

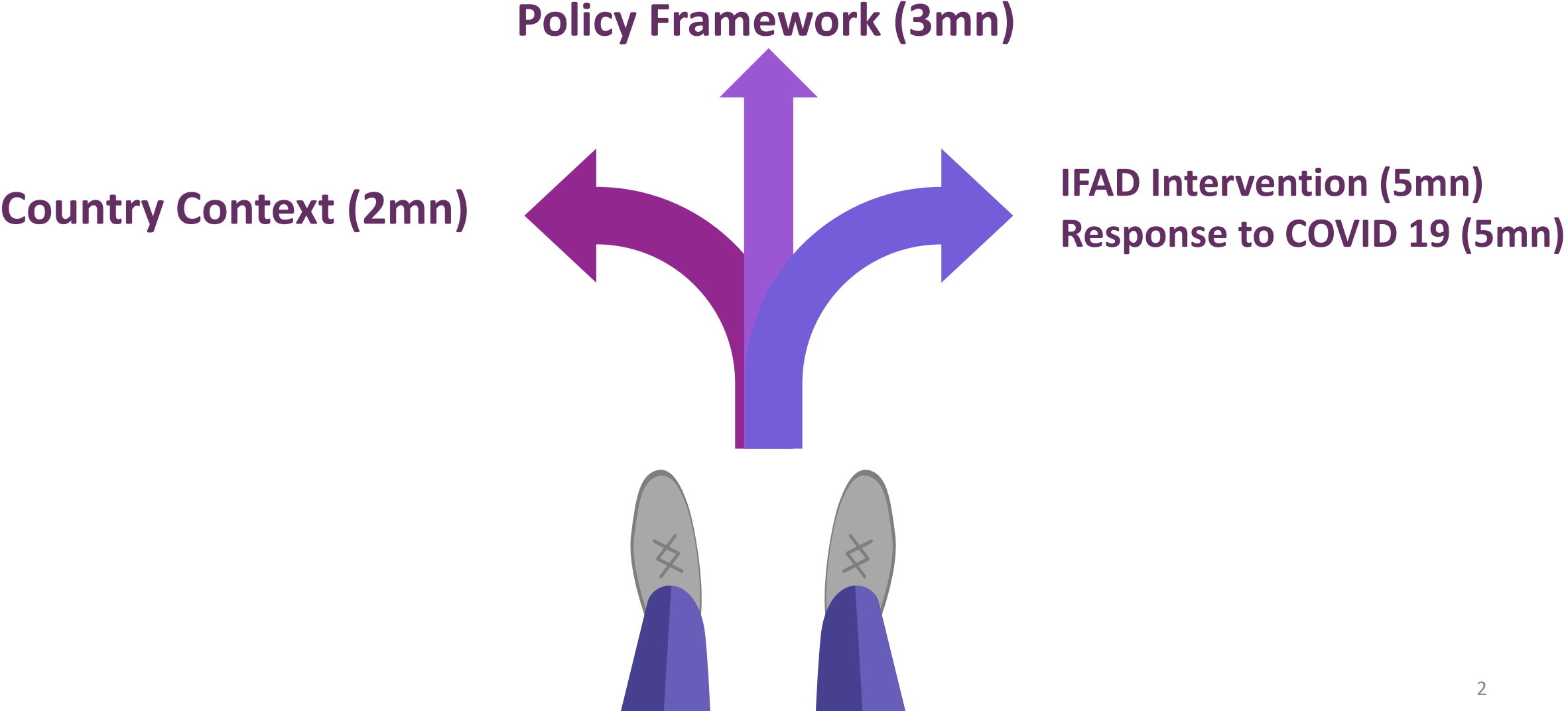
Digital solutions

Meng Sakphouseth

IFAD Programme in Cambodia



Structure of the presentation: 15mn



COUNTRY CONTEXT

STATISTICS



15.2M
Population



6
(3 share > 90%)
Mobile Operators



36
Internet Service
Provider



50,000+KM
Land Fiber
Optical Network

PENETRATION



117%
Mobile
Subscription



0.52%
Fixed-line
Subscription



84%
Internet
Subscription



10%
Household
Broadband



45%
Farmer has
Smartphone

SOCIAL MEDIA



9M, 60%
users



1.9M
users



720K
users



500K
users



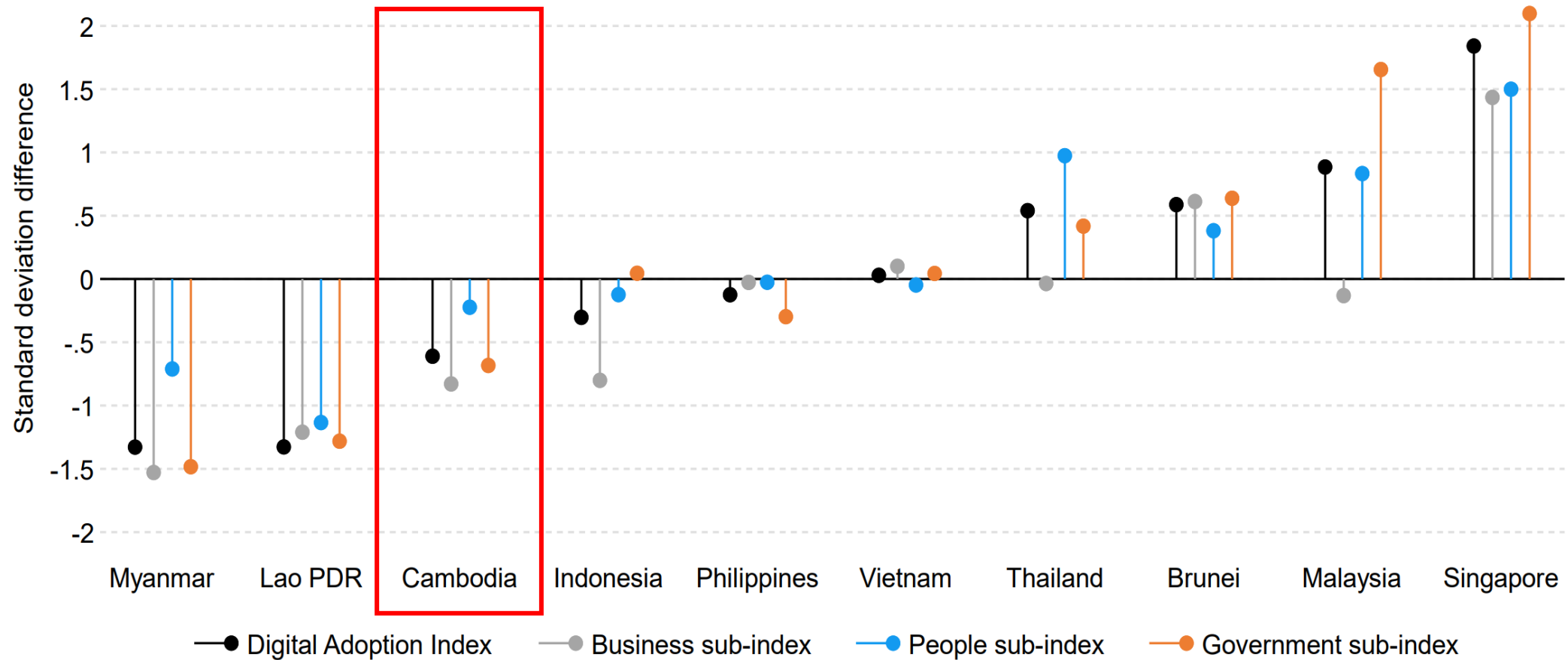
330K
users



200K
users

DIGITAL ADOPTION INDEX

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



Source: World Bank, 2018

STATUS OF CAMBODIA'S DIGITAL ECONOMY



E-COMMERCE

Domestic e-Commerce

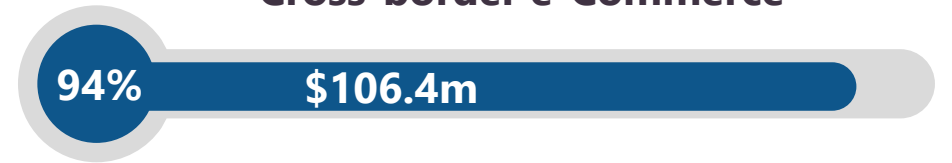


 90 %
Fly Ticket

 10 %
Online Shopping


 Cash on Delivery (cannot capture)


