase access to computing resources for AI research, development, and innovation.

2.6. Promote, incentivize, and invest in key technologies to support critical or large-scale use cases.

2.7. Conduct a study on the markets of computing resources, AI, and data in Cambodia.

| Flagship Activities | Strategic Measures Addressed |
|---|---|
| **(1) - Expedite the preparation of the Data Governance Policy (including parts on open data)**<br>- MPTC leads the preparation, with participation from all ministries and institutions<br>- All ministries and institution participate in the implementation, and prepare detailed measures for their own use | 2.1 and 2.2 |
| **(2) - Establish the National Open Data Platform**<br>- MPTC develops and administers the platform<br>- Ministries and institutions are encouraged to publish open data and use the national platform<br>- Partners outside the government may request to use the national open data platform, following established conditions | 2.2 |
| **(3) - Openly publish non-sensitive data for the benefit of AI adoption and development** | 2.2 and 2.3 |

| | |
|---|---|
| - MPTC leads by example, publishing data on the national open data platform<br>- Ministries and institutions voluntarily participate in openly publishing data according to their readiness | |
| **(4) - Collect data for the Khmer LLM project**<br>- MPTC collects the data<br>- All ministries and institutions as well as partners are encouraged to contribute in the data collection (text, images, audio, and videos in the Khmer language or containing Khmer language data) | 2.3 |
| **(5) - Expedite the preparation of the Cloud-First Policy**<br>- MPTC leads the preparation, with participation from all ministries and institutions<br>- All ministries and institutions participate in the implement and prepare detailed measures for their respective sectors | 2.4 |
| **(6) - Establish the National AI and Data Science Lab**<br>- MPTC oversees with CADT as the implementing agency<br>- All ministries and institutions, academia, the private sector, and development partners are encouraged to request to use the Lab, following established terms of use | 2.5 |
| **(7) – Develop Khmer LLM**<br>- MPTC develops<br>- All ministries and institutions participate in the use and provide feedback<br>- All partners may request to use, following established terms of use | 2.6 |

## Strategic Priority 3 – Promoting AI Adoption and Development for Digital Government

In line with the adopted approach of having digital government lead by example in the development of the digital economy and society, ministries and institutions in the public sector need to explore ways to use AI to increase efficiency and better public service delivery.

**Strategic measures under Strategic Priority 3 include:**

3.1. Provide AI leadership training for leaders and senior officials from ministries and institutions.

3.2. Provide technical training on AI, data science, and related areas to officers from ministries and institutions based on their skill levels and work priorities.

3.3. Incorporate AI knowledge and skills into existing training digital literacy training programs for civil servants.

3.4. Disseminate AI literacy to academic and administrative staff in public education institutions, in phases.

3.5. Increase AI technology resources for digital government.

3.6. Promote the use existing AI-driven Digital Government Products and promote the creation of new AI-driven Digital Government Products in accordance with shared demand among ministries and institutions.

3.7. Implement pilot and flagship projects for AI adoption for internal work improvement or better public service delivery.

3.8. Promote ethical and responsible AI adoption in the public sector.

| Flagship Activities | Strategic Measures Addressed |
|---|---|

| | |
|---|---|
| **(1) - Provide training to the AI focal points and AI technical officers nominated by ministries and institutions**<br>- MPTC oversees with CADT as the implementing agency<br>- All ministries and institutions send the nominated focal points and technical officers to the training | 3.2 |
| **(2) - Include materials related to AI, data science, and related areas into public officers training programs organized by CADT**<br>- CADT implements, with the Institute of Digital Governance as the key implementing unit<br>- Ministries and institutions nominate officers to the training, per existing mechanisms | 3.3 |
| **(3) - Include materials related to AI, data science, and related areas into public officers training programs organized by the Royal School of Administration**<br>- The Royal School of Administration implements, with technical support from CADT | 3.3 |
| **(4) - Adapt the UNESCO AI Competency Frameworks for Teachers and Students to the national context to ensure relevance, feasibility of adoption, and continuity in the education system.**<br>- MoEYS in collaboration with UNESCO | 3.4 |
| **(5) - Develop and conduct training programs on basic digital literacy for teachers, using MoEYS' Capacity Development Platform (CDP) or other MOOC platforms**<br>- MoEYS | 3.4 |
| **(6) - Develop and conduct mandatory training courses on AI literacy education for education officers to increase awareness of AI in education, using MoEYS' CDP or other MOOC platforms**<br>- MoEYS | 3.4 |
| **(7) - Provide lifelong learning courses online through platforms recognized by MoEYS or in person to ensure everyone can gain literacy and awareness of AI in education, providing opportunities to learn about AI and computational thinking for primary, secondary, and upper secondary school students.**<br>- MoEYS | 3.4 |
| **(8) - Provide trainings on AI in agriculture**<br>- MAFF | 3.4 |
| **(9) - Prepare the Guidelines on Ethical and Responsible AI Adoption in Digital Government**<br>- General Secretariat of the DGC prepares for DGC's review and adoption<br>- All ministries and institutions participate in the dissemination, implementation, and providing feedback on the guideline | 3.5 |
| **(10) - Promote the use of SARIKA.GOV.KH**<br>- General Secretariat of the DGC<br>- All ministries and institutions participate in the adoption and providing feedback | 3.6 |

## Strategic Priority 4 – Promoting Sectoral Adoption and Development

*General Overview*

To truly harness AI to "improve the citizens' quality of life" and "strengthen and broaden the bases of economic and social development", productivity increase and value-added extraction must happen in key sectors in line with the directions set by the Royal Government, as well as the actualities and potential of Cambodia's economy.

