LONG-TERM POLICY FRAMEWORK FOR CAMBODIA’S DIGITAL ECONOMY

Marry Kong, PhD
Cambodia’s Digital Economy Working Group
Become an upper-middle-income country.

Cambodia Vision 2050
Become a high-income country.

Rectangular Strategy IV
Preparation to embrace digital economy.

NOW
A long-term strategic framework for digital economy.

2018
Preparation to embrace digital economy.

2030
Cambodia Vision 2050
Become an upper-middle-income country.

2050
<table>
<thead>
<tr>
<th>STATISTICS</th>
<th>15.2M</th>
<th>Population</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>6</td>
<td>(3 share &gt; 90%) Mobile Operators</td>
</tr>
<tr>
<td></td>
<td>36</td>
<td>Internet Service Provider</td>
</tr>
<tr>
<td></td>
<td>50,000+KM</td>
<td>Land Fiber Optical Network</td>
</tr>
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<table>
<thead>
<tr>
<th>PENETRATION</th>
<th>117%</th>
<th>Mobile Subscription</th>
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<tbody>
<tr>
<td></td>
<td>0.52%</td>
<td>Fixed-line Subscription</td>
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<tr>
<td></td>
<td>84%</td>
<td>Internet Subscription</td>
</tr>
<tr>
<td></td>
<td>10%</td>
<td>Household Broadband</td>
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<table>
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<tr>
<th>SOCIAL MEDIA</th>
<th>8.3M users</th>
<th>1.9M users</th>
<th>720K users</th>
<th>500K users</th>
<th>330K users</th>
<th>200K users</th>
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</table>

DIGITAL INFRASTRUCTURE

Good basic mobile access

Improving internet access

Inadequate fixed broadband

Source: ITU, 2017
DIGITAL ADOPTION INDEX

Digital Adoption Index (and sub-indexes), relative to world average

Source: World Bank, 2018

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DIGITAL ADOPTION BY FIRMS

Digital Adoption Index - firm subcomponents

Note: The global median refers to both index of 2015 and 2017
Source: World Bank, 2018

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DIGITAL MANPOWER

SHORTAGE ICT SKILL SUPPLY

of businesses in IT Sector are unable to hire staff with adequate IT skills

Source: World Bank, 2018

KONRAD ADENAUER STIFTUNG in 2019 surveyed 61 companies for about 100 employees. They found out:

1. Only half of the employees surveyed understand what a “digital economy” entails.
2. Half of them think their ICT skills are at most “average”.
3. 82% of the employees use basic technologies (office, internet, email) while less than 40% say they do video calling, use online storage and productivity tools.
4. More than 72% of the employees say they cannot depend on their company to upskill them.

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E-Commerce Law has been just passed by the National Assembly on 8 October 2019.

<table>
<thead>
<tr>
<th>Country</th>
<th>Electronic transactions/e-signature?</th>
<th>Data protection/privacy online?</th>
<th>Consumer protection for online purchase?</th>
<th>Cybercrime prevention?</th>
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<td>Thailand</td>
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<tr>
<td>Vietnam</td>
<td>Yes</td>
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</table>

Source: Digital Economy, Cambodia Policy Note, World Bank, 2018
WHAT IS DIGITAL ECONOMY?

No agreed definition, but the World Bank suggests:

“wide range of economic activities that use digitized information and knowledge as key factors of production”

What we thought the definition that may fit to Cambodia:

“a part of economic output derived primarily from digital technologies with a business model based on digital goods and services”
DIGITAL ECONOMY IN SIZE

THE WORLD DIGITAL ECONOMY

2017
$12.9tn

Global Connectivity Index, 2018

2025
$23tn
forecast

ASEAN DIGITAL ECONOMY

2019
$100bn

e-Conomy SEA 2019 by Google

2025
$300bn
forecast

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STATUS OF CAMBODIA’S DIGITAL ECONOMY

E-COMMERCE

0.51% of GDP

Domestic e-Commerce

6%
$6.4m

90%
Fly Ticket

10%
Online Shopping

Cash on Delivery (cannot capture)

Cross-border e-Commerce

94%
$106.4m

21.2%
Electronic Equipment

7.6%
Online Shopping

39%
Annual Growth

20.9%
Tourism Companies

6.7%
Social Network

26.7%
Others

16.9%
Online Platform

Source: Ministry of Economy and Finance, 2018

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**STRENGTH**
- Increasing young, educated population.
- Fast tech spillovers from FDIs.
- Situate in a dynamic region.
- Rising of middle class creating more demand for digital goods.
- Rapid development of digital payment, online entertainment, and e-commerce.

