



**KFTC**

Korea Financial Telecommunications  
& Clearings Institute

# KFTC's Centralized Digital Payment System

## extended to Open Banking Platform

**12 Aug 2020**

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# An analytic overview of KFTC

# 1

## An analytic overview of KFTC

- **Government & central bank-driven establishment**
  - A non-profit organization established in 1986
  - Central Bank(BOK) chaired the committee for establishment and Government(FSC) authorized the establishment of KFTC

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- **Centralized inter-bank systems accommodating other financial sectors**
  - Savings banks, cooperatives, securities, fintech companies have gradually participated.

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- **Policy implementation channel**
  - Government led strategic adoption of open banking service was implemented through KFTC systems

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- **An efficient payment infrastructure to cope with pandemic**
  - Efficient for government to give away rescue money to individual
  - Can be an ideal model for ASEAN countries in the early stage or revising phase of payment systems.





# Payment systems of KFTC as of 2020

# 1

## Various Payment Services of KFTC

continuous development of shared services for participants

- **Bank Note, GIRO(Debit/Credit) service**

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- **Shared banking services based on real-time funds transfer**
  - ATM, Home/Firm banking, Gateway for Electronic Commerce, B2B, etc.
  - Open Banking, Zero-pay . . . . . recently established.

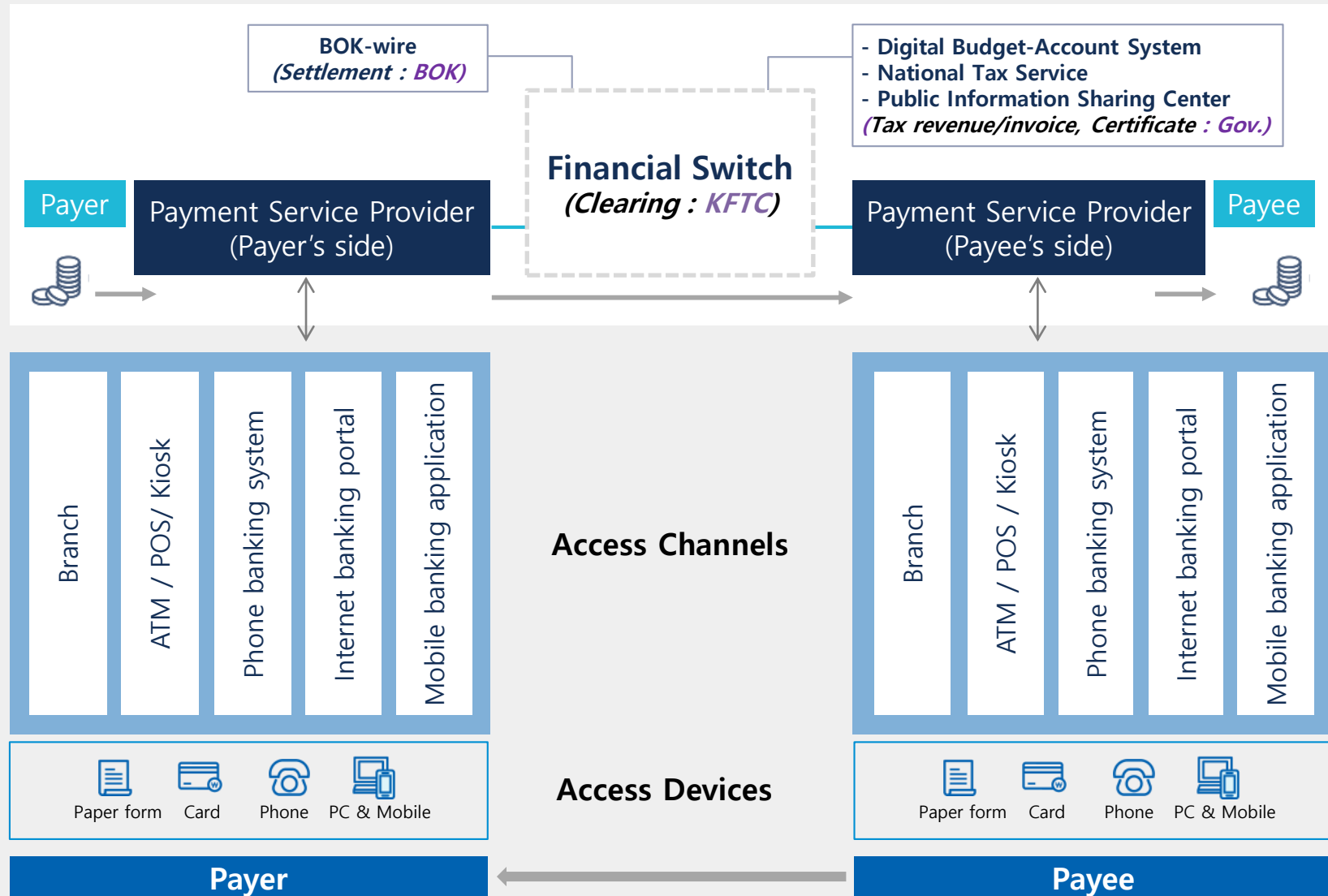
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- **Electronic Customer Authentication service**
  - Common-Banking Certificate issuance & real-time validity check
  - OTP / BIO Certificate information Intermediary

