ReapChain BusinessPaper

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REAPCHAIN.Inc

Contents

1. Abstract

With the development of digital technology and various changes in the financial system, we are now living in a society where mobile payments such as Internet banking, Samsung Pay, and Alipay are common. However, the modern financial system has various side effects such as security, information cost, transaction stability, and maintenance cost due to its centralized system, and enormous technical and cost matters must be maintained and built.

In other words, since the current financial payment system consists of a complex network that is organically coupled with each other, such as various institutions and companies, it is necessary to build a payment system that is compatible with each other, an authentication system for internal information exchange, and a messaging network. In addition, due to the structure of such a complex financial system, security threats due to personal information infringement or hacking occur, and it is difficult to secure the reliability of a lot of information exchanged between relay means.

Network encryption technology is required to solve the above problems in the digital payment market, and blockchain encryption technology enables open distributed network systems in a single centralized enterprise-centered system. Blockchain technology is a distributed computing technology that provides reliable and efficient data based on non-interference and time evidence records and is a fourth industrial technology defined as P2P network activity based on mutual trust between participants. As a result, the introduction of blockchain technology is accelerating in the financial sector.

The modern financial system is still unstable and complex, and it is difficult to converge blockchain technology with the modern financial system. However, to solve these problems, ReapPay wants to overcome the limitations of payment services based on the existing financial system and build a new financial infrastructure that does not require cash or cards by increasing security based on the safe value of blockchain.

The emergence of fintech is attributable to the environment in which consumers' consumption behaviors are shifting towards mobile-centric due to the widespread use of smartphones and in which customized financial services are available to consumers through big data analysis, etc. ReapPay aims to provide customized financial services in line with changing financial trends and secure financial payment services with enhanced security based on blockchain technology. In addition, as a global payment system, we want to think and move forward to complete a financial infrastructure without currency exchange anytime, anywhere.

2. ReapPay Business Overview

2-1.

Overview and status of the simple payment/ remittance market

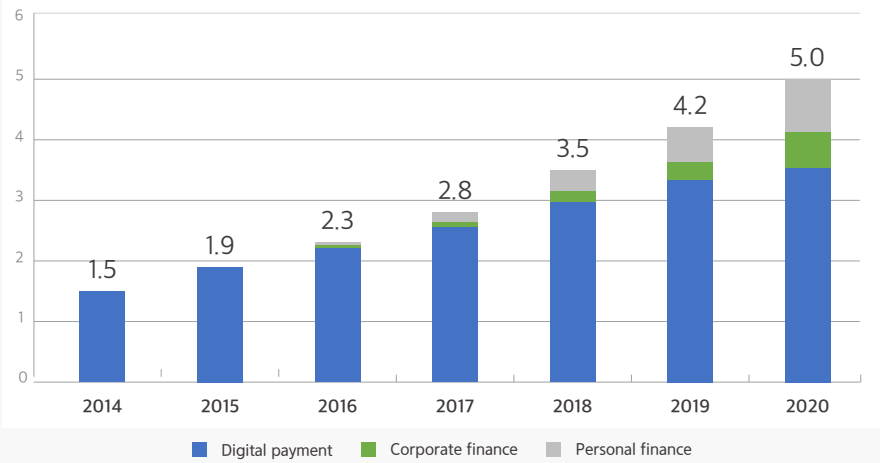
2-1. Overview and status of the simple payment/remittance market

Since the 2008 global financial crisis, competition and innovation have been spreading in the banking-oriented payment industry, with the emergence of various financial services, financial channels, and business models such as mobile payment, foreign currency remittance, financial platform, P2P, public investment (crowdfunding), personal asset management, security certification, and financial data analysis.
As a result, a new type of fintech industry based on various technologies and platforms is rapidly emerging. Many non-financial companies fiercely compete for market preoccupation and expansion based on Pay-type simple payment methods and prepaid simple remittance methods.

① Overseas market status

- (Market size) According to the 'Global Fintech Trends and Supervision Policy' announced by the Financial Supervisory Service, the global Fintech market has grown from $1.6 trillion in 2014 to about $5 trillion in 2020. It is also projected to increase to $9.8 trillion by 2023. In the global fintech market, the digital payment sector is growing thanks to the development of technology and the spread of smartphones rapidly. It is closely related to consumer life, so the number of users is high, and its frequency is high. In addition, due to the wide range of applications, it accounts for more than 77% of the total market.

< Graph1. Global Fintech Market Size > (Unit: trillion dollars)



Source: Financial Supervisory Service, Global Fintech Trends and Supervisory Policy, December 2020

2-1.

Overview and status of the simple payment/ remittance market

- (structural growth background) Although the US, Europe, and Japan are classified as advanced financial countries, the proportion of cash settlements in personal consumption expenditures is still high. In particular, the proportion of cash use is high in small business owners (small and medium-sized stores), lifestyle-related industries, and micropayments. Recently, due to technological developments, policy efforts in each country, and the impact of COVID-19, the cashless nation is accelerating worldwide. (The trend of changing from cash payment to non-cash/digital payment)

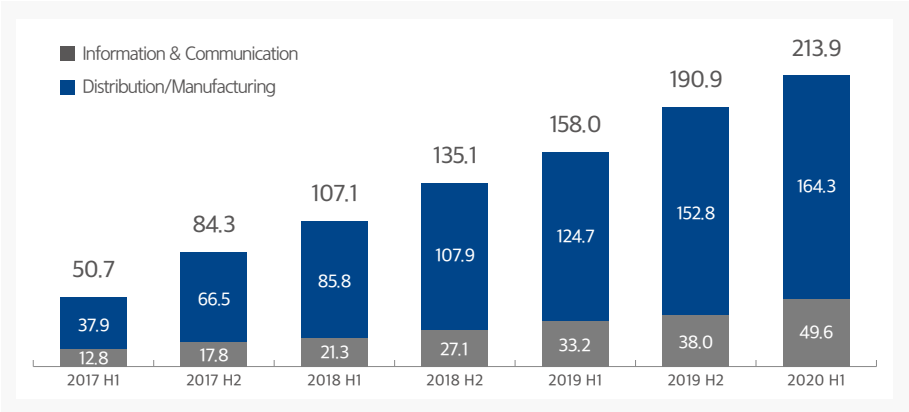
- (Major operators) Pay companies representing non-cash payments to include Kakao Pay, Samsung Pay, Alipay, Google Pay, and Apple Pay. Due to fierce competition among global companies, the payments market had grown rapidly from $2.9 billion in 2013 to $8 billion in 2018, management consulting multinational company Accenture announced. In the case of China, the number of investments and loans further decreased due to the aftermath of COVID-19 and the effect of tightening regulatory policies for the fintech industry. Nevertheless, the investment amount in the first half of 2020 was $2.1 billion (RMB 13.8 billion). this is equivalent to 25% of the total investment in the Asia/Pacific region.

② Status of the domestic market

- (Market size) The domestic fintech market, which has recently been rapidly increasing, recorded 7.31 million daily transactions and an average daily usage amount of USD 190 million (213.9 billion KRW) as of the first half of 2020, up 8% and 12% from the previous year, respectively. According to the Bank of Korea, the size of the simple payment market soared to $35.9 billion in 2017, $71.9 billion in 2018, and $107.7 billion in 2019.

< Graph2. 2017-2020 Domestic average daily simple payment service usage amount >

(Unit: KRW billion)



Note) Information & Communication : Kakao Pay, Naver Pay, KPAY, Paynow, UBpay, Payco, SPC Networks, SS Pay, Toss Pay
Distribution/Manufacturing : Smile Pay, SSG PAY, L PAY, Samsung Pay, LG Pay, One Pay, Baemin Pay, Coupay, SK Pay, WeMakep Pay

Source: Bank of Korea (2020.09)

- (Proportion by a business operator) According to the '2018 Financial Informatization Promotion Status' report published by the Bank of Korea, non-face-to-face transactions accounted for 91.2% of financial transactions in 2018 (based on deposits and withdrawals and money transfer transactions), and face-to-face transactions through bank windows Transactions were only 8.8%. In particular, the number and amount of use by information and telecommunication operators have increased due to the impact of social distancing due to the spread of COVID-19.

- (Major operators) As a result of confirming the domestic simple payment market through IR data (accumulated number of subscribers, monthly active users, and transaction amount) published by each company, 8 out of 10 service users are Kakao Pay (81.9%), or Naver Pay (81.4%) was found to be in use. However, in terms of the main platform used the most in real life (1st place), Samsung Pay (30.2%) occupies the lead by a narrow margin, followed by Naver Pay (29.1%) and Kakao Pay (14.6%).

2-2.

Simple payment/ remittance market technology overview

① Service procedure and technology type

Non-financial companies use PIN or biometric information and various authentication technologies online, and provide simple payment and remittance services offline using mobile phone-based MST, NFC, QR/ Barcode technology.

- (Simple payment) When paying at an online merchant, the customer selects a simple payment method and pays easily with a PIN or biometric information authentication method, or completes the payment with a mobile phone touch or QR-code, etc.

- (Simple remittance) The customer selects a simple remittance method, withdraws money from the financial company account to the prepaid account and charges it, then fills in the recipient's contact information (mobile phone number, SNS ID, etc.) or financial company account number and enters the amount before remittance easy to complete with the push of a button.

2-2.

Simple payment/ remittance market technology overview

② Online authentication method

- (Authentication method) Pin/pattern authentication, ARS authentication, mobile phone SMS authentication, account/card authentication, biometric authentication, etc. are used for identity and transaction authentication.

- Non-financial business operators register personal information, password, and payment method through the customer identification process, and perform simple authentication for each payment and remittance.