**OPPORTUNITY**
- Access to oversea markets.
- New business opportunities.
- Growing demand due to the rising of middle class.
- Digitalization to address development challenges in health, agriculture, etc.

**WEAKNESSES**
- Insufficient digital infrastructure.
- Government digital adoption is shallow and not integrated.
- Business digital adoption is still low.
- ICT skills and literacy are low.
- Small local market for digital business.
- Complex Khmer script for contents and analysis.

**THREAT**
- Negative impact on job displacement and loss.
- Affect current value chains.
- Expose cyber risks.
- Economic and social disparities will widen.
- Absence of legal framework.
- Late development.

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Basic digital infrastructure
No common digital payment gateway
Problematic of postal address for last-mile delivery
Need a concrete plan for digital government
Digital business, startup and their ecosystem are at nascent stage
Limited participation in the region and global value chain

Lack of digital leadership and fundamental skills for digital economy
Low digital literacy and capability among citizen
Insufficient laws and regulations
Lack of digital trustworthiness
Need a sustained, coordinated mechanism
VISION AND GOAL

VISION

Follow the vision of the Cambodia Vision 2050

“Reclaiming National Pride, Rebuilding Vibrant Nation” based on the aspiration of “transforming Cambodia into an upper-middle-income country by 2030 and a high-income country by 2050”

GOAL

“To build a sizable digital economy to be one of the growth drivers, to continuously innovate, and to facilitate transformation of Cambodia into a digital society”
CHOICES OF IMPLEMENTATION

IMPLEMENTATION
Supposed to start from 2021.

DURATION
Either 15 or 20 years.

PHASES
Either 3 or 4 phases.

- PHASE 1
  DIGITAL FOUNDATION
- PHASE 2
  DIGITAL ADOPTION
- PHASE 3
  DIGITAL TRANSFORMATION
- PHASE 4
  TOWARD IR 4.0

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OPTION 1

• 15 Years in total
• 3 Phases
• 5 years in each phase

DIGITAL FOUNDATION
PHASE 1: 2021-2025
Build digital infrastructure and key enablers.

DIGITAL ADOPTION
PHASE 2: 2026-2030
Government, business and citizens are ready to mass adoption and consumption of digital services.

DIGITAL TRANSFORMATION
PHASE 3: 2031-2035
Transform into digital society and reap the benefit of a digital economy driven by technology and innovation.
OPTION 2

- 20 Years in total
- 3 Phases
- 5 years in Phase 1 and 2
- 10 years in Phase 3

DIGITAL FOUNDATION
PHASE 1: 2021-2025
Build digital infrastructure and key enablers.

DIGITAL ADOPTION
PHASE 2: 2026-2030
Government, business and citizens are ready to mass adoption and consumption of digital services.

DIGITAL TRANSFORMATION
PHASE 3: 2031-2040
Transform into digital society and reap the benefit of a digital economy driven by technology and innovation.

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OPTION 3

- 20 Years in total
- 4 phases
- 5 years in each phase

**DIGITAL FOUNDATION**

**PHASE 1: 2021-2025**

Build digital infrastructure and key enablers.

**DIGITAL ADOPTION**

**PHASE 2: 2026-2030**

Government, business and citizens are ready to mass adoption and consumption of digital services.

**DIGITAL TRANSFORMATION**

**PHASE 3: 2031-2035**

Transform into digital society and reap the benefit of a digital economy driven by technology and innovation.

**TOWARD IR 4.0**

**PHASE 4: 2036-2040**

Deepen the digital transformation and harmonize the society toward the Cambodia Vision 2050.

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KEY TARGETS (1/2)

PHASE 1: DIGITAL FOUNDATION

HIGH-SPEED INTERNET
Up to 10Mbps covering 100% of urban and 70% rural areas.

KEY SERVICE ENABLERS
Establish E-ID, PKI, Payment Gateway, Local Internet Exchange, Postal Address, etc.

PUBLIC SERVICE DIGITALIZATION
Digitalize main public services and establish interoperability platform for data sharing.

DIGITAL LAWS AND REGULATIONS
Update and enact essential laws.

ICT SKILLS AND TALENTS
Embed into formal education; build and enlarge talent pool.