This national strategy sets "strategic directions" to support and promote sectors that have considered the adoption of AI and to provide initial guidance for sectors with the potential to adopt AI. All sectoral directions are articulated in consultation with the relevant ministries and institutions. The relevant ministries and institutions will prepare detailed measures or activities or prepare sectoral strategies where necessary, in line with the directions set at the national and sectoral levels in this strategy. Another method is to include AI aspects into sectoral policies, strategies, and plans, without the need to prepare a standalone sectoral AI promotion strategy. Where necessary, ministries and institutions may conduct additional studies and assessments of AI readiness by sector to prepare the most appropriate measures and activities.

In accordance with the Royal Government's policies, the sectors that are considered priority sectors for the adoption of artificial intelligence include (1) education, (2) healthcare, (3) agriculture, (4) industry, (5) tourism, and (6) micro, small and medium enterprises.

The sectors with high levels of readiness or those that have the potential to increase economic output through AI adoption, and the sectors that act as supporting sectors include (1) finance (including banking and non-banking financial services), (2) transport, and (3) digital. Last but not least, the information sector is one that is most heavily exposed to artificial intelligence.

In addition, the adoption of artificial intelligence technology is also important for other sectors, including justice, land management, urban planning, construction, and social affairs, etc. The determination of priority sectors in this strategy is to highlight national attention, but each sector has the potential to adopt and develop artificial intelligence and can request support from the national ecosystem.

### *Strategic Direction - Education*

AI can enhance the quality, accessibility, and efficiency of education in Cambodia, supporting the country's long-term human capital development goals. As part of broader digital transformation in the education sector, AI will be leveraged to support personalized learning, improve access to education for students in remote areas, and strengthen the capacity of educators and administrators.

Key applications include:

- **Adaptive Learning:** AI-powered platforms can tailor content delivery based on individual learners' progress, pace, and preferred learning styles. By dynamically adjusting exercises, explanations, and assessments, these systems help students engage more effectively and master subjects at their own speed.
- **Intelligent Tutoring Systems:** AI-driven tutors can provide real-time support for students outside of the classroom, helping them grasp complex concepts, practice problem-solving, and receive instant feedback. These tools can complement traditional teaching, especially in STEM subjects and language learning.
- **Accessibility and Inclusion:** AI tools such as speech-to-text, text-to-speech, and real-time translation services can improve educational access for students with disabilities, non-Khmer speakers, and learners in remote or multilingual settings. Given the challenges posed by the complex Khmer alphabet, this may have wider applications for voice interaction across the digital economy.
- **Administrative Support:** AI can automate tasks such as grading, attendance tracking, and performance analytics, reducing the administrative burden on educators and enabling data-driven insights for student support and curriculum planning.

These innovations align with Cambodia's education reforms under the Pentagonal Strategy, offering scalable solutions to enhance hybrid learning models, improve equity in education, and build a more digitally fluent future workforce.

### *Strategic Direction - Healthcare*

Artificial intelligence can play a role in modernizing the health sector to contribute to expanding access to healthcare services, aiming to improve the health status of citizens, especially in underserved

communities. Cambodia has been piloting AI technologies to serve the health sector, including the project "Participating in Reducing Antimicrobial Drug Resistance Using Machine Learning through Artificial Intelligence" and the pilot use of AI-assisted medical imaging.

Key applications include:

- **Medical Imaging**: AI algorithms can assist in analyzing diagnostic images such as X-rays, CT scans, and MRIs to detect conditions like cancer, pneumonia, and bone fractures with a level of precision that may exceed human interpretation. These tools can help relieve pressure on Cambodia's limited pool of radiologists, especially in provincial hospitals
- **Predictive Analytics:** AI can be used to analyze patient data to forecast risks and identify early warning signs for diseases such as diabetes and hypertension. This enables more proactive, personalized care, and supports national efforts toward preventive health models, potentially saving millions in long-term treatment costs.
- **Telemedicine:** AI-enabled telemedicine platforms can improve healthcare accessibility for rural populations, enabling virtual consultations, basic diagnostics, and triage advice. These systems can help reduce the burden on urban hospitals and ensure timely care in remote areas.
- **Administrative Efficiency:** Routine administrative tasks such as appointment scheduling, medical billing, and electronic health record management can be automated using AI, freeing up time for healthcare providers to focus on patient care.
- **Public health:** Artificial intelligence has a high potential to modernize public health systems, especially in the areas of infectious disease surveillance, health education, and disease prevention. In addition, artificial intelligence can help improve the quality of medical education and training, which contributes to increasing human resources in medicine.

### *Strategic Direction - Agriculture*

As a foundational sector for Cambodia's economy and rural livelihoods, agriculture presents one of the most immediate and impactful opportunities for AI adoption. By supporting smarter, more precise farming practices, AI can help modernize Cambodia's agricultural systems, improve yields, and strengthen resilience to climate shocks.