Cross-border e-Commerce



 21.2 %
Electronic Equipment

 20.9 %
Tourism Companies

 16.9 %
Online Platform

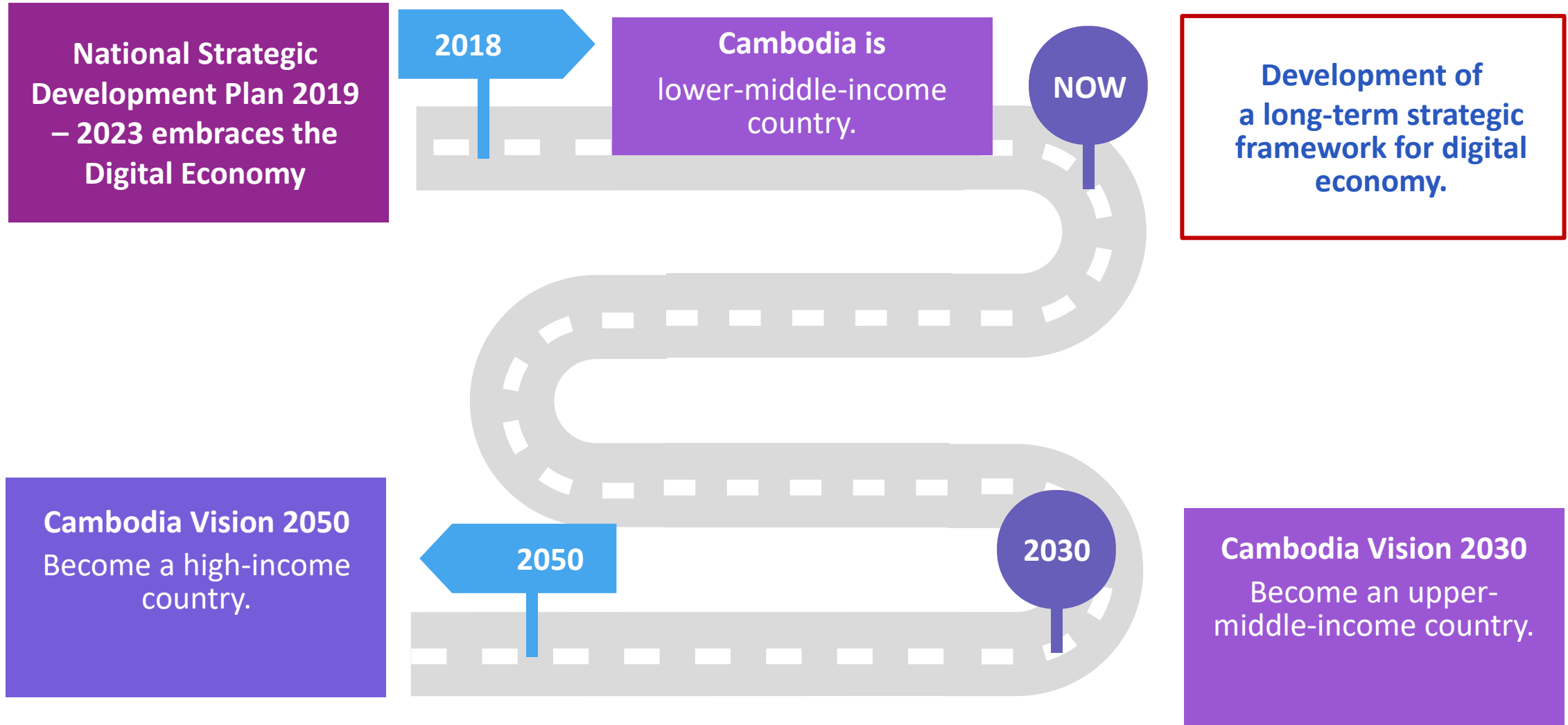
 7.6 %
Online Shopping

 6.7 %
Social Network

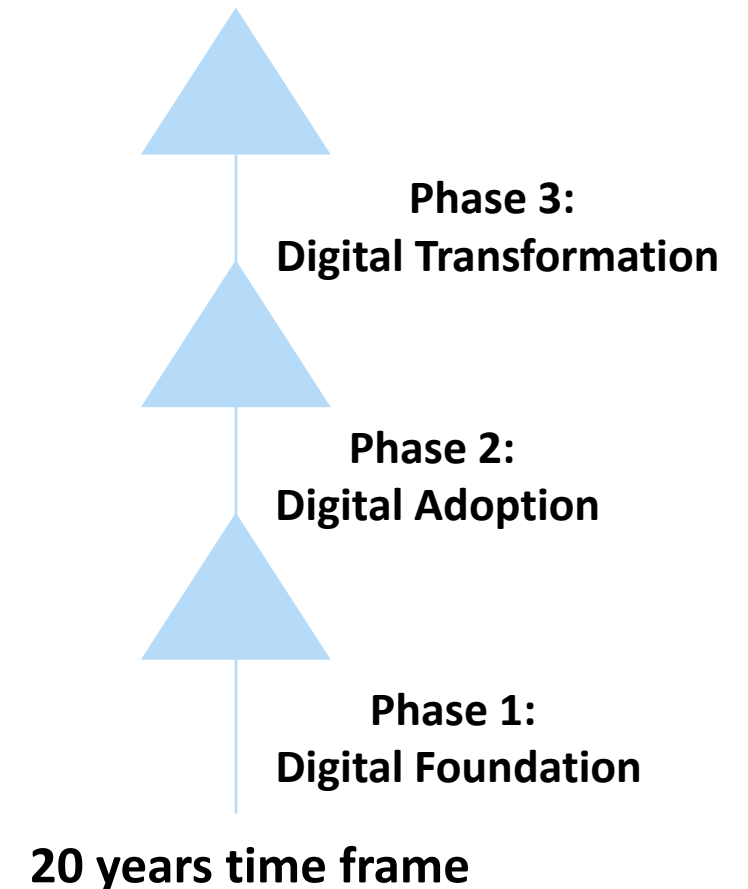
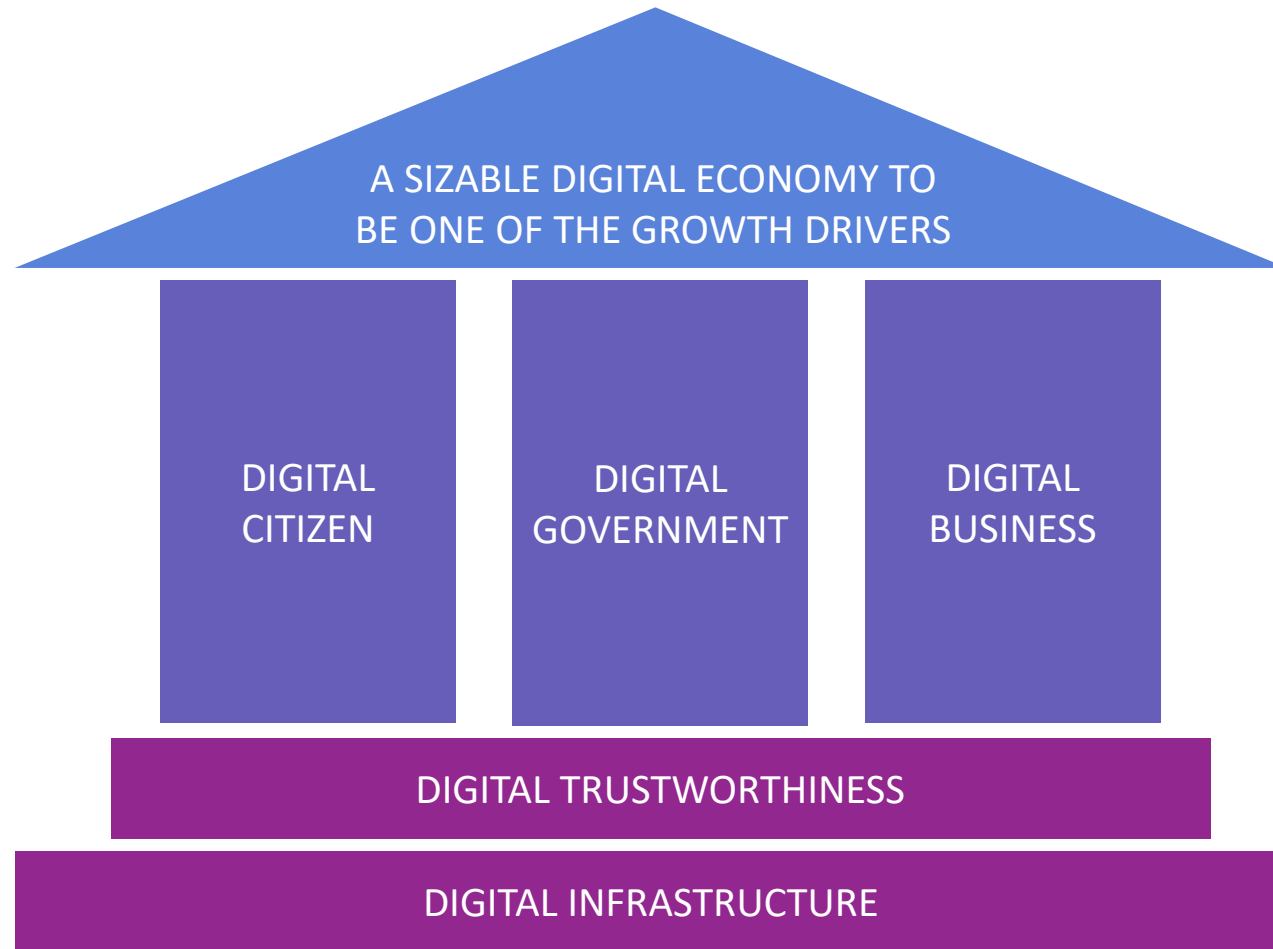
 26.7 %
Others

 39%
Annual
Growth

POLICY FRAMEWORK



Long-term strategic framework for digital economy: Strategic Thrusts



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 CITIZEN

- Digital leaders
- Digital talent pools
- Digital citizens



DIGITAL TRUSTWORTHINESS

- Laws and regulations
- Regulators and Institutional capacities
- Raise security awareness

3 Phases : 20 years timescale

Lower Middle-Income Country

**PHASE 1:
2021-2025**

**DIGITAL
FOUNDATION**

Build digital
infrastructure and key
enablers.

**PHASE 2:
2026-2030**

DIGITAL ADOPTION

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

Upper Middle-Income Country

**PHASE 3:
2031-2040**

DIGITAL TRANSFORMATION

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

High-income country

2050

**Industrial
Revolution 4.0**

KEY TARGETS

PHASE 1: DIGITAL FOUNDATION

HIGH-SPEED INTERNET

Up to 10Mbps covering 100% of downtown 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%

Digital literacy and Capability



70%

Digital adoption by firms



4%

Employment in ICT workforce



30%

Socio-economic transactions



KEY TARGETS (Cont.)