< Table1. Main simple authentication method >

Authentication method	How to authenticate
Pin / Pattern	Authenticate by having to enter a pre-registered pin number or pattern
ARS	Make a call to the phone number registered in advance, give an authentication number, and enter it to authenticate
SMS	Authenticate by sending the authentication number by text message (SMS) to the mobile phone registered in advance.
Account	After sending a small amount such as 1 won and a number or text to the customer's account, it is authenticated by inputting it
Card	Authenticate by entering the card information entered in advance (card number, expiration date, CVC, etc.)
Biometric	Authenticate by comparing the pre-encrypted and registered biometric information with the entered information

*Source: Ministry of Public Administration and Security, Introduction to Public Website Authentication Means 2018.09..p6~7, reorganized

③ Offline authentication method

- Online payment is possible only with a smartphone without a payment terminal, but offline, various methods are applied depending on short-range communication technology and payment terminal

- Offline payment methods are broadly classified into app card method, magnetic field method of MST (Magnetic Secure Transmission) and WMC (Wireless Magnetic Communication), and NFC (Near Field Communication) method.

- (Information storage method) SE (Secure Element), Divided into TEE (Trust Execution Environment) and HCE (Host Card Emulation)

*SE method stores payment information on a separate USIM card, eSE (embedded SE), microSD card, or cloud in a mobile device, while TEE method stores it in a secure area such as the mobile device CPU, whereas HCE method stores it in the mobile OS).

2-2.

Simple payment/ remittance market technology overview

< Table2. Offline simple payment method >

Division	App card	Magnetic Field Method	NFC
Technology	QR/Barcode	MST, WMC	NFC
Payment terminal	Barcode Reader	Existing MS terminal	NFC terminal
Information Storage	No storage required	TEE method	SE, TEE, HCE area
Security	Disposable virtual card number, variable QR code	Encrypted information storage, tokenization technology, Knox program, fingerprint authentication	Encrypted information storage, tokenization technology, fingerprint authentication
Applicable company	Naver Pay, Kakao Pay, Toss, Payco, SSG Pay, Card Company App Card, etc.	Samsung Pay (MST), LG Pay (WMC)	Naver Pay, Samsung Pay, Payco, SSG Pay, Card Company App Card, etc.

2-3.

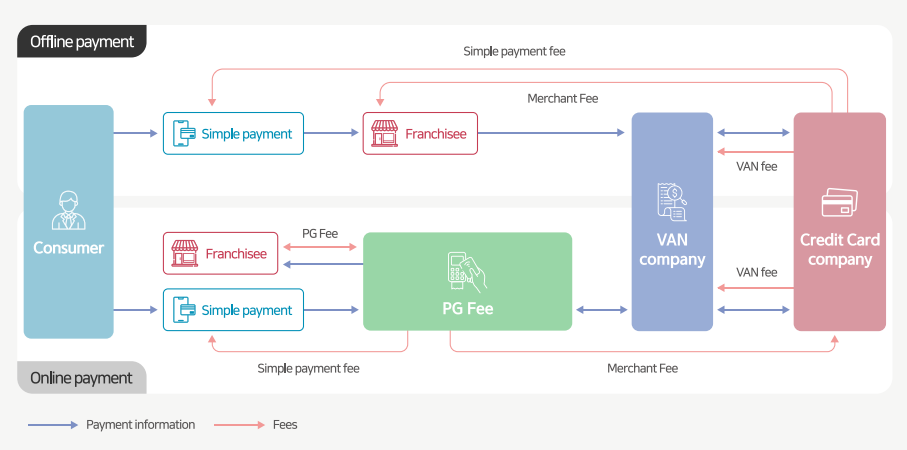
Necessity of ReapPay

① Problems in the existing market

a. Problems in service procedures

- Fee problem: In the existing simple payment system, the fee burden is increased due to the complicated structure of the payment process. As of the first half of 2020, it was found that Naver Pay and Kakao Pay commission rates were higher than those of credit cards when looking at the commission rates of merchants with 'annual sales of 3 billion won or less'. This is because they have a double payment structure. Most of the commission sales of simple payment companies are paid to card companies and electronic payment agencies (PG companies). Therefore, a fundamental method to solve this structural problem is needed.

< Picture1. Payment process of existing simple payment >



Source: BNK Financial Management Research Institute

2-3.

Necessity of ReapPay

b. Problems with service technology

- Weak security: Because there is no protection device for personal information such as simple authentication methods such as fingerprint recognition and password considering user convenience and stored credit card information, it is vulnerable to payment security and exposure of personal information. To secure security, various types of services such as 'Face Pay,' which allows payment with a face without a smartphone, are being released. However, concerns are still being pointed out about personal information leakage, the possibility of forgery or falsification, and the theft of mobile virtual accounts. In fact, it was confirmed that about 74.9% of the security problems that occurred when using mobile payments in 2020 were related to personal information leakage, so security vulnerabilities are the biggest problem that mobile payment users are concerned about.

- Lack of versatility: According to the results of a survey conducted by the Korea Consumer Agency on 'the most inconvenient point when using the existing mobile simple payment service' in 2019, 30.7% answered 'restricting the use of a specific payment service for each merchant' Among the survey results, the second-highest response result was obtained. This is because the devices and programs required for each payment method, such as App Card, NFC, and MST, are different for each company that provides mobile simple payments, so it can only be used at affiliate stores of companies that provide simple payment services. In addition, it isn't easy to introduce all payment methods since merchants need to install additional devices or programs to provide these payment services.

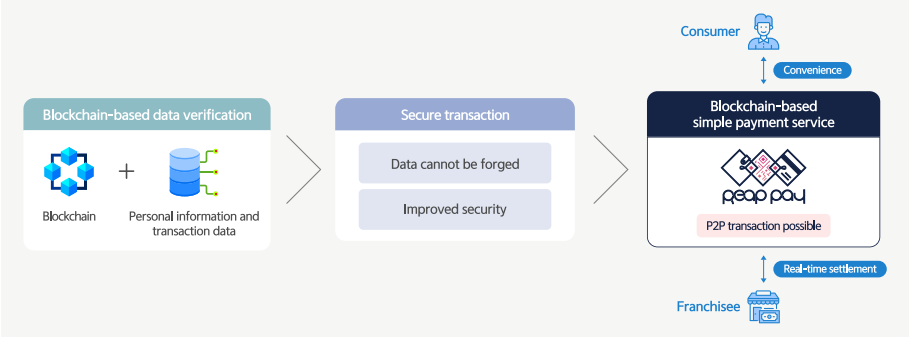
2-3.

Necessity of ReapPay

② Overview and Solution of ReapPay

a. Building a decentralized P2P transaction system based on blockchain-based strong security

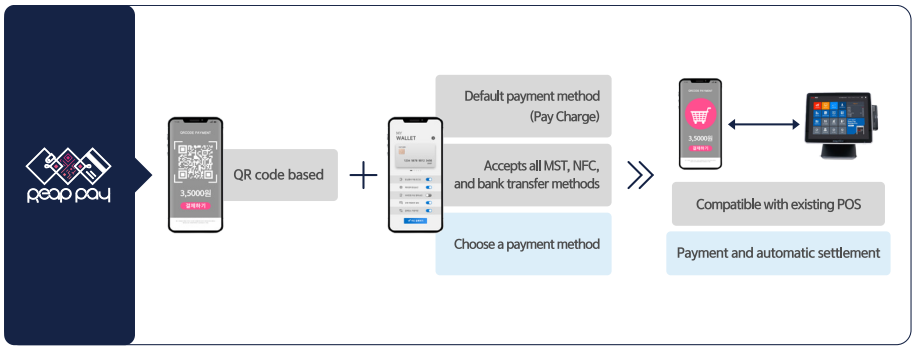
< Picture2. Blockchain-based P2P transaction system structure >



- ReapPay builds a P2P transaction between a consumer and a merchant rather than a centralized payment system based on blockchain technology, and verifies previous transactions whether the payment process is appropriate by creating and storing the data generated during the transaction in a block. Since the blockchain distributes and stores transaction details in multiple nodes, it guarantees safe transactions by fundamentally blocking hacking and forgery.

b. Provides user convenience through compatibility with existing POS and linking with other payment methods

< Picture3. ReapPay System Structure >



- ReapPay basically pursues QR simple payment, and by accepting all existing simple payment methods such as MST, NFC, and bank transfer, it minimizes customers' reluctance to new payment methods, It is intended to serve as a channel for payment methods.

- In addition, payment can be made through the ReapPay app installed on the consumer's smartphone without replacing the POS program already in use by developing an interworking API compatible with the POS program in use.