Key applications include:

- **Predictive Analytics:** By analyzing historical agricultural data alongside current field conditions, AI systems can forecast yields, identify early signs of pest infestations or crop disease, and recommend preventive actions. This empowers farmers to take timely, informed decisions and reduce crop losses.
- **Smart Farming Technologies:** AI-enabled internet of things (IoT) devices and autonomous equipment can optimize farming operations such as seeding, irrigation, and harvesting. These technologies reduce the reliance on manual labour, lower input costs, and contribute to more consistent productivity, especially in areas with labour shortages.
- **Crop Monitoring:** AI-powered drones and sensors can monitor soil quality, plant health, and weather patterns in real-time. These tools provide farmers with actionable insights to guide irrigation, fertilization, and disease management—improving both efficiency and sustainability.
- **Supply Chain Management:** AI can also enhance efficiency beyond the farm. Tools for demand forecasting, inventory management, and logistics optimization help reduce food waste, streamline market delivery, and stabilize farmgate prices—benefiting both producers and consumers.
- **Agricultural market:** Artificial intelligence can analyze market data such as agricultural product prices, consumer needs and preferences, and market trends, etc. Artificial intelligence can also predict product prices based on weather data and supply data, which helps farmers make the right decisions in producing and selling products.

- **Agricultural extension:** Support to farmers can be done quickly by integrating the use of artificial intelligence in the form of chatbots, etc. to automatically provide solutions or instructions when farmers have questions or concerns. In addition, searching for various knowledge can also be done quickly by incorporating agricultural knowledge content extracted from agricultural libraries, all of which can be easily summarized or searched using artificial intelligence.

The integration of AI in agriculture should be piloted in regions with digital infrastructure readiness, with an emphasis on scalable tools that can be adapted for **smallholder farmers**. As Cambodia expands its digital connectivity and develops enabling platforms, AI can play a key role in transforming agriculture into a **data-informed, climate-resilient**, and increasingly value-generating sector.

*Strategic Direction - Manufacturing*

Cambodia's manufacturing sector—particularly light industry—has been a key driver of economic growth and job creation. While the sector is still in the early stages of digital maturity, the strategic adoption of AI offers clear opportunities to enhance productivity, quality, and operational efficiency. AI can help local manufacturers remain competitive in global value chains and attract higher-value investments.

Key applications include:

- **Process Automation:** AI-powered robots and intelligent machinery can handle repetitive, precision-based, and labour-intensive tasks—such as assembly, packaging, and inspection—at scale. This reduces human error, increases throughput, and enables consistent product quality.
- **Predictive Maintenance:** By analyzing data from embedded sensors and industrial IoT systems, AI can forecast equipment failures and schedule maintenance proactively. This helps manufacturers minimize downtime, extend machine lifespans, and reduce repair costs.
- **Quality Control:** AI-based computer vision systems can detect defects and anomalies in real-time, ensuring that quality standards are consistently upheld. These tools can be especially valuable in export-oriented sectors where compliance with international standards is critical.
- **Supply Chain Optimization:** AI tools can enhance end-to-end supply chain efficiency by predicting demand fluctuations, managing inventory more precisely, and streamlining logistics. This reduces overhead costs and supports leaner, more resilient operations.

To accelerate adoption, the NAIS encourages pilot deployments in Cambodia's Special Economic Zones (SEZs)—particularly those near logistics hubs or with planned smart infrastructure. These zones can serve as testbeds for AI-powered manufacturing, drawing lessons to scale across the sector. Partnerships with vocational institutions and industry associations will also be promoted to build the necessary skills pipeline and facilitate technology transfer.

*Strategic Direction - Tourism*

As one of Cambodia's most important economic sectors and a window to its cultural identity, tourism stands to gain significantly from the thoughtful integration of AI technologies. AI can both **enhance the visitor experience** and support more **efficient, data-driven operations** across the industry, particularly as Cambodia looks to rebuild and modernize its tourism ecosystem in the post-pandemic era.

Key applications include:

- **Personalized Recommendations**: AI systems can analyze tourist preferences, behaviors, and historical trends to generate tailored suggestions for attractions, restaurants, tours, and cultural activities. These personalized services enhance the tourist experience while promoting lesser-known destinations and experiences.
- **Chatbots and Virtual Assistants**: AI-powered multilingual chatbots can provide real-time support to travellers, offering assistance with bookings, directions, and general inquiries. These tools can

be integrated into tourism websites, apps, and even on-site kiosks to improve accessibility and service quality, including in Khmer and languages of major foreign tourist groups to Cambodia.

- **Crowd Management and Site Optimization**: AI tools such as video analytics and predictive models can help monitor and manage visitor flows at major heritage sites like Angkor Wat. This improves safety, preserves cultural assets, and creates smoother visitor experiences during peak-travel seasons.
- **Predictive Analytics for Planning**: By analyzing historical and real-time tourism data, AI can help authorities and businesses forecast peak periods, optimize pricing strategies, and allocate resources more effectively. This contributes to improved planning, staffing, and infrastructure readiness.

Beyond its economic value, AI also offers tools to preserve and promote Cambodia's cultural heritage through automated translation, voice-guided tours, and immersive digital experiences that make cultural content more engaging and accessible to a global audience.