PHASE 3: DIGITAL TRANSFORMATION

SIZABLE DIGITAL ECONOMY

5-10% OF GDP is visible by digital economy



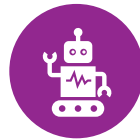
EMERGING NEW LOCAL BUSINESSES

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



TOWARD Industrial Revolution 4.0



TOWARD CAM VISION 2050

Moving toward a high-income country



DIGITAL SOCIETY

Harmonized and prosperous digital
society

IFAD INTERVENTION



Goal: Support the long-term strategic framework of the Cambodian digital economy



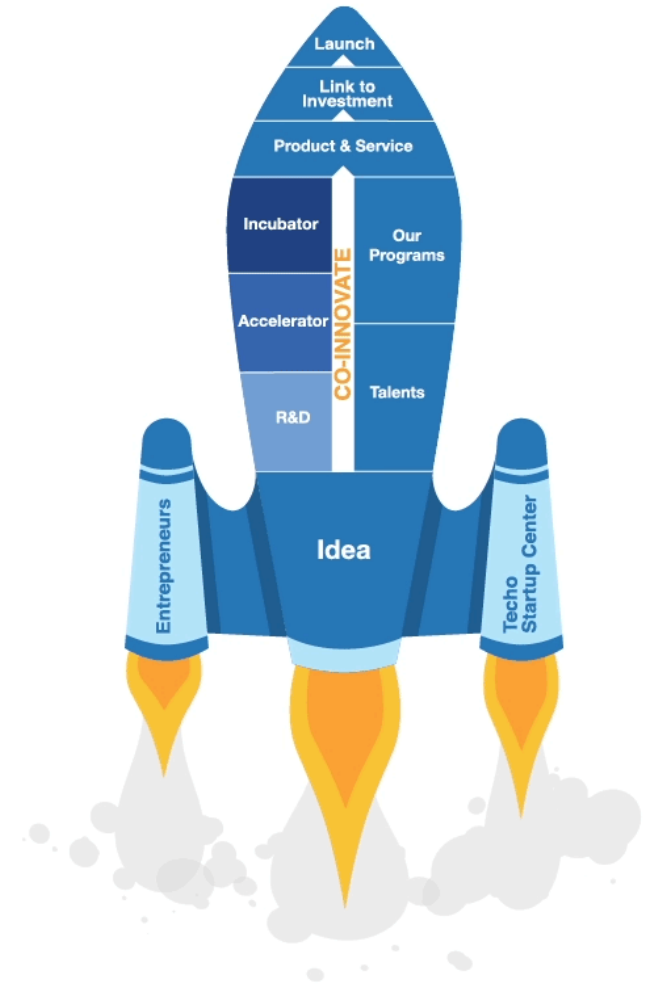
Objective: Promote the innovative digital services to smallholder farmers and rural economy.



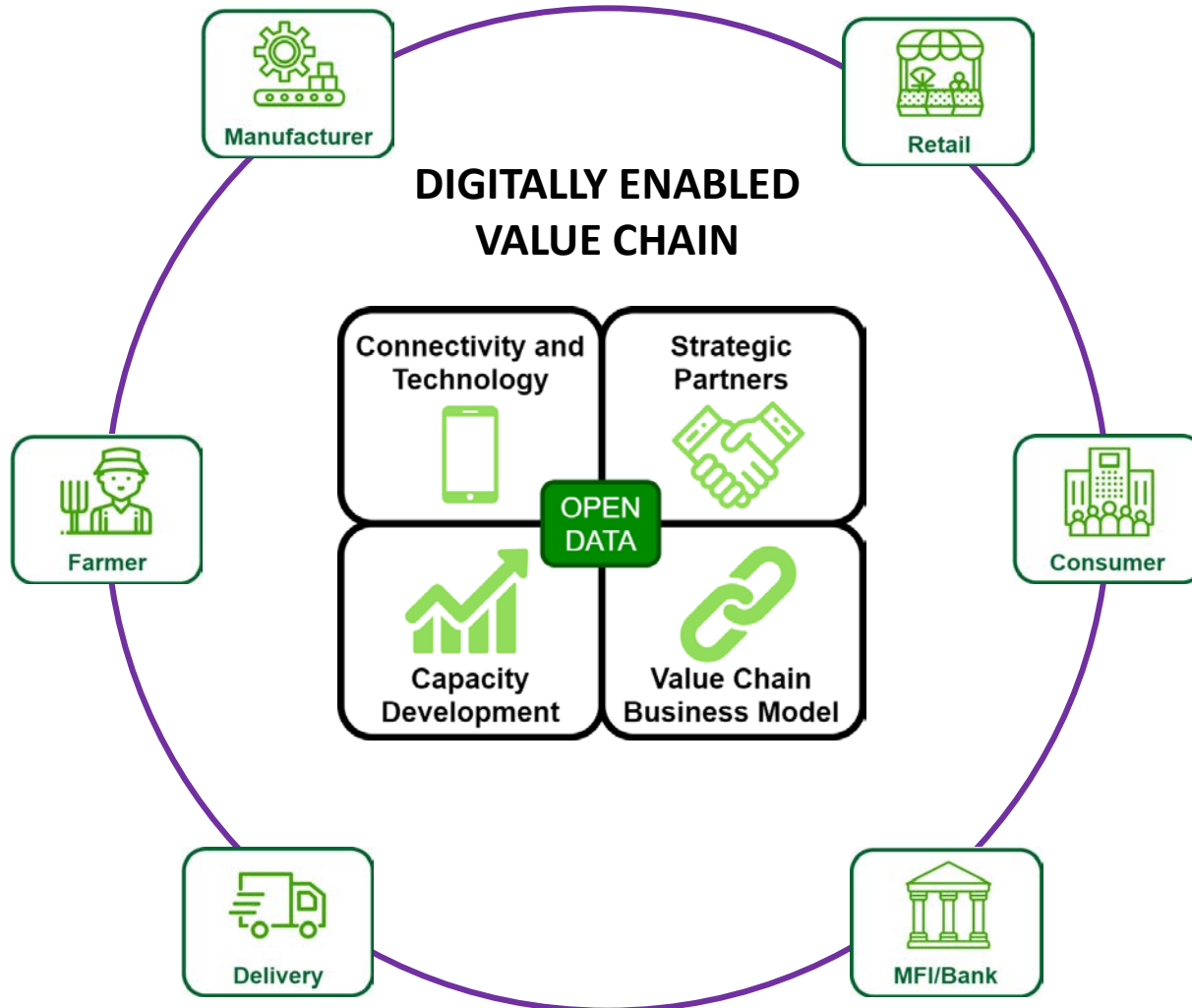
Collaboration with Techo Start Up Center

An entity established under an innovation arm of MEF.
Supercharge of digital ecosystem and innovation.

- 1 Long term strategic framework of the digital economy
- 2 National outreach campaign on digital literacy
- 3 Testing the challenge fund facility
- 4 Development of Khmer Agriculture Suit (KAS)