PHASE 2: DIGITAL ADOPTION

100%
Main public service digitalization

60% 20%
Digital literacy and Capability

70%
Digital adoption by firms

4% 30%
Employment in ICT workforce Socio-economic transactions

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KEY TARGETS (2/2)

**PHASE 3: DIGITAL TRANSFORMATION**

**SIZABLE DIGITAL ECONOMY**
5-10% of GDP is visible by digital economy

**EMERGING NEW LOCAL BUSINESSES**
Innovative service industries, smart factory,

**SPECIALIZED-SKILL WORKFORCE**
Big data, analytics, AI, IoT, VR, AR, robotics, etc.

**SMART CITY**
At least one urban city is transformed into a smart city

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**PHASE 4: TOWARD IR 4.0**

**TOWARD CAM VISION 2050**
Moving toward a high-income country

**DIGITAL SOCIETY**
Harmonized and prosperous digital society

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STRATEGIC THRUSTS

DIGITAL INFRASTRUCTURE
- Digital connectivity
- Digital payment infrastructure
- Logistics and last-mile delivery

DIGITAL GOVERNMENT
- Digital key enablers
- Public service digitalization
- Data-driven governance

DIGITAL BUSINESS
- SMEs go digital
- Startup and entrepreneurship ecosystem
- Digital value chain

DIGITAL LITERACY AND CAPABILITY
- Digital leaders
- Digital talent pools
- Digital citizens

DIGITAL TRUSTWORTHINESS
- Laws and regulations
- Regulators and Institutional capacities
- Cyber security
- Consumer trust

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## Elements of the Policy Paper

### What to Expect
- Current situation assessment
- Gap analyses
- Strategy issues, Policy framework and roadmap
- Policy measures (matrix), and institutional arrangements
- Management of risks
- No technical design

### Assumption
- Affordable and reliable electricity
- Steady growth of local and global economy
- Technology advances at the speed experienced in the past decades
- No major interruption on digital development in the future
PROPOSED OUTLINE

I. Introduction
   I.1. Context of digital economy
   I.2. Rationale for digital economy policy framework

II. Digital Economy Readiness Assessment
   II.1. International experience for development of digital economy
   II.2. Assessment of Cambodia’s digital economy and readiness
   II.3. Policy gaps and choices

III. Policy Framework of Digital Economy
   III.1. Goals
   III.2. Approaches/Phases
   III.3. Strategic Thrusts
   III.4. Policy measures and roadmap

IV. Implementation Arrangement
   IV.1. Implementing mechanisms
   IV.2. Management of Major Risks

V. Conclusion

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LEADING GOVERNANCE

Committee for Drafting DE and DG Policy Framework

Led by SNEC

WG for Drafting DE

Led by SNEC

WG for Drafting DG

Led by MPTC

INTER-MINISTRIAL COMMITTEE

WORKING GROUP

TECHNICAL WORKING GROUP

Take Stock

Digital Infrastructure for DE

Software, Platform and Information Security

Laws, Regulations and Institutional Arrangement

Entrepreneurship, Startup and Digital Skills

Digital Government

SNEC: Supreme National Economic Council
MPTC: Ministry of Posts and Telecommunications

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ROLE OF THE WORKING GROUP

INTER-MINISTRIAL COMMITTEE

DE and DG
- Assist RGC to prepare the draft policy on DE and DG
- Review DE and DG draft policy
- Analyze SWOT of Cambodia’s DE and DG
- Host high-level consultative workshop
- Report the results to RGC

WORKING GROUP

DE Working Group
- Draft DE policy framework to SNEC
- Study and review DE development in the region and global
- Analyze SWOT of Cambodia’s DE
- Analyze the requirements for Cambodia’s DE
- Host high-level consultative workshop

TECHNICAL WORKING GROUP

DE Technical Working Group
- Assess the evolution of ICT policy in Cambodia
- Study readiness comparison of infrastructure, human resources, and regulations
- Assess Cambodia’s digital government
- Review international experiences in digital economy through study visits
- Host policy dialogue and consultative workshop

RGC: Royal Government of Cambodia
SNEC: Supreme National Economic Council
DE: Digital Economy
DG: Digital Government

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### PREPARATION MILESTONES

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 2019</td>
<td>Concept Note</td>
</tr>
<tr>
<td>Oct 2019</td>
<td>First draft of the DE policy framework</td>
</tr>
<tr>
<td>Dec 2019</td>
<td>SNEC meeting on the first draft</td>
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<tr>
<td>Jan 2020</td>
<td>Consultative workshop</td>
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<tr>
<td>Mar 2020</td>
<td>SNEC meeting on the final draft</td>
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<tr>
<td>Apr 2020</td>
<td>Economic policy committee meeting on the final draft</td>
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<tr>
<td>May 2020</td>
<td>Dissemination Workshop</td>
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<td>Jun 2020</td>
<td>Finalize the draft</td>
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**DE:** Digital Economy  
**SNEC:** Supreme National Economic Council

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THANK YOU!

Questions and Comments are welcome!