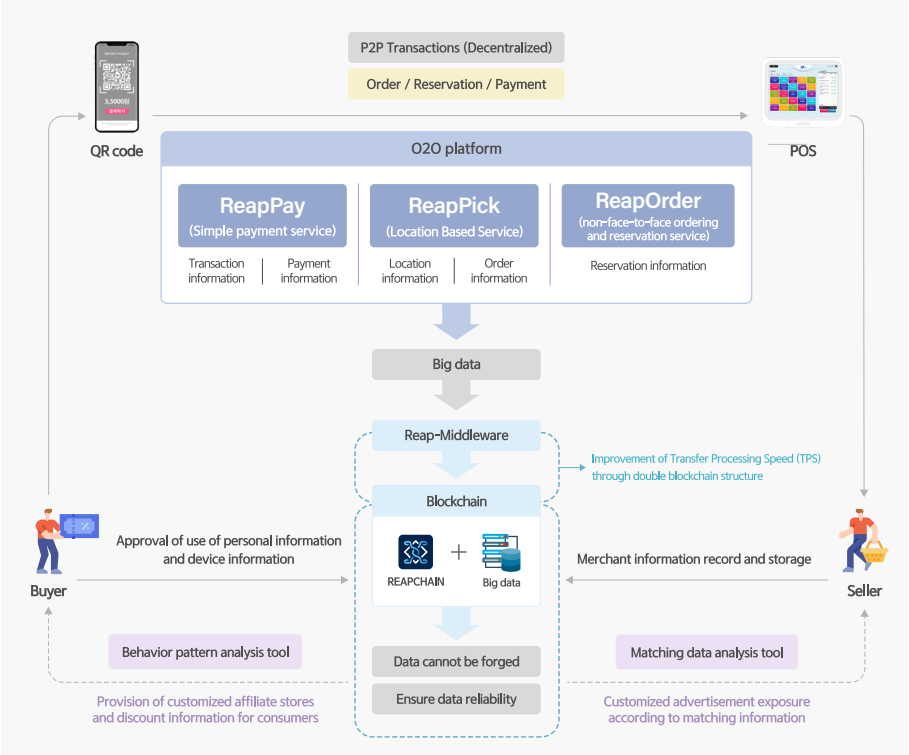
3. Definition of service (business) content and technology

3-1.

O2O platform service

-ReapPay
-ReapPick
-ReapOrder

< Picture4. Blockchain-based O2O platform structure >



ReapPay is the core of blockchain technology: 'decentralization', 'reducing transaction costs', 'guaranteeing transparency', and 'resolving asymmetry of information'. , to solve problems such as information asymmetry between consumers and suppliers, protection and management of collected personal information, etc., and create a transaction network between individuals, companies and individuals, and companies and companies based on 'ReapPay / ReapPick / ReapOrder'. We want to build an O2O platform to activate it.

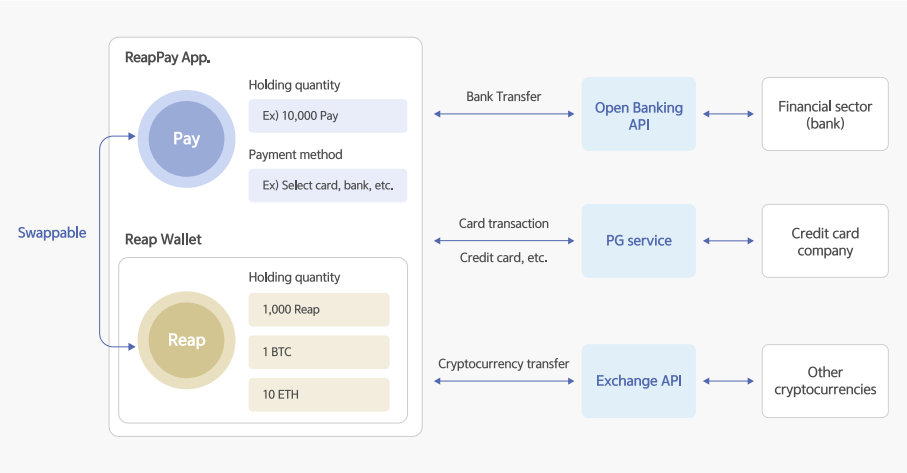
3-1.

O2O platform service

-ReapPay
-ReapPick
-ReapOrder

① ReapPay

< Picture5. Interworking with 'ReapPay & Reap Wallet' with existing platforms >



a. Prepaid electronic payment method (ReapPay): ReapPay, a prepaid electronic payment method, can be used both online and offline, and is a dedicated payment method for freely using all O2O platform services of ReapChain governance. Consumers can freely use Alliance corporate services that are affiliated with the ReapChain platform without restrictions, and can experience flexible payment services through ReapPay. In addition, it is easy to attract and secure new customers through customer sharing between companies by using blockchain-based ReapPay rather than fragmented residual points for each company. (1 KRW has the same value as 1 Pay, but 1 Pay is not equal to 1 Reap.)

b. Reap wallet (cryptocurrency wallet): Reap Wallet is a blockchain-only wallet for storing Reap, ReapChain's own token, and a personal wallet with the ability for users to store or transfer Reap and other cryptocurrencies.
- Reaps and cryptocurrencies stored in the Reap wallet can be exchanged for cash, and can be swapped to Pay through ReapPay. Also, it is possible to transfer to an exchange wallet or someone else's personal wallet through the Reap wallet.

c. Linking other payment methods and integration point function: ReapPay intends to expand consumers' choice of payment methods by linking other payment methods through electronic financial business (PG) business registration and open banking service, and other companies (card, bank etc.) to increase the convenience of consumers through the integrated service that can be used by converting and integrating the reward points accumulated during payment into ReapPay points.

3-1.

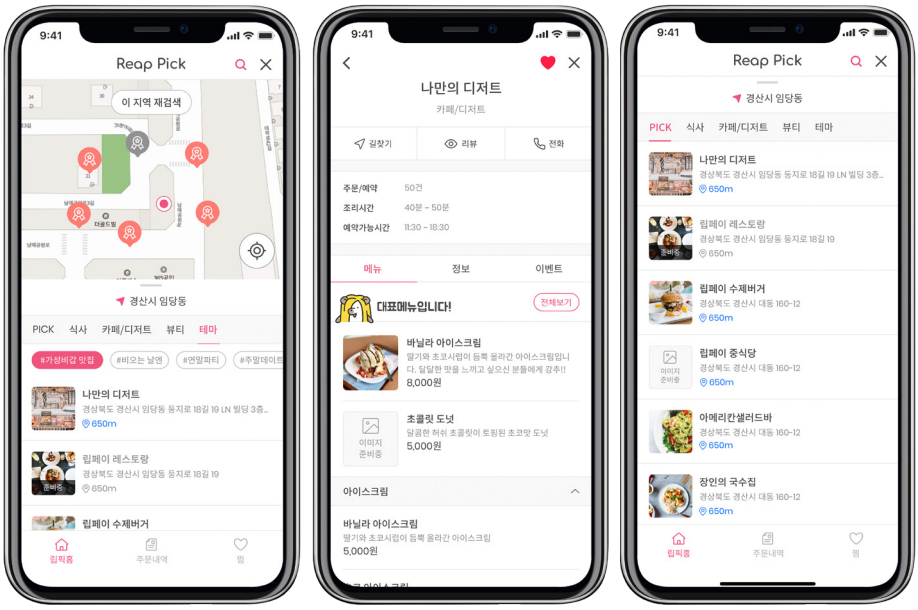
O2O platform service

-ReapPay
-ReapPick
-ReapOrder

② ReapPick

: ReapPick utilizes location-based service (LBS) to help customers easily find the store they want in the location where they are, check the menu in advance at the store, order pickup and make a visit reservation, and even pay through ReapOrder possible at once.

< Picture6. ReapPay app configuration >



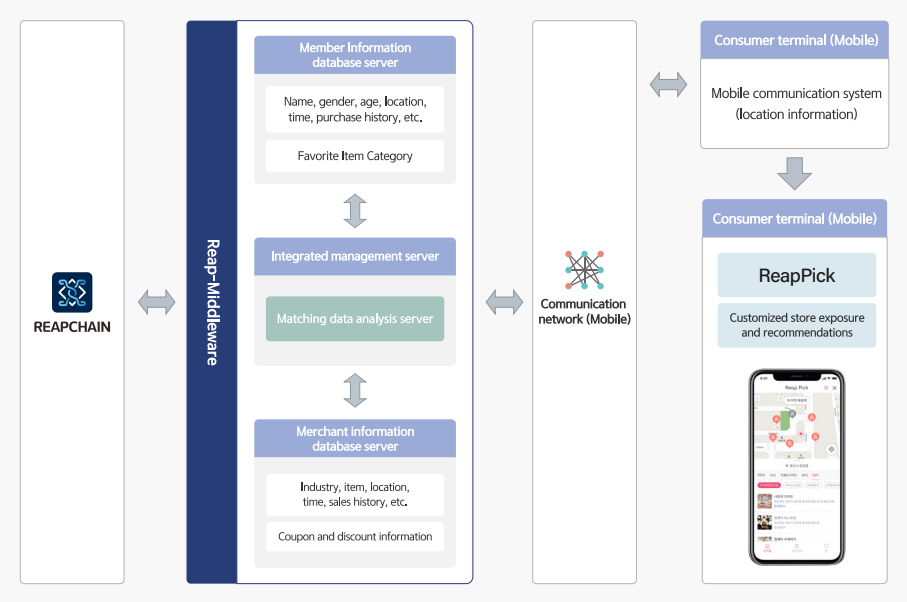
a. Location-based store search and recommendation service: Based on the information that predicts the user's behavior using the context-based ontology lifelog that includes the user's location information, time information, transaction information, and basic information, the user's preference compared to the information of nearby franchisees As a service that recommends stores with a high price, the user can immediately check the discount information and stored coupons of the selected affiliated store, so that the practical consumption life and emotional quality of customers can be improved. can be provided.

3-1.