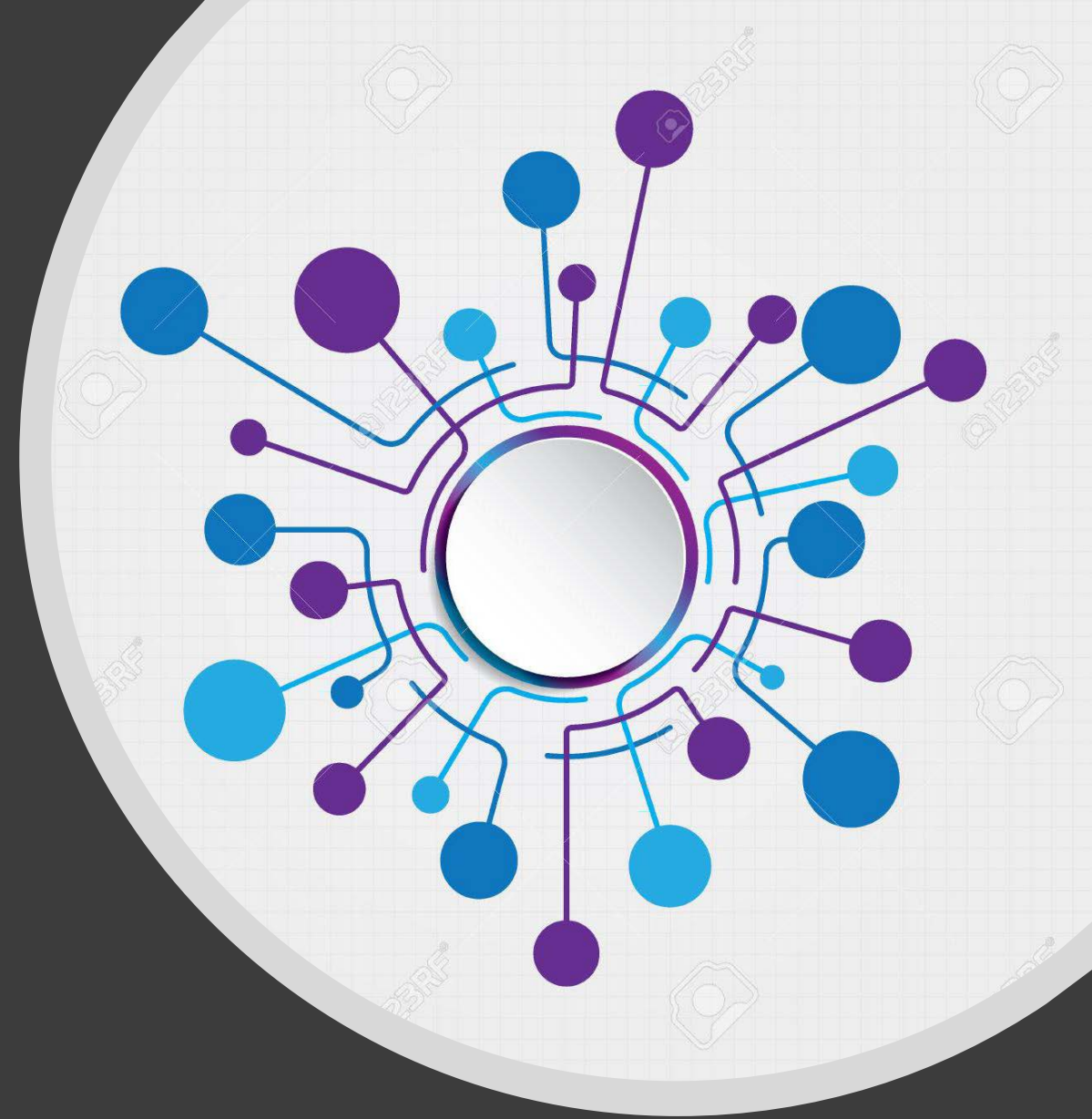
Overview of Khmer Agriculture Suite (KAS)



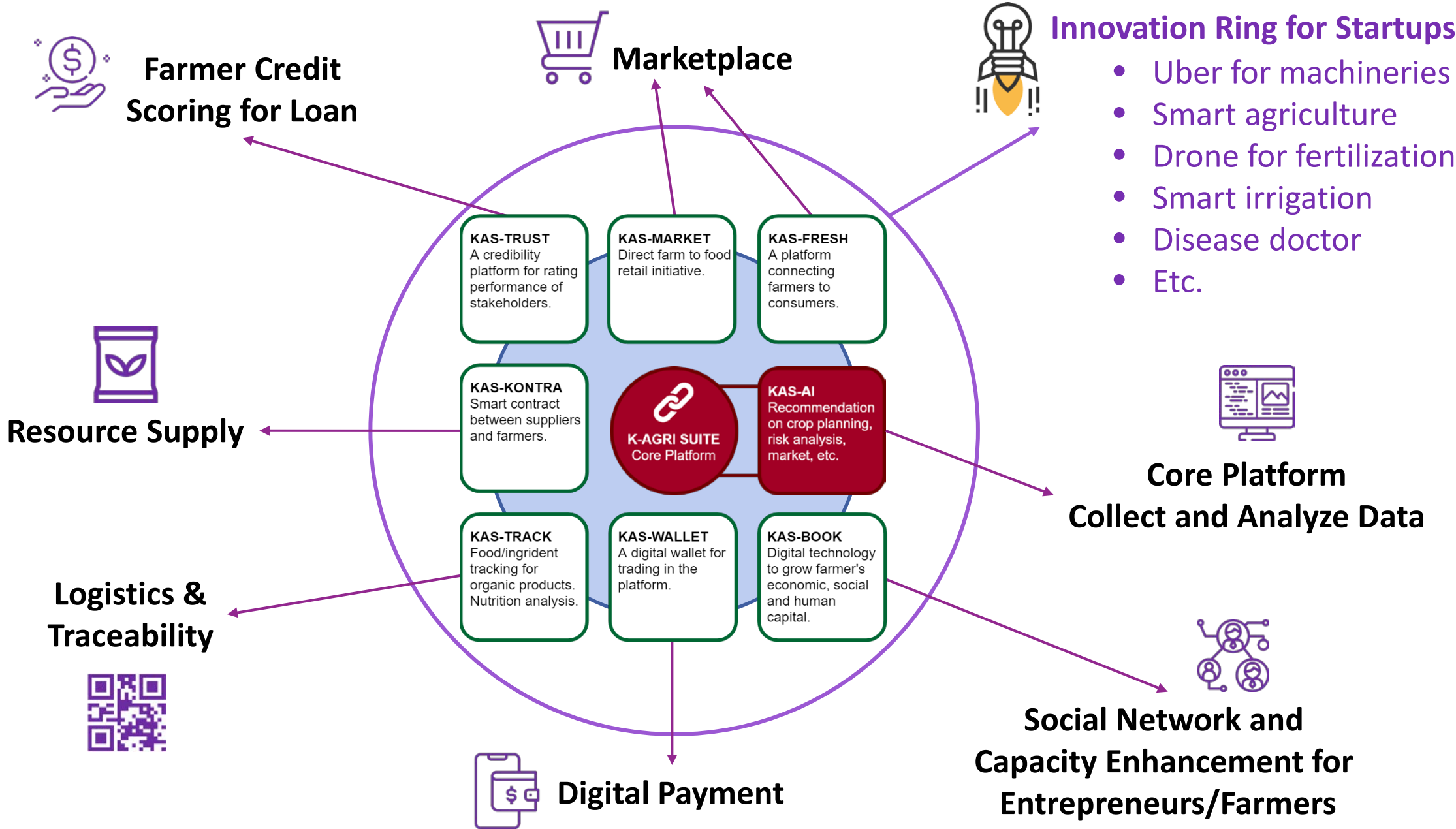
- Build an **open platform** for digital agriculture value chain
- Digitally connect **all segments** of relevant stakeholders
- **Public and Private Partnership** model in digital agriculture value chain
- **Big data** driven approach
- Composed of **Core Platform** and **Key Applications**