### *Strategic Direction - MSMEs*

Micro, small, and medium-sized enterprises (MSMEs) are the backbone of Cambodia's economy, accounting for the majority of businesses and a significant share of employment. As digital transformation accelerates, AI offers MSMEs and startups powerful tools to enhance their efficiency, competitiveness, and growth potential. Ensuring that these technologies are accessible to small businesses is critical to creating a more inclusive digital economy.

Key applications include:

- **Customer Insights**: AI can analyze customer data—including purchase histories, browsing behavior, and feedback—to generate deep insights into consumer preferences and market trends. These insights help MSMEs tailor their product offerings, pricing strategies, and service models to meet customer demands more effectively.
- **Inventory Management**: AI-powered tools can predict demand patterns, optimize inventory levels, and automate reordering processes. This helps businesses minimize stockouts and overstock situations, improving operational efficiency and reducing costs.
- **Personalized Marketing**: AI-driven platforms can create customized marketing campaigns based on individual customer profiles. These campaigns increase engagement and drive conversions by delivering the right message to the right audience at the right time.
- **Customer Service**: Chatbots and virtual assistants powered by AI can provide instant customer support, answering common questions, assisting with transactions, and resolving service issues—freeing up staff time and improving customer satisfaction.

To support widespread adoption, **capacity-building programs**, **toolkits**, and **pilot partnerships** with local business associations could be launched. These initiatives will be integrated into broader digitalization efforts under the Digital Economy and Society Policy Framework, with a focus on increasing MSME participation in e-commerce, fintech, and cross-border digital trade.

### *Strategic Direction - Finance*

The financial sector in Cambodia includes the banking sector under the jurisdiction of the National Bank of Cambodia and the non-bank financial sector under the jurisdiction of the Non-Banking Financial Services Authority. Artificial intelligence is an important digital technology that has the potential and opportunity to develop financial technology and digital applications in the financial sector with a modern, safe, secure, stable, reliable and innovative manner, including market diversification and customer protection, as a benefit to reform and strengthen governance in the era of artificial intelligence and data. The adoption and development of artificial intelligence in the financial sector mainly covers research and development, the preparation of strategic and regulatory frameworks, the development of digital

infrastructure and/or systems, human resource development, promoting the widespread use and development of digital technologies, and collaboration and cooperation in the ecosystem of relevant actors. To maximize the benefits of artificial intelligence in the financial sector and minimize risks, the Royal Government has launched the following activities:

- Research and develop artificial intelligence in the financial sector
- Prepare strategies/strategic plans, frameworks, projects and legal documents that include responsibilities, ethics, security and safety protection and risk management related to artificial intelligence in the financial sector
- Prepare, develop and launch an artificial intelligence test environment in the financial sector
- Develop capabilities and qualifications related to artificial intelligence in the financial sector
- Promote the use and development of artificial intelligence in, among others, regulatory and supervisory technologies, including customer service improvement, process automation, identification, fraud prevention, early warning, risk management and compliance, data and text analysis, anti-money laundering and countering the financing of terrorism and proliferation of weapons of mass destruction, cybersecurity and countering cybercrime, and diversification of products and services in the financial sector.
- Strengthen collaboration and cooperation in the ecosystem of actors related to artificial intelligence in the financial sector.

### *Strategic Direction - Transport*

As Cambodia's urban population and e-commerce grow, transportation and logistics systems must evolve to be more efficient, reliable, and responsive to demand. Artificial intelligence technologies can play a key role in improving urban mobility and end-to-end transportation systems to reduce congestion, increase resource efficiency, and support more sustainable transportation infrastructure.

Key application cases include:

- **Route Optimization**: AI algorithms can analyze real-time traffic, road conditions, and weather data to determine the most efficient delivery or transport routes. This reduces travel times, lowers fuel consumption, and improves fleet efficiency—particularly important in congested urban areas like Phnom Penh.
- **Dynamic Scheduling and Load Optimization**: AI systems can forecast demand patterns and dynamically schedule deliveries or transport services, maximizing vehicle usage and reducing operational delays. These tools also support load balancing, minimizing empty trips and improving cost-efficiency for logistics providers.
- **Real-Time Tracking and Customer Engagement**: AI-powered platforms offer **live tracking**, estimated delivery times, and automated notifications, improving transparency and customer satisfaction for logistics and ride-hailing services.
- **Address Validation and Predictive Analytics**: AI tools help ensure accurate geolocation and delivery estimates, reducing failed deliveries and enhancing reliability in areas with informal addressing systems.
- **Sustainable Mobility**: By enabling smarter route planning and reducing idle time, AI contributes to **lower carbon emissions**, supporting Cambodia's commitments to environmental sustainability and resilient urban development.

The national strategy encourages pilot projects using artificial intelligence in collaboration with logistics companies, travel booking agencies, and municipal administrations to demonstrate the value of artificial intelligence in traffic management, increasing fleet efficiency, and enhancing service reliability.

### *Strategic Direction - Digital*

AI has the potential to accelerate digital transformation, improve the efficiency of digital infrastructure and connectivity, reduce cybersecurity risks, protect personal data, and support the creation of innovative digital business models.