O2O platform service

-ReapPay
-ReapPick
-ReapOrder

< Picture7. Location-based store search and recommendation service flow chart >



- Based on the location-based service of the smart terminal, this system converts consumer personal information and merchant information into data and provides optimized merchant information by analyzing the consumer's location, consumption pattern, and purchasing propensity, thereby inducing smart payment by consumers. It is a system that does

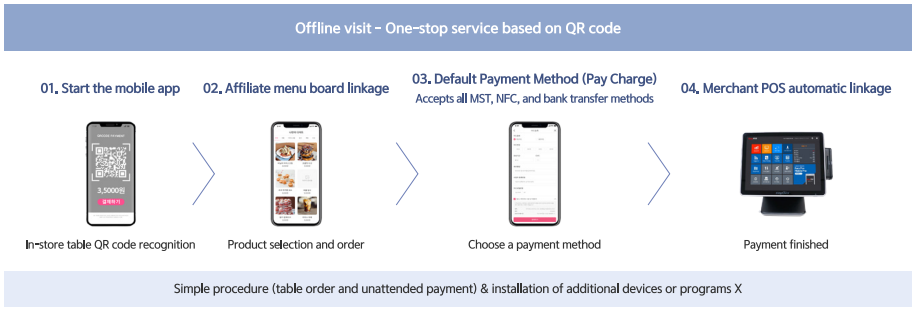
3-1.

O2O platform service

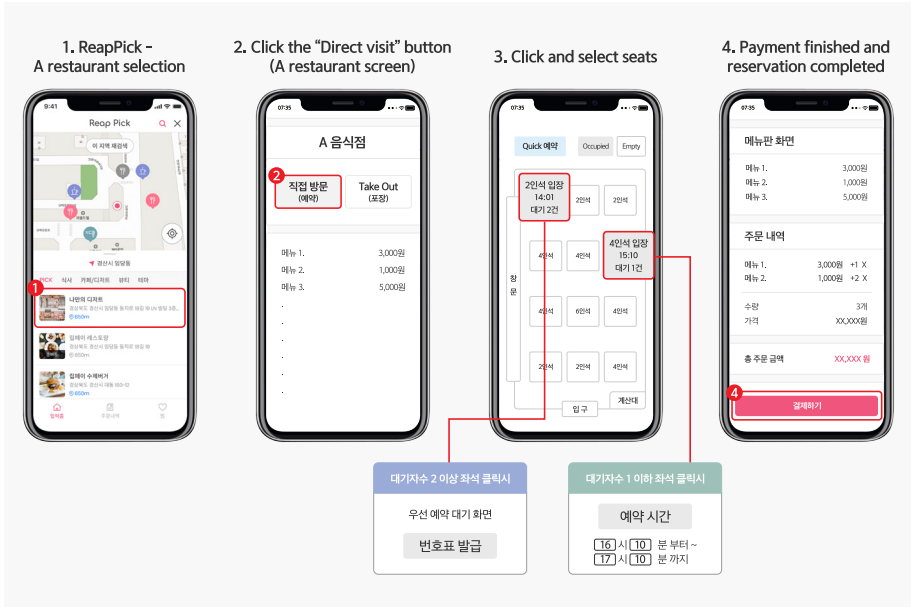
-ReapPay
-ReapPick
-ReapOrder

b. ReapOrder (non-face-to-face unmanned system) : As a QR-based non-face-to-face ordering and reservation service, it is a one-stop service that scans the QR code in the store to check the menu, order and pay, so no separate KIOSK equipment is required. In addition, by developing an interlocking API compatible with the existing POS, there is no need to install additional equipment or programs for payment and settlement. Customers' orders and payment details are also automatically linked so that franchisees can check directly through the monitor.

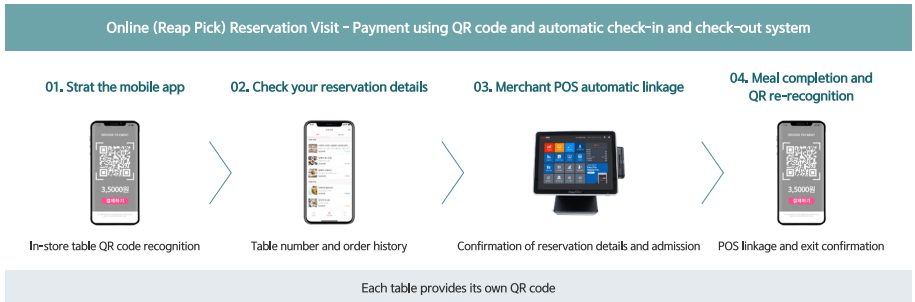
Ex. 1_ When visiting offline, the procedure



Ex. 2_ Online reservation and advance payment procedures for restaurants, etc.



Ex. 3_ Procedure when visiting a restaurant after making an online reservation (after making a reservation for payment in advance, when sitting at a table)

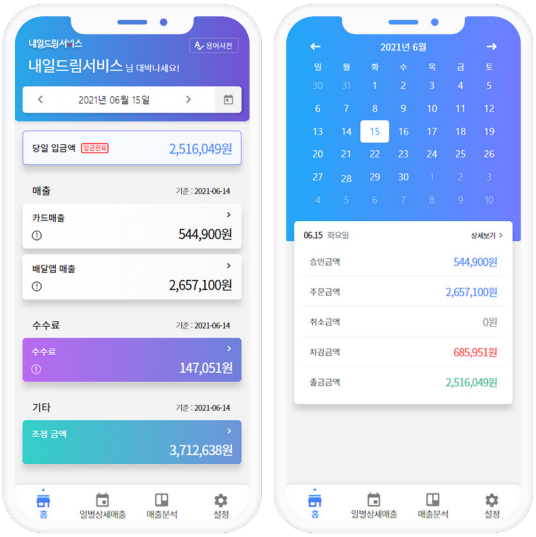


3-2.

O2O platform additional service

a. Integrated settlement and revenue omission prevention service : ReapPay's integrated settlement service is a service that automates the need to manually fill out and fill out PG and VAN credit card sales data through data scraping technology. Scraping technology is the technology that automatically collects data from Internet websites (PG and VAN companies) on arbitrary screens without the user's web browsing.

< Example of integrated settlement service >



< Example of sales omission prevention notification service >

ReapPay provides a free service that receives basic information of affiliates through an integrated settlement service based on scraping technology and transmits the previous day's approval amount and today's deposit amount (by a credit card company, approval date) through notification talk. The sales omission prevention notification talk service improves the inconvenience of merchants caused by different payment dates for each card company. In addition, it allows you to check sales at a glance and prevent sales omissions easily.

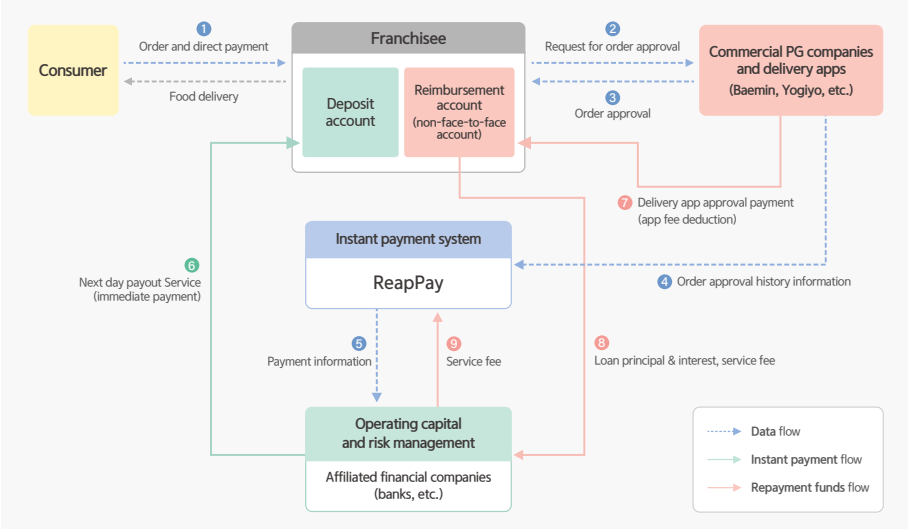
In addition, unlike existing solutions, you can check sales by the card company and sales of delivery apps at a glance, so there is no need to check merchant sites such as BAEDAL-MINJOK and YOGIYO. You can check all sales at once through the manager page.(It is possible to prevent omission of sales by comparing the payment contents of 'delivery platform/delivery brokerage platform/delivery agent')

3-2.

O2O platform additional service

b. Next day payout (Pre-settlement) service : ReapPay transfers the same-day order approval amount to the next day through the 'Next-day payout Service' to solve the inconvenience of situations in which settlement dates are different for each PG company or delivery brokerage app and to increase cash flow at merchants we provide a pre-settlement service that deposits money directly tomorrow.

< Picture12. Pre-settlement service flow chart >



- The existing payment method has many difficulties in securing cash flow as it takes from 4 to 15 days from the settlement due to the complicated structure of the procedure.

- ReapPay affiliates can settle and receive the amount that is individually settled according to the settlement date of the PG company or the delivery brokerage app the next day after sales occur. As a result, stable business operation is possible because it can procure operating funds such as payment and labor costs.

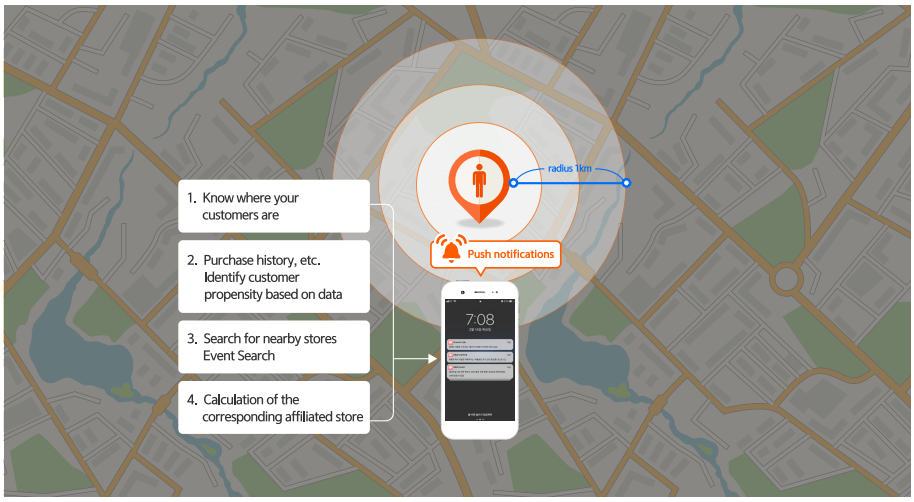
- Although the card company pre-settlement service already exists, the pre-order service for a delivery app is the first in Korea. Moreover, you can use the service at the lowest fee through affiliated financial institutions.