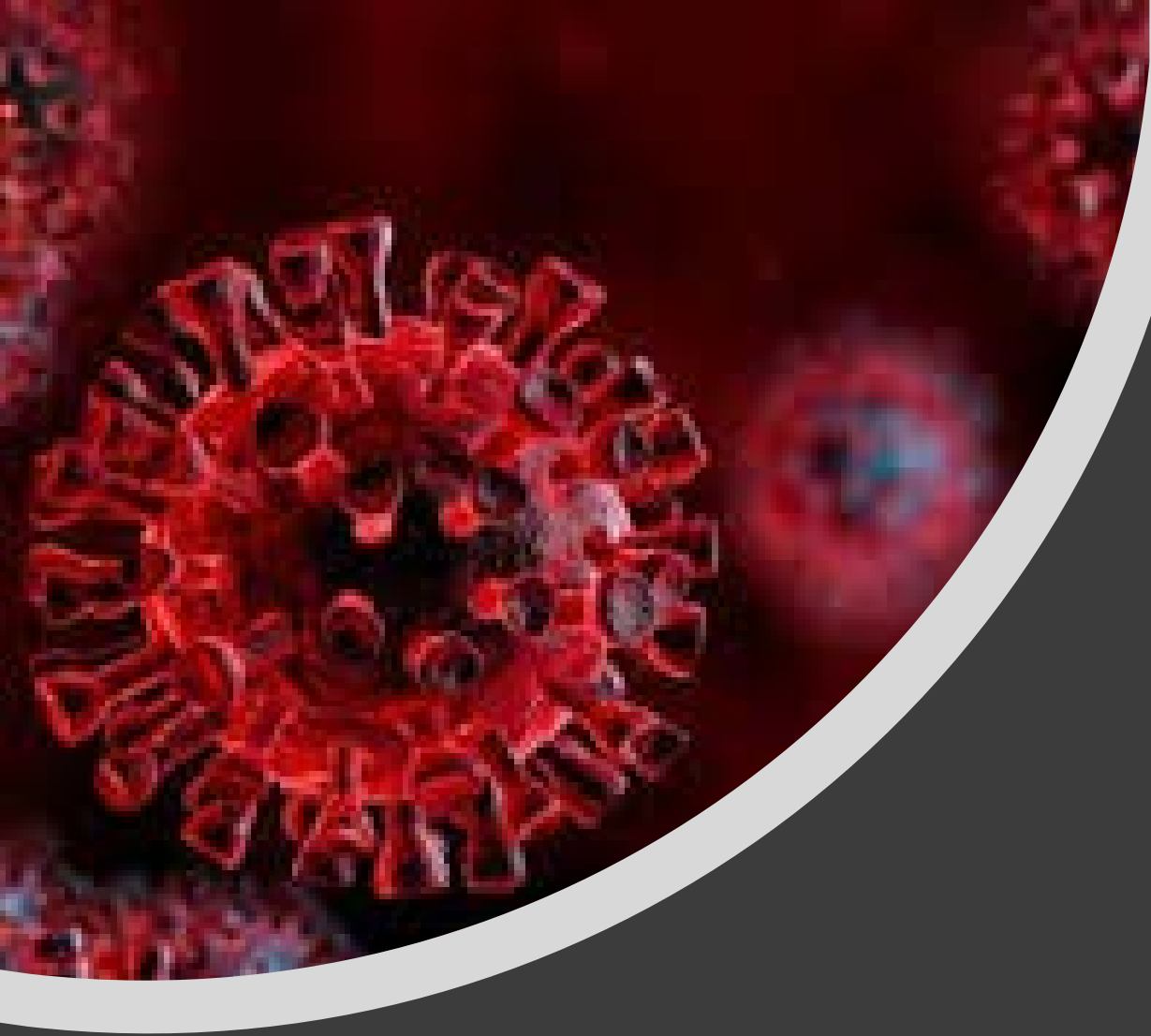
CORE PLATFORM

- Continuously collect and analyze data from various sources by means of automation and semi-automation.
- Utilizes cutting-edge AI techniques with crowdsourcing data to leverage the accuracy of the prediction.
- Provides real time information necessary for key applications to run on: weather, temperature, precipitation, soil, price, etc.



KEY APPLICATIONS





SPECIFIC RESPONSE TO COVID 19



In collaboration with Ministry of Agriculture Forestry and Fisheries /
Bronx Technology



YOUNG FARMERS START APPLYING ICTs



App is developed by Korean fund and was redesigned to respond to the movement restrictions and physical distance.

CORE FUNCTIONS



Get updated news related their business;



Early warning system;



Technical material



Access to technical experts through integrative platform



Access to buy production inputs



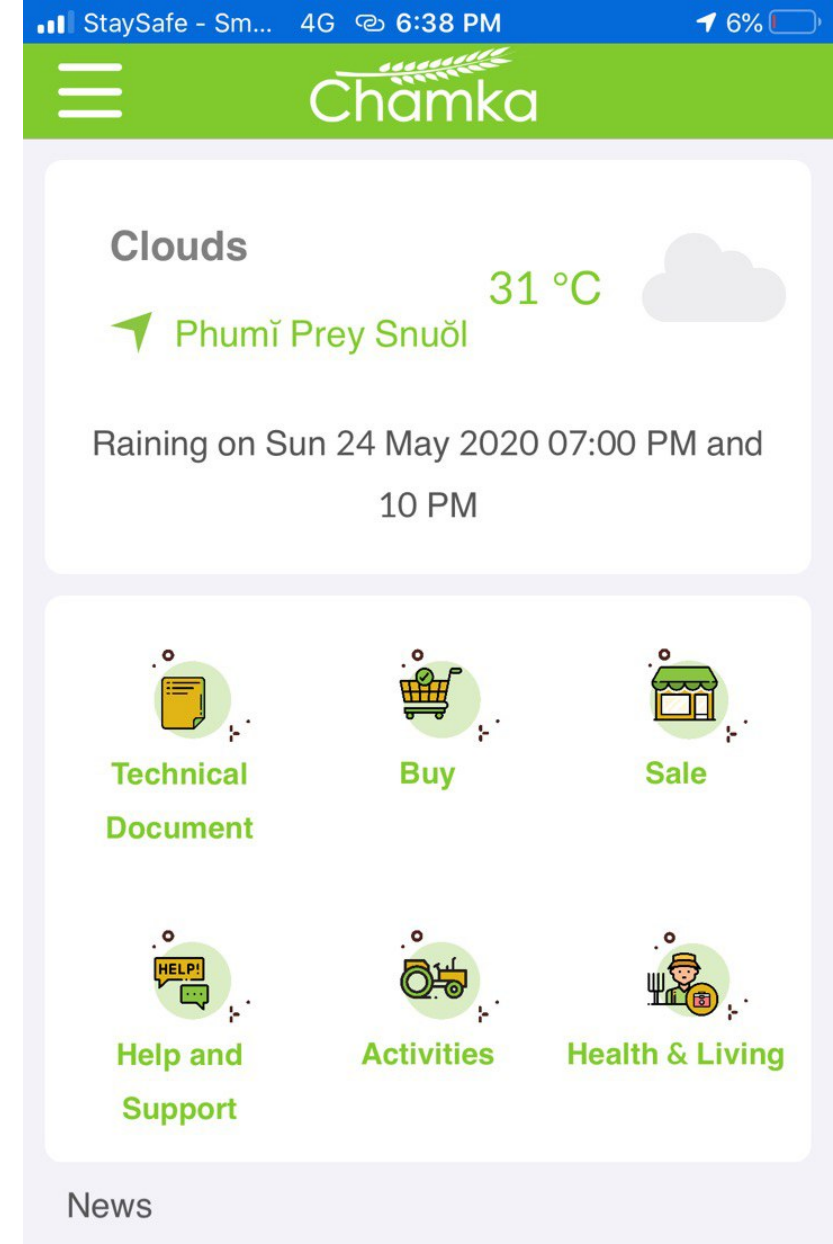
Access to virtual market to sell their products