Key applications include:

- Digital infrastructure and connectivity efficiency: AI can be used to enhance the service delivery capacity of digital networks, enhance system security, and support high-density computing.
- Cybersecurity: AI can be used to detect cybersecurity threats and respond to malware automatically.
- Personal data protection: AI systems for compliance can help meet personal data protection requirements, identify data breaches, and monitor data sharing. AI-powered encryption can also be used to securely transmit data.
- New businesses and digital commerce: Artificial intelligence is a useful tool for creating new digital businesses and new digital commerce models by supporting business functions such as predicting market movements, recommending or creating personalized advertisements, increasing customer satisfaction, responding to customer questions and requests, managing inventory, creating content, and rapidly creating product prototypes.

### *Strategic Direction - Information*

Information integrity is an important part of socio-economic development, especially through dissemination of knowledge and promotion of transparency, providing information for citizens to make informed decisions about businesses and investment, data about the market, new research and technology, and promote productivity and competitiveness. Besides economic support, clear information is also important for social development and protection of people's lives, for instance, in the case of clear communication during disasters. Proper information management during periods of crises can help to reduce face news, panic, and disruptions, and contributes to public order and national unity.

AI may be used as tools for:

- **Information verification**: Quickly identify fake news and their sources to respond quickly.
- **Clear communication**: Translate and adapt public information to different types of audience.
- **Quick answer from reliable souces**: chatbots can link users to official sources.
- **Understanding public sentiment**: Understand the trends and concerns among members of the public and quickly provide pertinent information.

Processes involving artificial intelligence must be under human supervision and there must be clear indicators when artificial intelligence is the creator of content. Data managed by artificial intelligence systems must be strictly protected by high standards of privacy, security and freedom in accordance with relevant regulations. Reducing risks from artificial intelligence in the information sector is a way to protect information integrity, that is, to protect truth, democracy and ensure the freedom of individual decision-making in the age of artificial intelligence. The principles and measures related to the use of artificial intelligence in the information sector are regularly reviewed and updated to ensure their suitability and safety in the rapidly developing technological context.

## Strategic Priority 5 – Promoting Ethical and Responsible AI

A key foundation for embracing digital technologies is trust. To increase the trust of all stakeholders in the use of AI, Cambodia needs an appropriate governance framework in place to manage risks and address the negative impacts of AI, aiming to promote ethics and responsibility in the development, deployment, and use of AI. Some risks and impacts arise from the specific nature of AI technologies, but many arise from the misuse or abuse of the technology. Different types of risks and impacts require different solutions, which may include technical, social and regulatory measures.

To maintain a balance between the burdens of compliance and rooms for innovation, measures must be proportionate. Cambodia adopts a light-touch approach to AI governance in line with regional and global trends and builds a regulatory framework step by step as AI technology evolves, starting with strengthening supply-side regulation and direct regulation for high-risk applications. It should be noted

that because AI systems are digital systems by nature, all policies, laws, regulations, and guidelines generally applicable to digital systems, such as cybersecurity and personal data protection rules prepared by MPTC and/or included in sectoral regulations, also apply to AI systems.

Additionally, AI risk management at the national level includes protecting cultural values, tradition, and the national identity. To this end, priority measures related to the proliferation of data pertinent to the Khmer language, culture, and national context under Strategic Priority 2 will contribute to addressing the issues of representativeness as these data makes way into mainstream and future AI models.

**Strategic measures under Strategic Priority 5 include:**

5.1. Prepare the National AI Governance Framework to harmonize governance from the national through sectoral to the enterprise levels.

5.2. Disseminate the AI ethics principles and the principles of responsible development, deployment, and use of artificial intelligence.

5.3. Compile, enhance, and disseminate technical resources that facilitate compliance with ethical principles and principles of responsible development of artificial intelligence.

5.4. Prevent and mitigate the negative impacts of digital content created or modified using artificial intelligence.

5.5. Promote and support risk assessments of the use of artificial intelligence by sector and by key institutions, with participation from relevant stakeholders according to each sectoral context.

5.6. Conduct a feasibility study for setting up a (regulatory) sandbox artificial intelligence.

5.7. Study the preparation of a response mechanism for artificial intelligence incidents.

5.8. Strengthen understanding and respect for intellectual property within the framework of the ethical and responsible use and development of artificial intelligence.

5.9. Invest in research and training of human resources related to AI ethics, responsible AI and AI regulation.

| Flagship Activities | Strategic Priorities Addressed |
|---|---|
| **(1) - Prepare Cambodia Guidelines on AI Governance and Ethics**<br>- MPTC to prepare, in consultation with relevant ministries, institutions, and stakeholders<br>- Ministries and institutions participate in the dissemination and adapt the guidelines for sectoral use | 5.2 |
| **(2) - Create and disseminate datasets for safety evaluation of AI models for Cambodian context**<br>- CADT in collaboration with relevant partners | 5.3 |
| **(3) - Prepare new regulation or update existing regulation to combat abuse of AI-generated or manipulated content**<br>- MInfo, MoI, and MPTC to work in tandem | 5.4 |
| **(4) – Designate responsible units to prepare a "National AI Observatory" to monitor developments related to the promotion of ethical and responsible AI adoption and development**<br>- MPTC to execute, in collaboration with relevant partners | 5.2, 5.3, and 5.9 |

## Strategic Priority 6 – Promoting Collaboration, Research, Development, and Innovation

Domestic and international collaboration and partnerships will accelerate the AI adoption and development in Cambodia. International cooperation, both bilateral and multilateral at the regional and global levels, provides a source of knowledge and technological resources to drive domestic

development. Public, private, and international partners are all options for strengthening Cambodia's network in AI.