3-2.

O2O platform additional service

c. . **Customized Advertising (Push) Service** : According to the location of the customer, a customized advertising service that provides events and advertising services from nearby stores can have the effect of attracting customers and naturally increasing sales When a merchant registers and sets an advertisement, an advertisement with matching conditions is sent to the user's smartphone (within a certain radius) by push, increasing the likelihood of consumption when exposed to advertisements.

< Picture13. Flow chart of customized advertisement service >



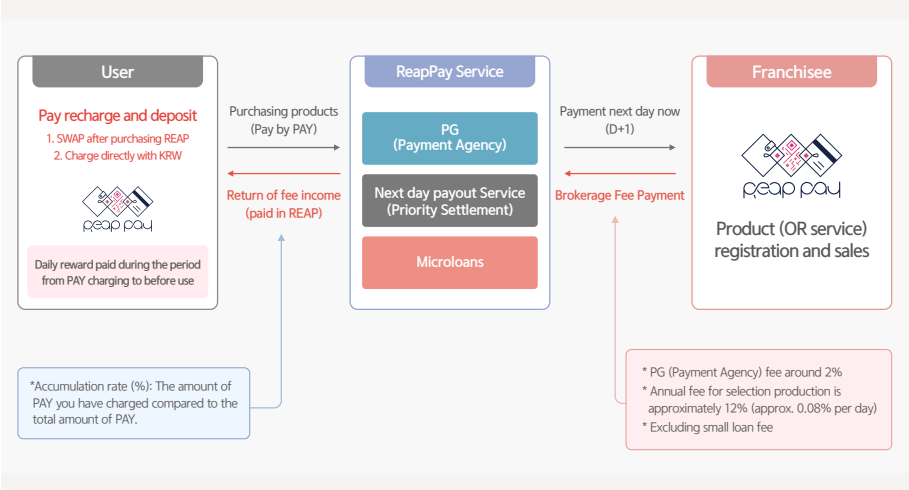
- If you are a ReapPay merchant, you provide an opportunity to expose products and events to all users.

- Based on customer data such as purchase history, we provide customized advertisements by analyzing customer propensity to naturally increase sales of affiliated stores.

3-3.

Cryptocurrency deposit and microloan service

< Picture14. ReapPay deposit service flow chart >



a. Deposit service : ReapPay charges a Pay (① directly charged with KRW, ② after purchasing Reap and then charged with Pay after purchasing ReapPay), and wants to pay rewards for the period of holding it just by holding it. ReapPay's deposit service introduces a method in which a commercial bank deposits a certain amount and pays interest, and after charging the Pay, it intends to pay a Daily Reward for the period until it is used.

ReapPay's commission income includes 'Next-day payout Service's commission (about 12% per year = about 0.08% per day) and PG (payment agency) commission (about 2%)'. There is a brokerage fee for micro-loan services for small businesses. ReapPay aims to increase consumer benefits by providing these services and returning all commission revenue generated to consumers.

Consumer reward is paid through REAP (ReapChain), and REAP paid as a reward is Swap again as Pay so that it can be used to create a virtuous cycle structure. Of course, the paid REAP can be swapped to Pay, but you can also profit from the market by holding it in the Reap wallet for a certain period of time.

Each individual's accumulation ratio for consumer reward is calculated as the 'ratio of the amount charged by the user to the total amount of users deposited in ReapPay,' and REAP will be paid daily based on the ratio.

3-3.

Cryptocurrency deposit and microloan service

b. Micro (credit) loan service : ReapPay intends to provide a medium-interest microloan product service for small and medium-sized merchants through a partnership with a savings bank. Due to the nature of small and medium-sized businesses, it isn't easy to get a loan through the first financial sector and get a loan through a guarantee. Therefore, for small business owners who need funds suddenly like this, we want to provide a micro-loan service that anyone of ReapPay can use easily and conveniently. In other words, ReapPay's micro-loan for small businesses is a service that allows you to quickly use the funds you want at a medium interest rate through proof of the sales of individual ReapPay affiliates.

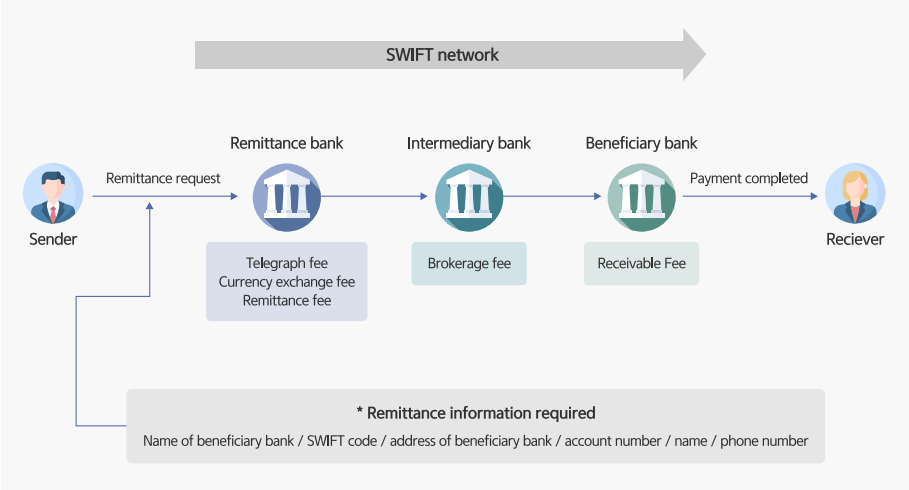
3-4.

Overseas simple payment and remittance service

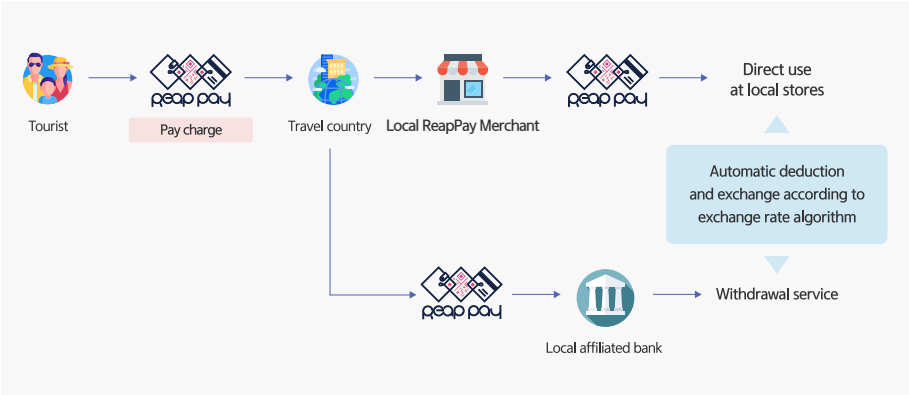
a. Global cross-border payment service : ReapPay users do not need to exchange money or carry cash when visiting overseas to purchase goods and make payments. ReapPay is a simple exchange rate algorithm based on real-time exchange rates. Through a 'global cross-border' payment service that deducts Pay according to the exchange rate of the visiting country, ReapPay users can easily pay with Pay at affiliated stores in the visiting country without the inconvenient exchange process. Withdrawals can also be made in the currency of the country visited.

Cf> Existing SWIFT method: Accessibility is the best, but it takes a long time to receive after remittance, and also incurs a lot of fees. Five types of fees are charged: telegraphic fee, currency exchange fee, remittance fee, brokerage fee, and receiving fee.

< Picture15. Existing cross-border payment service flow chart - SWIFT method >



< Picture16. Flow of ReapPay's cross-border payment service >

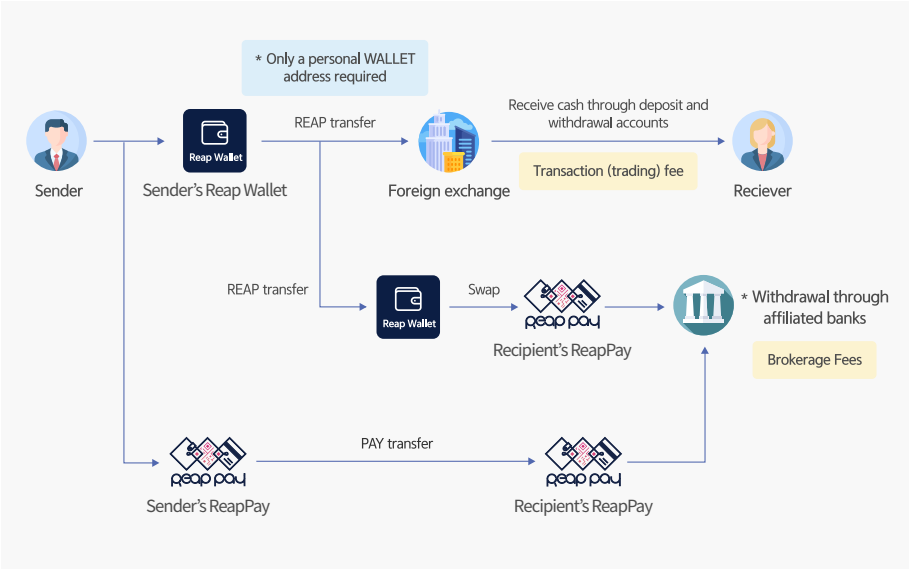


3-4.