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- **Credit/Debit Card transaction intermediary (to Card Company)**

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- **Overseas Knowledge Sharing Program (System consulting & SI)**

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- **Overseas connected services(CLS, APN)**

# Financial Switch



# 2

## Structural Characteristics of KFTC's systems

### KFTC Participants' Shared Platform

Reliable, Scalable, Cost-saving

#### Proliferation of individual services in the Shared Platform

Shared services  
► Respective ones



**Participants retake & promote them to be representative businesses**

Mobile Banking,  
Retired Pension Fund Record Keeping

Variations caused by  
financial circumstances

Transformation of  
Financial Sectors by  
Openness



**Involve Non-bank entity(Fin-tech) in the platform**

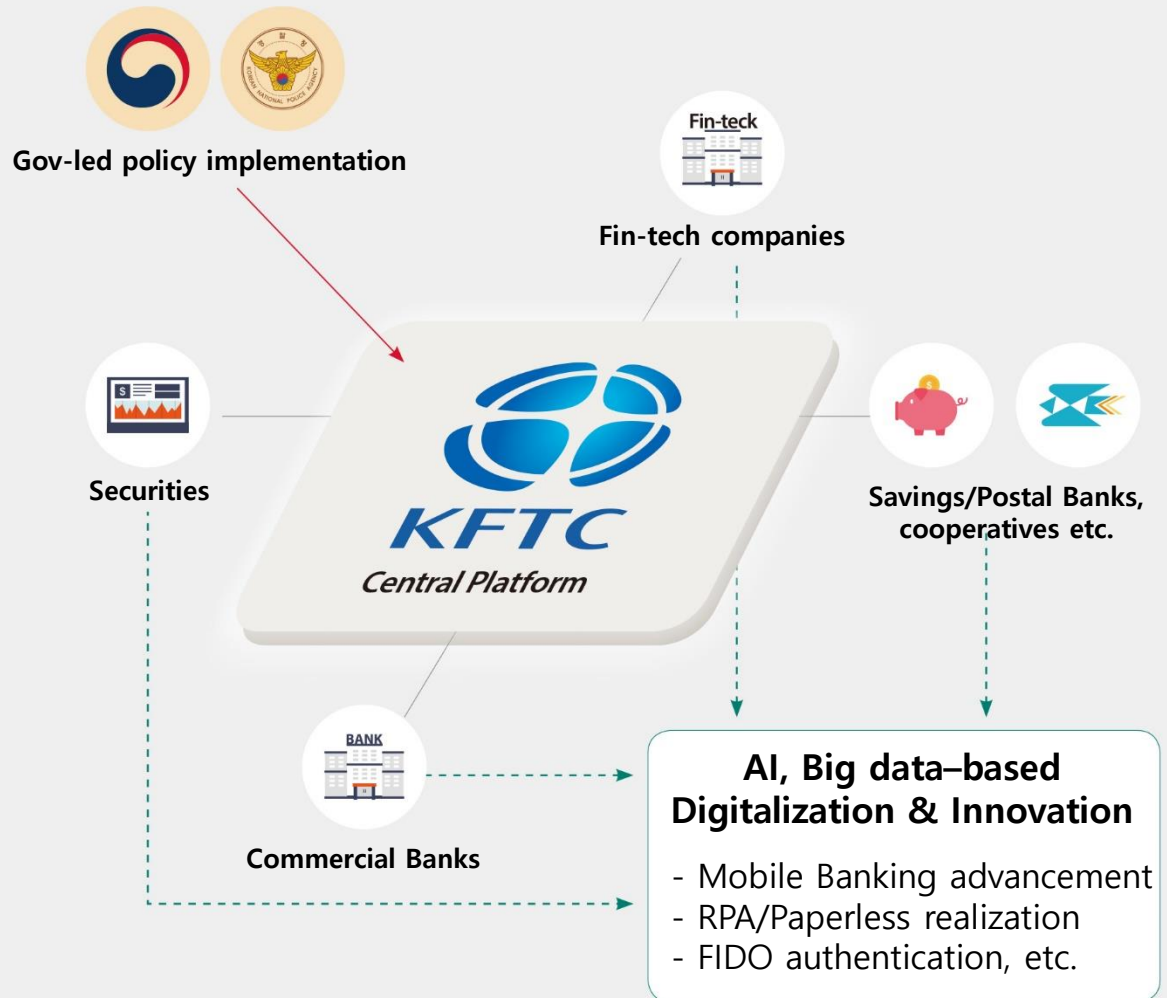
Open Banking



# 3

## KFTC's position in Financial Sectors

### Basic Platform & Policy implementation Channel



# 4

## Functional Characteristics of KFTC's system

- **Real-time fund transfer-based services**

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- **Implementation of Financial Inclusion at Service Providers' side**
  - Gradual opening to non-bank financial sectors (Securities, Savings Banks, Fin-tech, etc.) from Banks

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- **Strong support of FSC**(Finance Services Commission)
  - Cut fee burden of Fin-tech by 90% in order to successfully implement Open Banking service

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# 5

**FSC revises current law & KFTC expands its functional frame to foster transformation (within 2020)**

- **Electronic Financial Transaction Act (to be revised)**

**Fin-tech companies are to be stipulated mainly as**

- Comprehensive payment service provider(entrepreneur)
  - Providing all the financial services except deposit & lending
- Payment instruction delivery provider
  - Delivering customers' order for participants to make payments or funds transfer

**Stipulation of Open Banking as a payment system open to various non-banking participants**

**Making it mandatory for big-tech companies to utilize official clearing system(KFTC)**

# 5

**FSC revises current law & KFTC expands its functional frame to foster transformation (within 2020)**

- **Expansion of KFTC's capacity into data-related business sector**
  - providing KFTC-stored data to official data trade center