As a member of UNESCO, Cambodia supports the Recommendation on the Ethics of Artificial Intelligence. At the same time, Cambodia actively participates in regional efforts, including the ASEAN Working Group on AI Governance under ASEAN Digital Senior Officials' and Digital Ministers' Meetings, as well as the Hiroshima AI Process Friends Group. Work products and principles born out by these regional mechanisms are input in the process of preparing this strategy and will guide its implementation.

More importantly, partnerships with domestic institutions, including the private sector, academia, and civil society, are indispensable for Cambodia to achieve the vision and objectives in this strategy. In particular, state support for research, development, and innovation, whether carried out by academia alone or through collaboration between academia and the private sector, are key to accelerating the targeted use of AI and building a strong AI capacity in the country for Cambodia's technological future.

In brief, collaboration is both a priority in its own right and a systematic approach to implementing all strategic measures in this strategy. In other words, responsible ministries and institutions welcome participation from all partners—domestic and international—who with the capacity, capability, and goals of supporting Cambodia, for mutual benefits.

**Strategic measures under Strategic Priority 6 include:**

6.1. Strengthen cross-sectoral collaboration to promote the AI adoption and development.

6.2. Create a conducive environment for collaboration and partnership between relevant stakeholders, including ministries, institutions, the private sector, academia, and civil society.

6.3. Establish collaboration with leading regional and global AI companies and institutions.

6.4. Strengthen and expand global, regional, and bilateral AI collaboration and partnerships.

6.5. Organize annual AI events to strengthen relations with relevant stakeholders both domestically and internationally.

6.6. Implement a multi-stakeholder approach to implementing strategic priorities in the National Artificial Intelligence Strategy through existing or additional mechanisms as necessary.

6.7. Promote and encourage AI research, development, and innovation, giving priority to creating added value from AI for economic and social development.

6.8. Provide funding and incentives for new AI businesses and micro, small, and medium-sized enterprises.

6.9. Gradually invest in scientific research in artificial intelligence to accumulate resources for the future.

6.10. Establish research and innovation hubs or projects in collaboration with the private sector and academic institutions.

| Flagship Activities | Strategic Priorities Addressed |
|---|---|
| **(1) - Establish the Research Center for AI in Education**<br>- MoEYS and the Rector Council of Cambodia, headquartered at CADT | 6.1 and 6.7 |
| **(2) - Establish a multi-purpose Digital Park to serve multi-stakeholder collaboration**<br>- MPTC to implement, with support from CDC | 6.2 |
| **(3) - Continue to participate closely in AI work under the ASEAN Digital Ministers' Meeting**<br>- MPTC | 6.4 |
| **(4) - Participate in global AI collaboration platforms**<br>- MPTC with support from MFAIC | 6.4 |
| **(5) - Organize the National AI Forum** | 6.5 |

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| - MPTC with participation from relevant ministries and institutions | |

## V. Implementation and Monitoring and Evaluation Mechanism

The timeframe and stakeholders for each strategic action are outlined in the Annex.

The Digital Government Committee is the inter-ministerial mechanism that provides high-level coordination for the implementation of the National Artificial Intelligence Strategy. An Inter-Ministerial Working Group on Artificial Intelligence will be established under DGC to provide working-level coordination and support to relevant ministries and institutions in the process of implementing the strategy. Relevant units and mechanisms MPTC shall provide technical and administrative support to the inter-ministerial working group. The AI focal points and technical officers nominated by ministries and institutions at the request of the Minister of MPTC and Chair of DGC will be the champions promoting the dissemination and implementation of the National Artificial Intelligence Strategy on in their respective ministries and institutions under the leadership of the designated leaders in their ministry/institution. In case of necessity, sectoral sub-working groups may be established under the inter-ministerial working group.

In order to implement and facilitate the monitoring and supervision of the implementation of the strategy, the Inter-Ministerial Working Group will prepare annual action plans, adapting the strategic measures to the actual situation and recent developments in the field of AI. In order to accelerate the implementation of the first years, all the Flagship Activities identified under each strategic priority will be automatically included in the overall action plan for 2025 and 2026. From 2027 onwards, the action plan will be prepared annually. Key performance indicators will be set in the annual action plans.

The Inter-Ministerial Working Group on Artificial Intelligence will monitor the progress of the work every 3 months and report to the DGC every 6 months, to resolve issues or set new directions, if any. At the end of 2026 and 2028, MPTC will prepare an achievement report for dissemination to inform relevant parties and the public.

By the end of 2030, the Inter-Ministerial Working Group will prepare an evaluation report of the strategy to serve as a basis for learning and further actions.

The strategic measures in this national strategy are defined broadly enough to facilitate practical implementation. However, this national strategy on artificial intelligence is a living document that can be revised as necessary.