Understand the profitability of their business



Mainstreaming material: COVID 19, CC, Gender



EARLY WARNING SYSTEM

Weather

- Weather forecasting for upcoming rain and storm up to 10 days
- Using Open Weather API
- In App notification alert



Technical Documents

- To provide best farming practice knowledge via video and ebook
- Share success stories of other model farmers
- Resources are provided through MAFF Agriculture Extension Portal



ទាំងអស់ មាន បន្លែ ស្រូវ



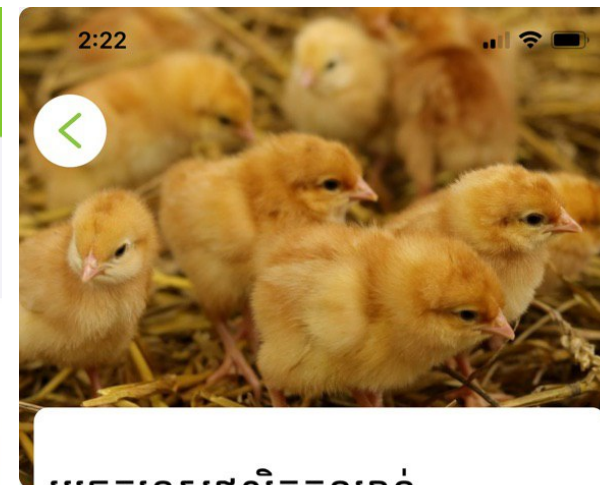
បច្ចេកទេសផលិតកូនមាន់

6 may 2020, 08:31 am



បច្ចេកទេសចិញ្ចឹមមាន់ស្រុក

4 may 2020, 08:31 am



បច្ចេកទេសផលិតកូនមាន់

6 May 2020, 08:31 AM



ការផលិតកូនមាន់

4 may 2020, 08:31 am



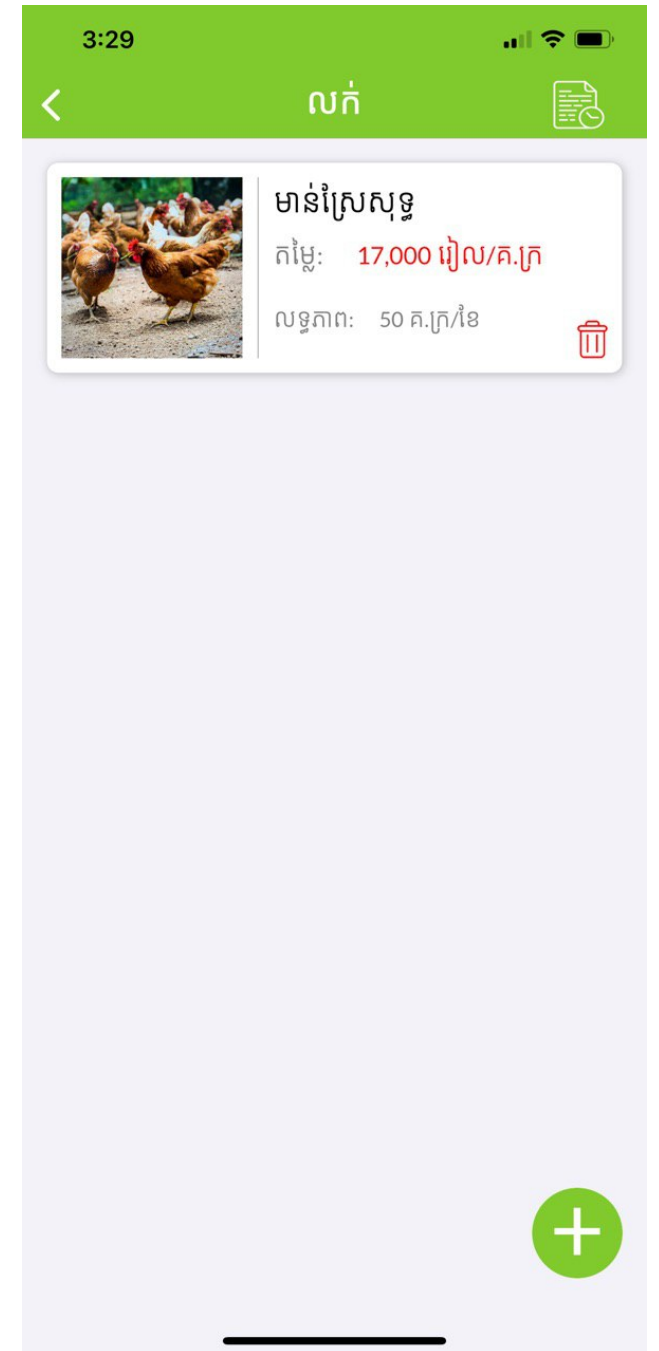
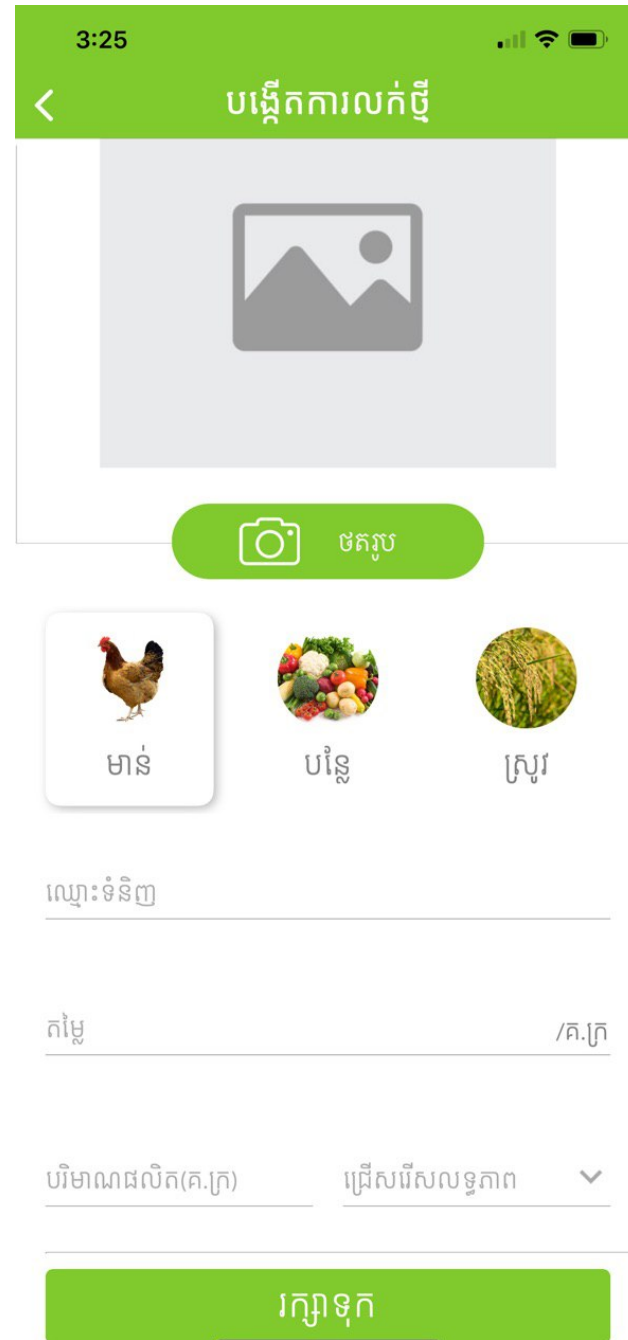
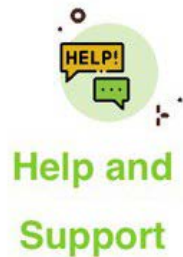
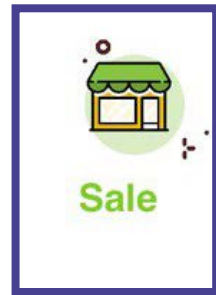
Buy Input Supply