  - intermediating participants-stored data to Mydata business companies
  - to be designated as a data specialized organization
    - Verifying accuracy of assumed name/anonym of encrypted data sent by various companies and combining them for utilizing industrial purposes

# 6

## Continuous self-Digitalization of Korea's Financial Sectors

- **Generalize un-tacted Authentication / Transaction**

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- **Make advanced Mobile Banking platform**

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- **Strengthen cooperation with non-banking sectors (Fin-tech companies, etc.)**

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- **Leverage KFTC's financial information intermediary function(between banks and other entities)**
  - delinquent taxpayers' accounts information
  - authentication of individual ID cards at on/off-line bank' branches
  - management of debit accounts (erasing & transferring them to other participants is possible in 'AccountInfo' platform of KFTC)

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**COVID-19**



## **Availability of KFTC's systems amid Covid-19 pandemic**

**Payment intermediary channel of contingent  
rescue money to individual**

- **Authentication of each beneficiary by verifying**
  - his/her certificate on card company websites
  - his/her ID card at on/off-line bank' branches
  - his/her credit card ownership through KFTC's VAN system

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- **Intermediate cash paying out on real-time funds transfer (Gov. account → Beneficiary account)**

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- **Playing a part in paying out indirect rescue money to individual**
  - Gov. giftcard "Onnuri"(to be issued 3.2 trillion US\$ in 2020)
    - : KFTC registers selling record & clears balance among participants
  - Gov. & municipalities' mobile coupon (added to mobile Zero-pay)
    - : KFTC provides customers Zero-pay affiliates(over 600,000) and also provides participants its clearing system

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# IV

## Operation of "Open Banking system" from 2020



# 1

## Functional Definition

- Permission for Fin-tech companies to provide financial services (accounts inquiry / transferring of funds, etc.) through shared platform of KFTC (standardized open API)
- Access to only one account makes a customer use all the accounts he/she has in all participants.