## VI. Conclusion

The National Artificial Intelligence Strategy was developed in the context of rapid changes in AI technology. Thanks to the Royal Government and relevant ministries and institutions having paid close attention to harnessing the benefits of digital technology, Cambodia has a suitable basis on which to promote AI adoption and development in support of economic and social development.

Setting realistic strategic priorities, flexible strategic measures, and flagship activities that can yield immediate results are the keys to finding a balance between the need to act quickly while maintaining agility to respond to new developments.

Through collaboration between ministries, institutions, the private sector, academia, civil society organizations, and all partners, Cambodia will be able to maximize the benefits and minimize the negative impacts of AI and realize a vision to build an advanced future for Cambodian technology.

## VII. Annex – Strategic Measures and their Timeframe

| No. | Strategic Measures | Relevant Entities | Timeframe |
|---|---|---|---|
| **Strategic Priority 1 – Human Resource Development** | | | |
| 1.1 | Promote and support AI training for leaders of private enterprises. | - MPTC in collaboration with MoC<br>- Ministries and institutions participate sectorally<br>- Private enterprises join in building their own capacities | Continually (2025-2030) |
| 1.2 | Train 1000 technical talents in AI, data science, and related areas. | - MPTC with support from MoEYS and MLVT | 2025-2027 |
| 1.3 | Promote the development and support the delivery of degree and certificate programs in AI, data science, and related areas. | - MPTC with support from MoEYS and MLVT<br>- Higher-ed institutions and technical and vocational training institutions to participate | 2025-2027 |
| 1.4 | Explore the possibilities of attracting and nurturing high school students with the right predispositions to build a career in AI, data science, or related areas. Female students should be given particular encouragement to participate. | - MPTC and MoEYS to implement in tandem | 2026 |
| 1.5 | Coordinate and conduct supply-demand matchmaking between providers and deployers of AI solutions and related products (including training services for professionals) and relevant professional communities | - MPTC in collaboration with sectoral ministries and institutions<br>- Professionals participate, to gain understanding and provide input | 2025-2027 |
| 1.6 | Instill a broad understanding of the general concepts, advantages, disadvantages, basic use, ethical and responsible use, and self-protection from the risks of artificial intelligence technology | - MPTC leads the implementation<br>- All ministries and institutions to participate<br>- All stakeholders participate in raising awareness | Continually (2025-2030) |
| 1.7 | Compile and disseminate self-learning materials on AI and data literacy in various forms | - MPTC leads the implementation<br>- All ministries and institutions implement sectorally | 2025-2027 |

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| | | - All stakeholders join in raising awareness | |
| 1.8 | Integrate materials related to AI, data science, and related lessons into all levels of education. | - MoEYS to implement, with support from MPTC | Continually (2025-2030) |
| 1.9 | Conduct a study on the potential impact of AI on the labor market and propose risk mitigation measures, including protection, upskilling, and providing alternative opportunities for groups likely to be affected by AI, with special attention paid to women and other vulnerable groups. | - MPTC and MLVT to implement in tandem | 2026 |
| 1.10 | Explore the possibilities of using, promoting, and supporting open-source resources or other forms of open technologies (e.g., open weight models) | - MPTC leads the implementation<br>- Partners, the private sector, and digital professional community to support and provide feedback | Continually (2025-2030) |
| **Strategic Priority 2 – Data, Infrastructure, and Key Technologies** | | | |
| 2.1 | Induce public and private institutions in all sectors to properly collect and manage the data in their institutions and sectors | - MPTC leads the implementation<br>- All ministries and institutions implement sectorally<br>- Private sector joins in implementation | 2025-2027 |
| 2.2 | Support, coordinate, and encourage open data and data sharing initiatives | - MPTC leads the implementation<br>- All ministries and institutions implement sectorally<br>- Private sector and civil society join in implementation | Continually (2025-2030) |
| 2.3 | Promote the increase and sharing of Khmer language data and data related to Cambodian culture and society, as well as data in each sector | - MPTC leads the implementation<br>- All ministries and institutions implement sectorally<br>- Private sector and civil society join in implementation<br>- Members of the public participate according to their profession | Continually (2025-2030) |

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| 2.4 | Promote the use of cloud technology to contribute to increasing access to computing resources and technology component for AI adoption and development | - MPTC leads the implementation<br>- All ministries and institutions implement sectorally | 2025-2027 |
| 2.5 | Increase access to computing resources for AI research, development, and innovation | - MPTC | Continually (2025-2030) |
| 2.6 | Promote, incentivize, and invest in key technologies to support critical or large-scale use cases | - MPTC | Continually (2025-2030) |
| 2.7 | Conduct a study on the markets of computing resources, AI, and data in Cambodia | - MPTC to implement with cooperation from the relevant ministries and the private sector | 2026 |
| **Strategic Priority 3 – Promoting the AI Adoption and Development for Digital Government** | | | |
| 3.1 | Provide AI leadership training for leaders and senior officials from ministries and institutions | - MPTC to oversee with CADT as the implementing agency<br>- Ministries and institutions assign trainees | 2025-2027 |
| 3.2 | Provide technical training on AI, data science, and related areas to officers from ministries and institutions based on their skill levels and work priorities | - MPTC to oversee with CADT as the implementing agency<br>- Ministries and institutions assign trainees | Continually (2025-2030) |
| 3.3 | Incorporate AI knowledge and skills into existing training digital literacy training programs for civil servants | - MCS and MPTC to work in tandem | Continually (2025-2030) |
| 3.4 | Disseminate AI literacy to academic and administrative staff in public education institutions, in phases | - MoEYS with support from MPTC | Continually (2025-2030) |
| 3.5 | Increase AI technology resources for digital government | - MPTC with participation from ministries and institutions | Continually (2025-2030) |
| 3.6 | Promote the use existing AI-driven Digital Government Products and promote the creation of new AI-driven Digital Government Products in accordance with shared demand among ministries and institutions | - MPTC with participation from ministries and institutions | Continually (2025-2030) |
| 3.7 | Implement pilot and flagship projects for AI adoption for internal work improvement or better public service delivery. | - MPTC leads the implementation<br>- Ministries and institutions participate | 2025-2027 |