- To find and buy input supplies such as seeds, fertilizers, farming materials through our trusted suppliers
- Rate suppliers and recommend for other farmers



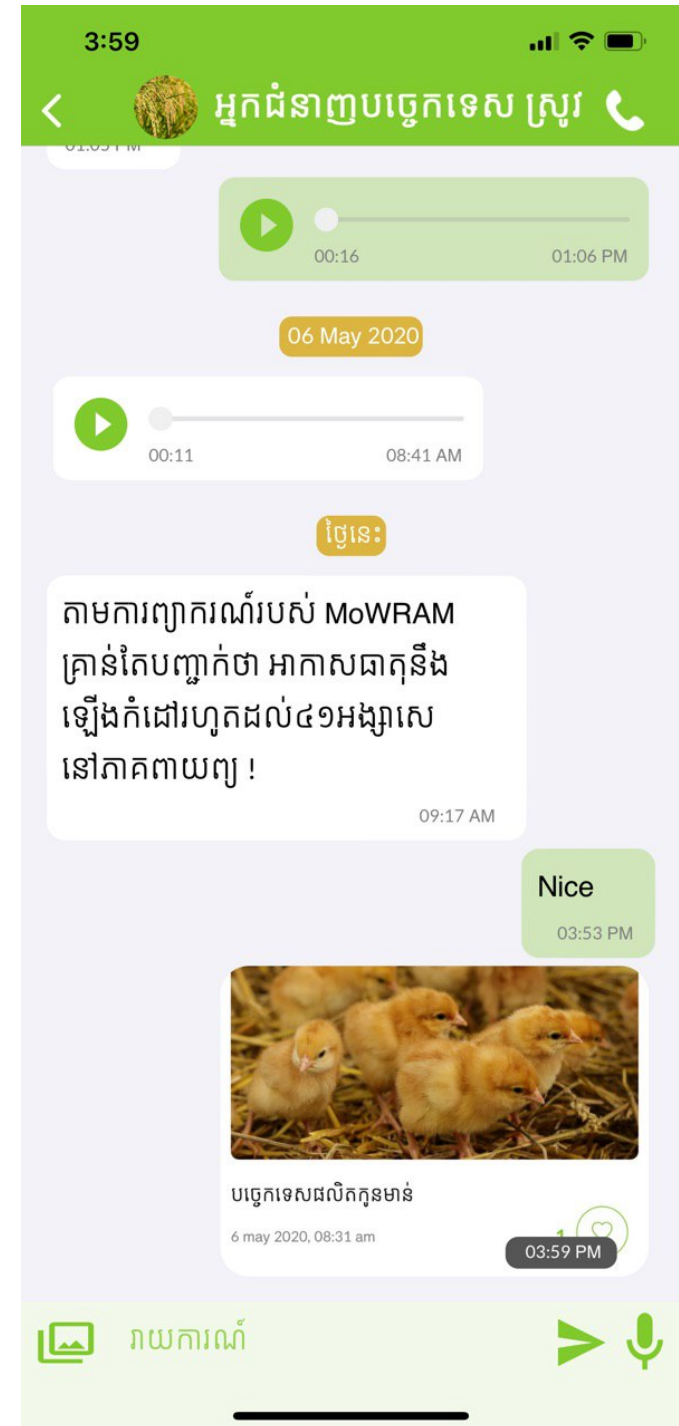
List Product for Sale

- To list agriculture product for sale through our Chamka Grocery App
- Accept purchase request through the app



Direct Contact to Agriculture Experts

- Farmers able to ask and chat directly with the experts that are always online to help for any questions
- Using Chat technologies, farmers can send text, images, videos and voice call directly to the experts for free as long as they have internet connection.
- Notification is used for upcoming messages



Record Farming Activities

- Record and track activities such as expense and revenue
- Basic financial analysis for top expense categories
- Basic analysis for profitability
- Access to credit line



Technical Document



Buy



Sale



Help and Support



Activities



Health & Living



Mainstreaming material


Technical
Document


Buy


Sale


Help and
Support


Activities


Health & Living

All កូរីដ ១៩ ភាពធន់



ការការពារជំងឺកូរីដ ១៩

22 may 2020, 05:20 pm

4 





Want to try?

iOS and Android: Chamka

And login with this phone

number: 012928093, PW: 123456

Future Roadmaps

- Early warning system
- Integrated AIs
- Trial testing of ATM Card & Digital Wallet
- Trail testing money transfer facility
- Traceability and branding
- Renting Agriculture Machinery
- Soil micro-organism improvement
- Income generation stream





THANK YOU!

Questions and Comments are welcome!