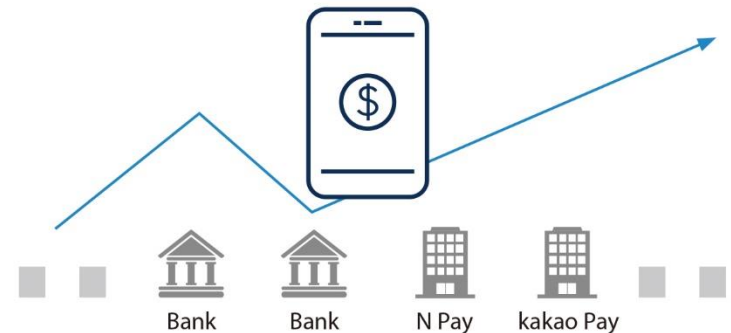
# 2

## Launching effect

### Expedite competition among participants

(especially, fin-tech companies vs commercial banks)

- roll-out innovative products & increase customers' option (considering customers tendency to eventually rest on one or two preferred service providers)
- promote globalization by banking sectors' coalition with big-tech companies(Naver, Kakao, etc.)





# 3

## Participants & usage as of July 2020

### Participants

**72**

including 28 tech  
companies

### Service users

**20 million**

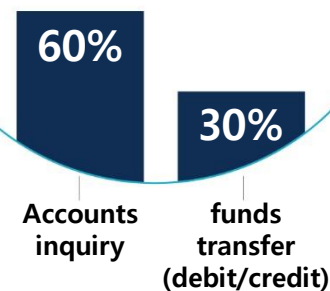
72% of population under  
economic activities