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| 3.8 | Promote ethical and responsible AI adoption in the public sector. | - All ministries and institutions participate | Continually (2025-2030) |
| **Strategic Priority 5 – Promoting Ethical and Responsible AI** | | | |
| 5.1 | Prepare the National AI Governance Framework to harmonize governance from the national through sectoral to the enterprise levels | - MPTC leads the implementation with participation from ministries and institutions<br>- The private sector provides input | 2025-2026 |
| 5.2 | Disseminate the AI ethics principles and the principles of responsible development, deployment, and use of artificial intelligence | - MPTC leads the implementation<br>- Ministries and institutions participate in dissemination and may adapt or complement the materials for sectoral implementation | 2025-2026 |
| 5.3 | Compile, enhance, and disseminate technical resources that facilitate compliance with ethical principles and principles of responsible development of artificial intelligence | - MPTC leads the implementation<br>- Ministries and institutions participate in dissemination | Continually (2025-2030) |
| 5.4 | Prevent and mitigate the negative impacts of digital content created or modified using artificial intelligence | - MInfo, MoI, and MPTC to work in tandem<br>- The private sector and the public to participate | Continually (2025-2030) |
| 5.5 | Promote and support risk assessments of the use of artificial intelligence by sector and by key institutions, with participation from relevant stakeholders according to each sectoral context | - Ministries and institutions implement and promote assessment in their respective sectors<br>- MPTC to support | Continually (2025-2030) |
| 5.6 | Conduct a feasibility study for setting up a (regulatory) sandbox for artificial intelligence | - MPTC to implement with participation from relevant ministries and institutions | 2027 |
| 5.7 | Study the preparation of a response mechanism for artificial intelligence incidents | - MPTC to implement with participation from relevant ministries and institutions | 2026 |
| 5.8 | Strengthen understanding and respect for intellectual property within the framework of the ethical and responsible use and development of artificial intelligence | - MPTC implements in participation with the National Committee on Intellectual Property Protection | Continually (2025-2030) |

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| 5.9 | Invest in research and training of human resources related to AI ethics, responsible AI and AI regulation | - MPTC | Continually (2025-2030) |
| **Strategic Priority 6 – Promoting Collaboration, Research, Development, and Innovation** | | | |
| 6.1 | Strengthen cross-sectoral collaboration to promote the AI adoption and development | - All ministries and institutions and private enterprises from all sectors to participate | Continually (2025-2030) |
| 6.2 | Create a conducive environment for collaboration and partnership between relevant stakeholders, including ministries, institutions, the private sector, academia, and civil society | - MPTC leads the implementation<br>- Ministries and institutions participate | Continually (2025-2030) |
| 6.3 | Establish collaboration with leading regional and global AI companies and institutions | - MPTC | Continually (2025-2030) |
| 6.4 | Strengthen and expand global, regional, and bilateral AI collaboration and partnerships | - MPTC implements with support from MFAIC | Continually (2025-2030) |
| 6.5 | Organize annual AI events to strengthen relations with relevant stakeholders both domestically and internationally | - MPTC leads the implementation<br>- Ministries and institutions participate | Continually (2025-2030) |
| 6.6 | Implement a multi-stakeholder approach to implementing strategic priorities in the National Artificial Intelligence Strategy through existing or additional mechanisms as necessary | - MPTC leads the implementation<br>- Ministries and institutions participate | Continually (2025-2030) |
| 6.7 | Promote and encourage AI research, development, and innovation, giving priority to creating added value from AI for economic and social development | - MPTC, MoEYS, and MISTI to work in tandem<br>- Academia, the private sector, and development partners participate | 2025-2027 |
| 6.8 | Provide funding and incentives for new AI businesses and micro, small, and medium-sized enterprises. | - MPTC with support from MEF and CDC | |
| 6.9 | Gradually invest in scientific research in artificial intelligence to accumulate resources for the future. | - MPTC, MoEYS, and MISTI to work in tandem<br>- Academia, the private sector, and development partners participate | 2027-2030 |
| 6.10 | Establish research and innovation hubs or projects in collaboration with the private sector and academic institutions. | - MPTC through collaboration with MoEYS and MISTI | Continually (2025-2030) |

## VIII. Glossary

[TBD]