Overseas simple payment and remittance service

b. Overseas remittance service : ReapPay is a simple overseas remittance service using block chain rather than the high-cost SWIFT method traditionally used in connection with overseas corporations and affiliates to eliminate currency exchange fees, so that overseas tourists, Korean foreign workers, and overseas students Significantly reduce the fee burden. ReapPay's overseas remittance service can send and receive money by directly connecting consumers and suppliers in other countries through a P2P platform.

< Picture17. ReapPay's overseas remittance service flow chart >



4. ReapPay Ecosystem

4-1.

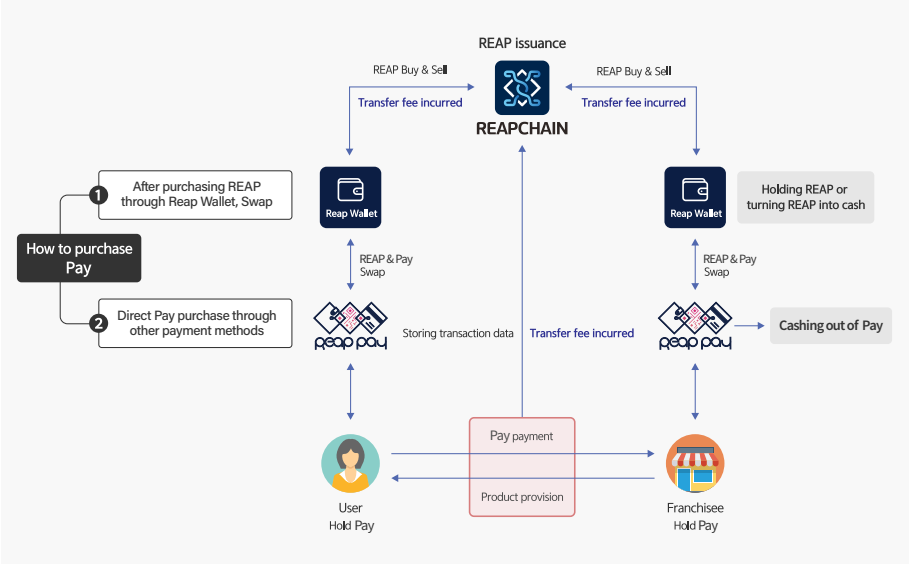
ReapPay Ecosystem

4-1. ReapPay Ecosystem

- ReapPay Pay is used as a means of transaction to purchase or use goods and services within the ReapChain service platform. ReapChain's REAP does not have any rights other than its function as a means of being listed and traded on an external exchange and used for proof of ownership of ReapChain.

- ReapPay Pay is a stable payment method, '1 KRW = 1 Pay', and the held Pay can be swapped at any time according to ReapChain's REAP and market value.

< Picture18. Ecosystem diagram of ReapPay >



- ReapChain's fee system: Reap Pay's transaction and payment details are stored in the blockchain for security and safety, and when ReapPay's Pay is swapped into REAP, 0.02 REAP is generated per transaction as a transfer fee. In addition, the merchant pays 0.5% of the payment amount in Pay as a ReapPay payment fee.

4-2.

Use of 'Pay' of ReapPay

ReapPay's Pay is an O2O service-only payment method used for all transactions (payment, settlement, compensation, etc.) that occur within the service platform. (1 KRW has the same value as 1 Pay, but 1 Pay is not the same as 1 Reap.)

- Payment method for consumers to purchase or use goods and services online/offline.

- Compensation method according to consumer contribution to activate platform service.
  ex> Merchant evaluation, reviews and reviews, etc.

- Payment method for merchants to use advertising services.

- Payment method according to the event conducted by the affiliated store.

4-3.

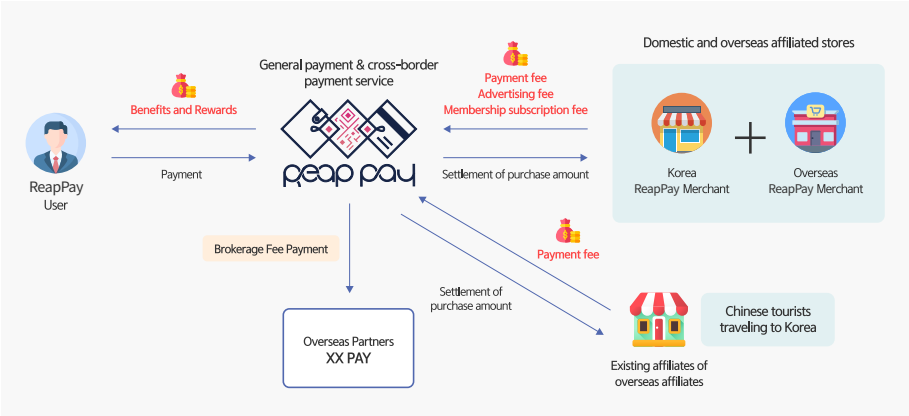
Business and revenue model

As a ReapPay platform operator, ReapPay Co., Ltd. may receive a basic fee for using the platform and a payment fee for electronic payment as a PG company.

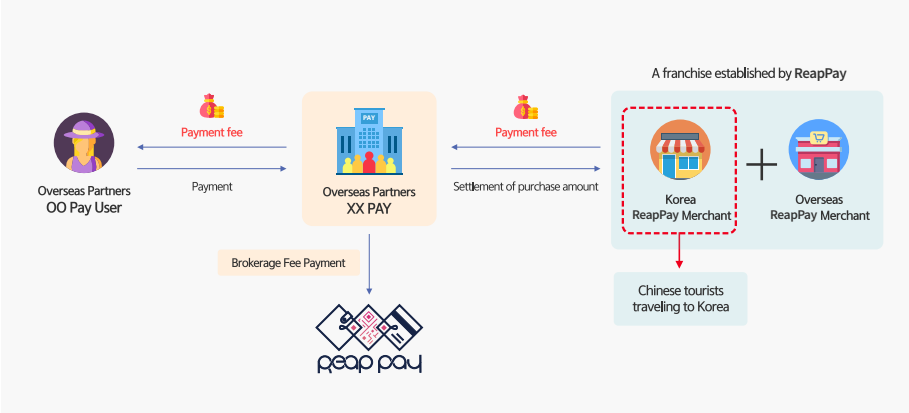
▶ Types of Fees Receivable

- Platform brokerage fees (basic fees for using the platform, such as sales fees and entry fees)
- Payment fee (payment fee according to the use of PG)
- Advertisement fee (advertising fee according to advertisements sent by affiliated stores)

< Picture19. Fees revenue model through ReapPay >



< Picture20. Reappay revenue model through affiliates (brokerage commission revenue) >



4-4.

ReapPay reserve policy

The reserve budget for ReapPay is financed from the amount allocated for marketing expenses out of the total amount of financing sold through ReapChain's pre-sale, ICO, and IEO at the beginning of the service. This is because we want to cover commission revenue and advertising revenue.

① Consumer Basic Reserve Policy

- Accumulation according to the payment amount
- Referral earning
- Earn merchant evaluation
- Earn by writing product reviews and purchase reviews

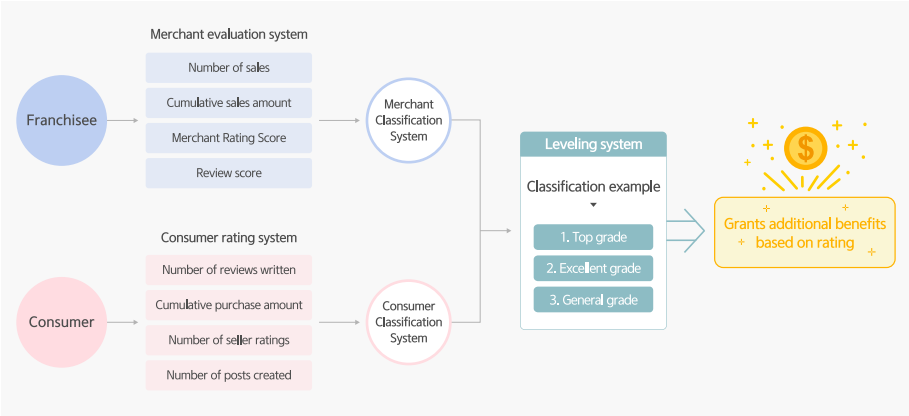
② Additional reserve policy according to the user leveling system

- Applicable only to ReapPick member subscribers and merchants.
- The purpose is to improve the reliability of the platform and revitalize the community by building a self-leveling system that classifies users' ratings by utilizing various evaluation indicators for merchants and consumers and differentially applying for the benefits according to the rating

Operational standard: The grade is updated monthly or quarterly so that the benefits can be returned to as many people as possible.

(However, detailed evaluation items are subject to change depending on the circumstances of the operator.)

< Picture21. Classification according to user leveling system >



- Merchant benefits: discount on payment fees according to grade, differential discount on advertising costs, etc.
- Consumer benefits: support for additional points according to grade, etc.

4-4.

ReapPay reserve policy

③ Payment scope and examples according to the reserve policy

- The following contents are subject to change depending on the circumstances of the operator.