### Registered accounts

**44 million**

### API usage (daily)

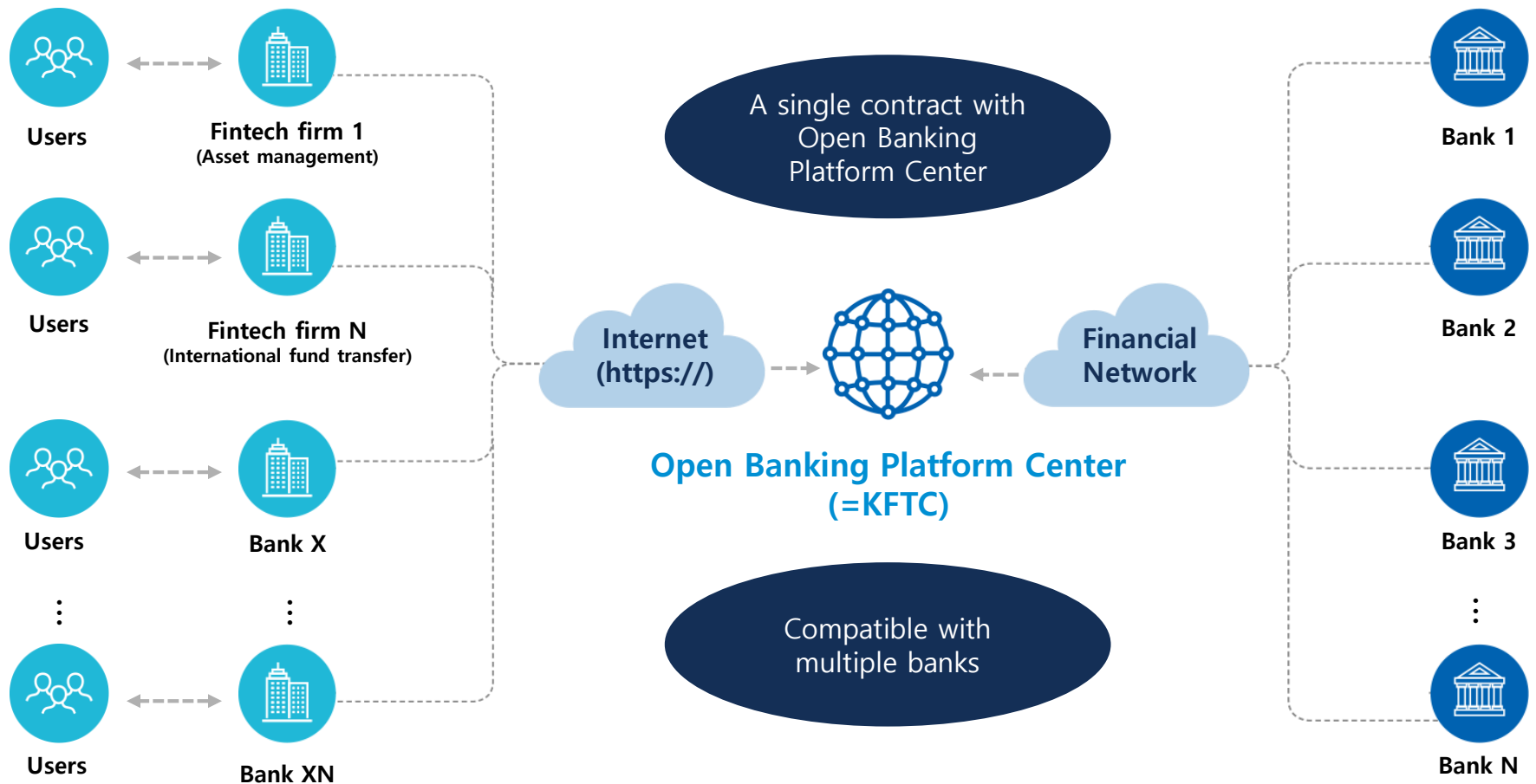
**6.6 million**





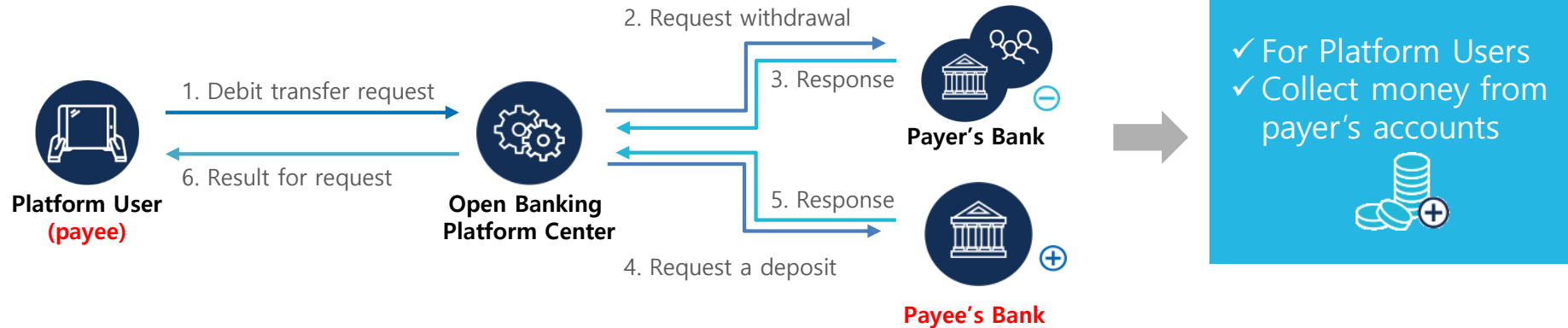
# Open Banking Services - Basic Concept

- The Platform enables banks/Fintech firms to provide banking-related services to users via Open APIs (inquiries, transfer, etc.)
- Banks/Fintech firms don't need to sign individual contracts with participating banks.

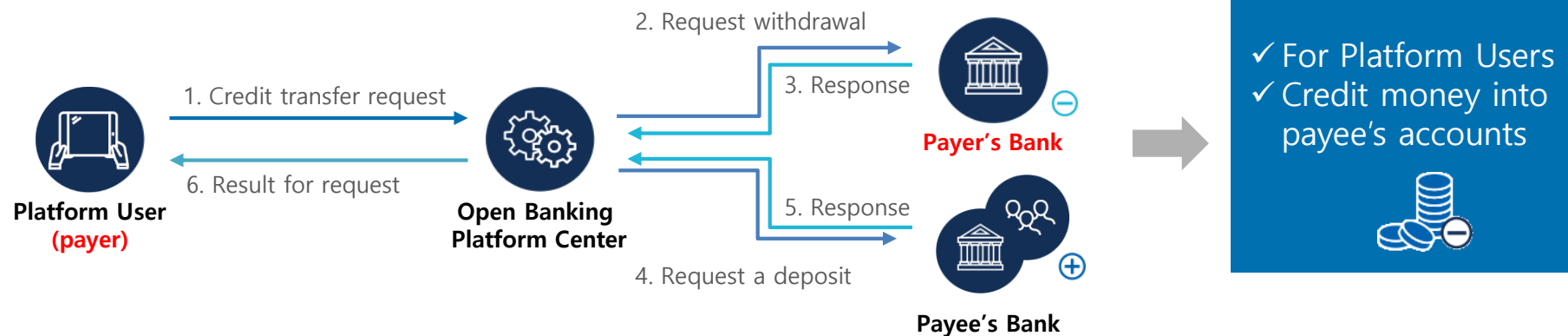


# Open Banking Services - Transaction Process

## Debit transfer API



## Credit transfer API





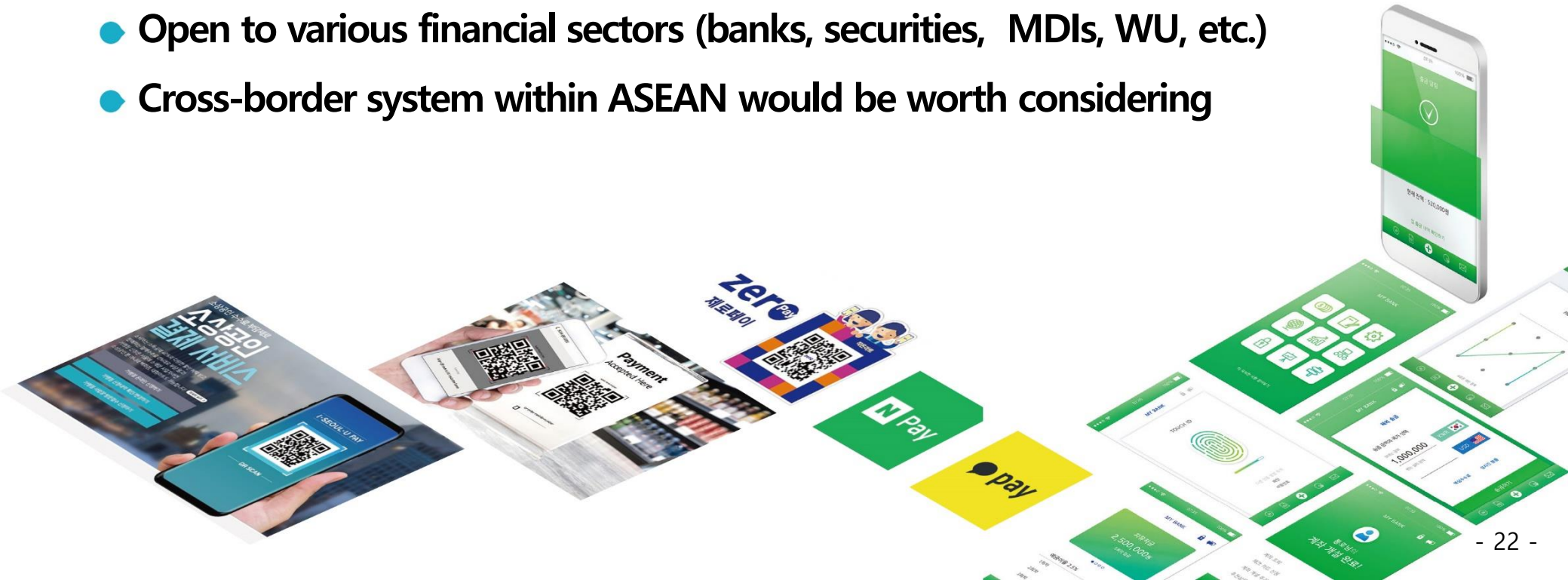
**V**

# **How to Implement Financial Inclusion for ASEAN**

# 1

## Strengthening of Competitiveness by strategic adoption of Open Banking service (referencing KFTC case)

- Involving regional Big-tech companies in Open Banking platform
- Open to various financial sectors (banks, securities, MDIs, WU, etc.)
- Cross-border system within ASEAN would be worth considering