< Table3. Basic payment scope >

Division	Basic Reward	Accumulation rate and payment unit	Remark
Consumer	Payment Accumulation Rate	1% of payment amount	
	Referral Reward	200 Point	
	Merchant evaluation reward	100 Point	
	Rewards for reviewing purchases and writing reviews	100 Point	

< Table4. Additional discount range according to grade >

Division		Rank	Additional accumulation rate and discount rate
Consumer		Excellnet	1% + 0.5% additional accumulation of payment amount (total 1.5% accumulation)
		Good	1% + 0.2 additional accumulation of payment amount (total 1.2% accumulation)
		Normal	1% of payment amount
Franchisee	Payment fee	Excellnet	0.3% of payment fee
		Good	0.4% of payment fee
		Normal	0.5% of payment fee
	Advertising fee	Excellnet	5% discount on advertising fees
		Good	3% discount on advertising fees
		Normal	N/A

5. Target market and entry strategy

5-1.

Global market status

5-1. Global market status

① Global Fintech Market Status

- The number of digital payment service users worldwide has increased steadily since 2017, and as of 2020, there are 3.471.94 million users. By 2024, it is expected that 4.636.34 million people will use it, which is about 60% of the global population.

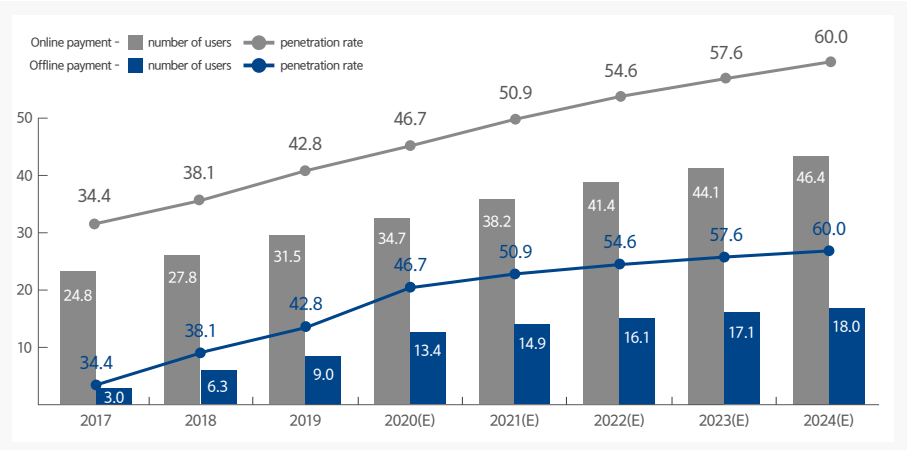
- The use of digital (mobile) wallets as a payment method is expected to increase day by day, and the digital (mobile) wallet (41.8%) was the most used payment method in the global e-commerce market in 2019 based on the transaction amount. As a result, the market share is expected to increase to 52.2% by 2023.

- Offline payments are still overwhelming (30.2%), but this portion is expected to decrease to 18.7% by 2023, and instead, the portion of payments through digital (mobile) wallets (29.6%).

- Due to cash transaction risks due to weak financial infrastructure and counterfeit bills in emerging countries and favorable regulatory environments, digital payment services are being introduced in Asian countries such as China, India, Indonesia, Vietnam, and many other African countries.

< Graph3. 2017-2024 Number of digital payment service users worldwide and penetration rate >

(Unit: billion people. %)



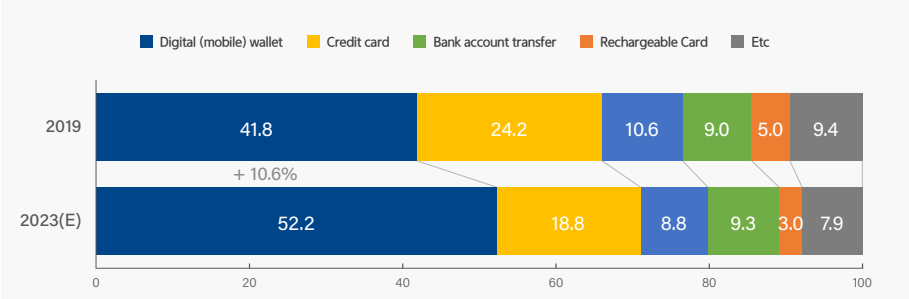
Source: Statista (2020.9)

5-1.

Global market status

< Graph4. 2019-2023 Global Transaction Proportion by Online Payment Method >

(Unit: billion people. %)



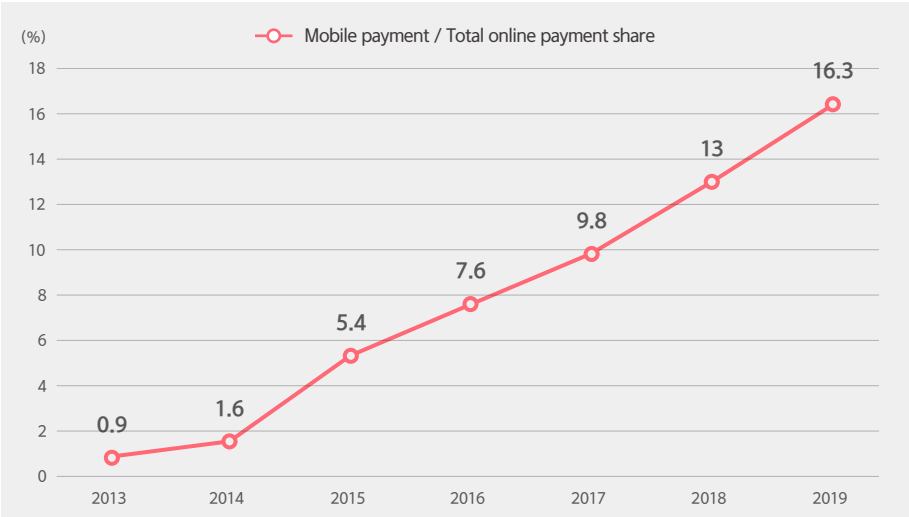
Source: Worldpay (2020.3)

② China Fintech Market Status

- Simple payment services in FinTech are growing rapidly around China and emerging countries. Especially in China, there is a relatively high demand from citizens for simple payment services because of the low credit card penetration rate due to high card fees and low financial accessibility.

- Of all online payments in China in 2013, mobile payments rose sharply from only 0.9% to 16.3% in 2019, emerging as a new power in the simple payment market, with domestic platforms such as Alipay and WeChat Pay accounting for the Top 5.

< Graph5. Mobile payment share among all online payments in China >



division	China	Korea
Smartphone penetration rate	69%	94.1%
Mobile Payment Utilization	Among mobile internet users, the proportion of mobile payment users is 71.4%	The rate of use of mobile payment services within the last 6 months was 26.1%
Credit and Debit Cards	0.7 pieces per person	2.1 pieces per person (2017)

Source: iResearch China, KITA

5-2.

Chinese market analysis and commercialization strategies

① Current status of simple payment companies in China

- China's high utilization rate of online simple payment services in 2020 shows that simple payment has become the most common means of use in real life.

- Most users use Alipay and WeChat Pay. Chinese payment companies are currently focusing their investments on overseas expansion projects, rising demand for investments from third-largest companies in China, including Yichenbao, Qui-Chen, and Lian Dongyus.

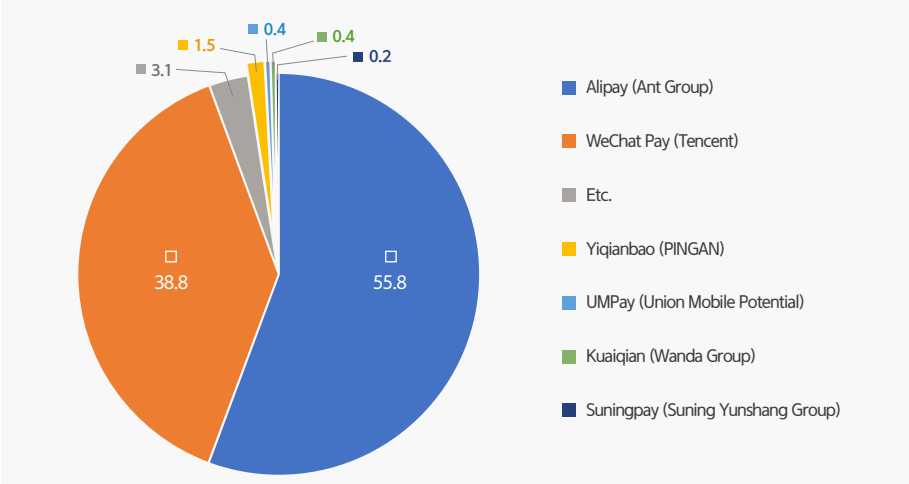
- In Korea, Alipay has entered the market in partnership with Kakao Pay, and WeChat Pay has entered the market, and payment POS system usage fees are charged 0.6% of the payment amount on average.

< Graph6. 2020 Online Simple Payment Service Platform Usage Rate by Country >

United States of America		England		China	
PayPal	90%	PayPal	95%	支付宝 ALIPAY	95%
venmo	30%	VISA Checkout	38%	微信支付 WeChat Pay	87%
G Pay	21%	Pay	20%	UnionPay 银联	45%
Pay	20%	amazon pay	16%	快钱 99Bill.com	32%
amazon pay	19%	G Pay	16%	财付通 TENPAY.COM	24%

Note) Online simple payment service users by country: US (n*2,366), UK (n*1,502), China (n*1,618)
Source: Statista(2020.09)

< Graph6-1. Domestic mobile payment market share in China (%) >



Source: Organized by Hong Kong Ming Pao, etc.

5-2.

Chinese market analysis and commercialization strategies

② Chinese market analysis and commercialization strategy

< Table5. PEST Analysis of Simple Payment Market in China >

P - Politics	E - Economy
- Deregulation in the financial sector - Allow non-financial companies to establish micro-loan companies - Accept online payment settlement service - Owned by own management company - Allow establishment of online specialized banks	- Leading the mobile market by Alibaba / Tencent - 71.4% of mobile payment usage in China - Even Chinese banks have entered the mobile simple payment market and competition is heating up
S - Society	**T - Technology**
- Low credit card penetration - Use QR payment throughout your life, regardless of on/offline - Tendency to prefer one's own brand	- Development based on QR code scanning method - NFC payment service, which requires high hardware or platform configuration, is in the initial stage

- China's Alipay and WeChat Pay POS system usage fees are gradually increasing to 0.55% in 2018 and 0.6% in 2019, but ReapPay provides high cost-effectiveness through low fees and excellent security for transactions by using blockchain technology.

- ReapPay aims to secure franchises, reduce the psychological repulsion of Chinese people through partnership strategies with local Chinese companies, reduce various commission burdens in the financial market, and enter China to secure mobile payment markets and overseas remittance markets.

- In addition, through the integrated QR code payment method through technical partnership with Chinese companies, ReapPay can secure affiliates in China through Chinese companies, and Chinese companies provide opportunities to enter the Korean market through domestic ReapPay affiliates. Therefore, we want to have an advantage in building the initial infrastructure.

5-3.

Detailed strategy for entering China: establishment of foreign-funded companies and alliances with local companies

① ReapPay's strategy to advance into China: Entering into China through alliances with third-ranked Chinese companies

- Except for Alipay and WeChat Pay, companies that support simple payment in China are showing weakness in the global simple payment market. ReapPay intends to enter the Chinese market through alliances with third-tier companies, except for Alipay and WeChat Pay, which have already formed alliances with domestic companies.

- ReapPay is also based on technological alliances with local companies like existing companies, so ReapPay users can use ReapPay directly at affiliated stores in China by charging them with ReapPay in Korea. Through this, users of Chinese affiliates can make payments with ReapPay at domestic ReapPay affiliated stores, thereby increasing the convenience of tourists and reducing exchange fees and overseas remittance fees.

Ex> 3rd largest mobile payment company in China with high possibilityof partnering with ReapPay

Company name	Service name	Share	Contents
Ping An	Itchenbao	1.5%	- A variety of membership alliances provide users with simple one-stop payment, accumulation, and financial asset management services. - This is the second-largest mobile payment service after Alipay and WeChat Pay. - Service safety and reliability are high due to the name value and expertise of a financial company.
Wanda	Qui-Chen	0.4%	- As the largest real estate developer and distributor in China, we are expanding our business centering on Wanda e-commerce. - It acquired Chinese online payment company Qui-Chen in 2014, used Qui-Chen payment services in shopping malls, hotels, and movie theaters, and is revitalizing the e-commerce market based on the huge offline market with more than 100 Wanda Plaza in China alone.
UnionPay	Liandongyouth	0.4%	- This is a card payment system operated by China UnionPay Co., Ltd. or a card brand issued. - Provide mobile payment services based on various benefits in daily life in China.

- Through the partnership with Chinese simple payment companies, we will secure additional domestic merchants, introduce and spread ReapPay in China, and quickly settle in the market by discovering additional services such as reserves, merchant dividend policies, discounts, and coupons.

5-3.

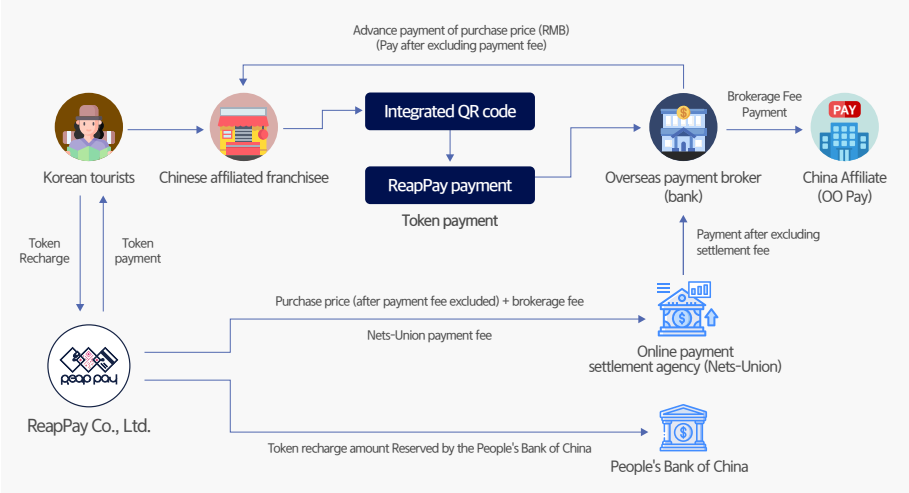
Detailed strategy for entering China:

establishment of foreign-funded companies and alliances with local companies

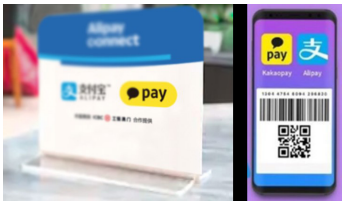
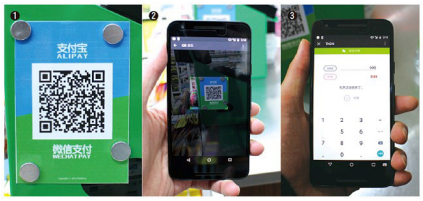
② ReapPay's method of providing simple payment services in the Chinese market

- Integrated QR code/bar code support through a technical partnership between local and domestic companies allows services to be supported using affiliated stores without a separate merchant recruitment period. Instead, overseas payment brokers settle the amount.

< Picture22. Payment Process Flow Chart >



< Picture23. Example of integrated QR code >

< Alipay - Kakao Pay >	< Alipay - Wechat Pay >
	

6. Expected Sales and Profitability

6-1.

Expected sales and profits according to the strategy to enter China

6-1. Expected sales and profits according to the strategy to enter China

- Total transaction value of Chinese mobile payment market in China in 2020: KRW 4 trillion

- The growth rate of each company is the same as the overall average growth rate (15.4%) of the Chinese fintech market for the last 4 years (2018-2021) (refer to SID Consulting (赛迪顾问))

- Proportion of 'third-ranked companies' based on Chinese mobile market share: Wanda Qui-Chen 0.4% / UnionPay Liandong Youth 0.4% / Pingan Itchenbao 1.5%

- Each company's sales are set at 0.5% of the transaction.

[Unit: KRW]

Division		2022	2023	2024	2025	2026
In partnership with Itchenbao, ReapPay Revenue	Itchenbao transaction size based on market share	838 trillion	968 trillion	1,117 trillion	1,289 trillion	1,487 trillion
	Itchenbao Sales (based on 0.5%)	4 trillion 194.9 billion	4 trillion 840.9 billion	5 trillion 586.4 billion	6 trillion 446.7 billion	7 trillion 439.5 billion
	ReapPay Revenue	41.9 billion	48.4 billion	55.8 billion	64.4 billion	74.3 billion
In partnership with Liandong Youth, ReapPay Revenue	Liandong Youth transaction size based on market share	223 trillion	258 trillion	297 trillion	343 trillion	396 trillion
	Liandong Youth Sales (based on 0.5%)	1 trillion 111.8 billion	1 trillion 290.9 billion	1 trillion 489.7 billion	1 trillion 719.1 billion	1 trillion 983.3 billion
	ReapPay Revenue	11.1 billion	12.9 billion	14.8 billion	17.1 billion	19.8 billion
In partnership with Qui-Chen, ReapPay Revenue	Qui-Chen transaction size based on market share	223 trillion	258 trillion	297 trillion	343 trillion	396 trillion
	Qui-Chen Sales (based on 0.5%)	1 trillion 111.8 billion	1 trillion 290.9 billion	1 trillion 489.7 billion	1 trillion 719.1 billion	1 trillion 983.3 billion
	ReapPay Revenue	11.1 billion	12.9 billion	14.8 billion	17.1 billion	19.8 billion

※ Calculation basis

- For simple calculation, it is assumed that the integrated QR code infrastructure construction rate with partner companies is 100%. The payment rate through ReapPay is assumed to be 1% in the rate of return on paid commissions of Chinese companies.

6-2.

Expected domestic sales and revenue

- Calculated based on statistics on franchising business in 2020 announced by the Fair Trade Commission
  (Based on the total number of affiliated stores: '260,000 affiliates with 7,000 domestic service and restaurant brands)

- Among the total domestic franchisees in 2020, 'bank + credit card + app card' accounted for 28%

(Source: DB Financial Investment, 2020)

※ ReapPay sales formula

1) ReapPay fee per store (A) :
   Merchant average sales x Simple payment fee
2) Target number of stores (B) :
   Number of simple payment stores x Target market share
3) ReapPay Sales (C) : (C) = (A) x (B)

[Unit: number, KRW 1million]

Division	2022	2023	2024	2025	2026
Total number of domestic stores	283,896	292,757	301,895	311,318	321,035
Number of simple payment stores	79,491	81,972	84,530	87,169	89,890
Target share	1%	2%	4%	7%	10%
Target number of stores	795	1,639	3,381	6,102	8,989
ReapPay Sales	**1,232**	**2,540**	**5,245**	**9,459**	**13,933**

※ Calculation basis

1) Simple payment fee 0.5%
2) Average sales of franchisees in 2020 KRW 310 million
   - Conservatively, about KRW 310 million in average sales will be applied by 2026.