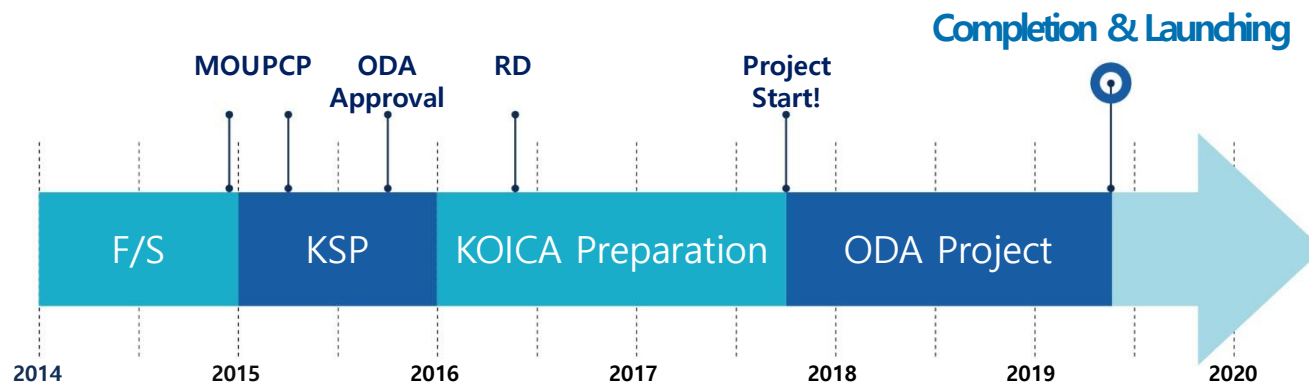
## 2

### KFTC's support would be more efficient.

#### KFTC has all the experiences and know-hows to implement it

- principles, detailed measures, know-hows of SI & operation
- concerned infra (real-time funds transfer, authentication) of KFTC should be considered simultaneously.

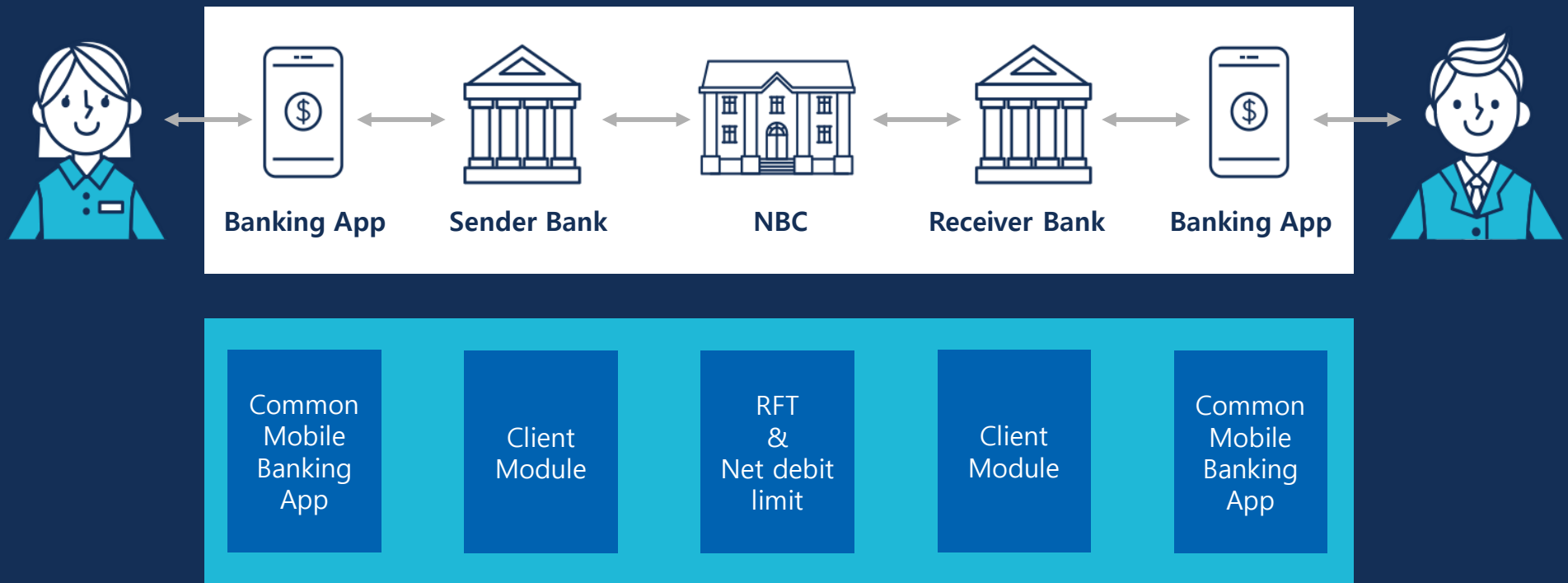
**\* KFTC has implemented real-time funds transfer service in Cambodia.**  
(the usage volume has been gradually increasing up to date.)





# Main services of Cambodia Project (2017~2019)

Cambodian bank customers can execute real-time interbank transfer on mobile phones.



# Thank You

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