Mobile Connect & T Auth. Solution

Dept./Date

About T-Authentication

Brief introduction of the T-Authentication Service

Identity authentication application with mobile phone numbers, providing easy, safe and reliable services to end users and corporate customers.

Use case

Log in
Log in, Sign-Up
Reset Password

Money Transfer
Online banking
(e.g., transfer, loan
exchange)

Payment
Used for authentication of
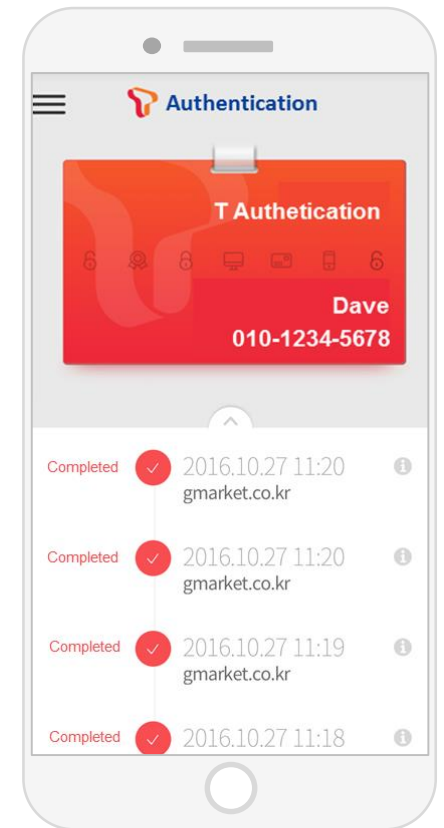Samsung pay, Kakao
pay, Naver pay etc.

Technology

mobile connect

| Identity GateWay | LoA 2 | LoA 3 | LoA 4 |

Status

| Handing 62M Authentications per Month | T Authentication App Users 6.0M | 26,847 partner companies |

Authentication

T Authetication

Dave
010-1234-5678

Completed ✓ 2016.10.27 11:20
gmarket.co.kr

Completed ✓ 2016.10.27 11:20
gmarket.co.kr

Completed ✓ 2016.10.27 11:19
gmarket.co.kr

Completed ✓ 2016.10.27 11:18

Process

Log in(Sign-up)

| Click authenticate to sign up | Request for identity authentication for membership | T Authentication | Enter member information |

*Identity authentication is required to join Battle.net in South Korea

Process

Payment

Enter card information	Identity authentication request for registration card	T Authentication	Completed card registration

*Samsung Pay is the number one mobile payment service
 The amount paid by Samsung Pay in 2016 is $ 3.94 billion

3

Process

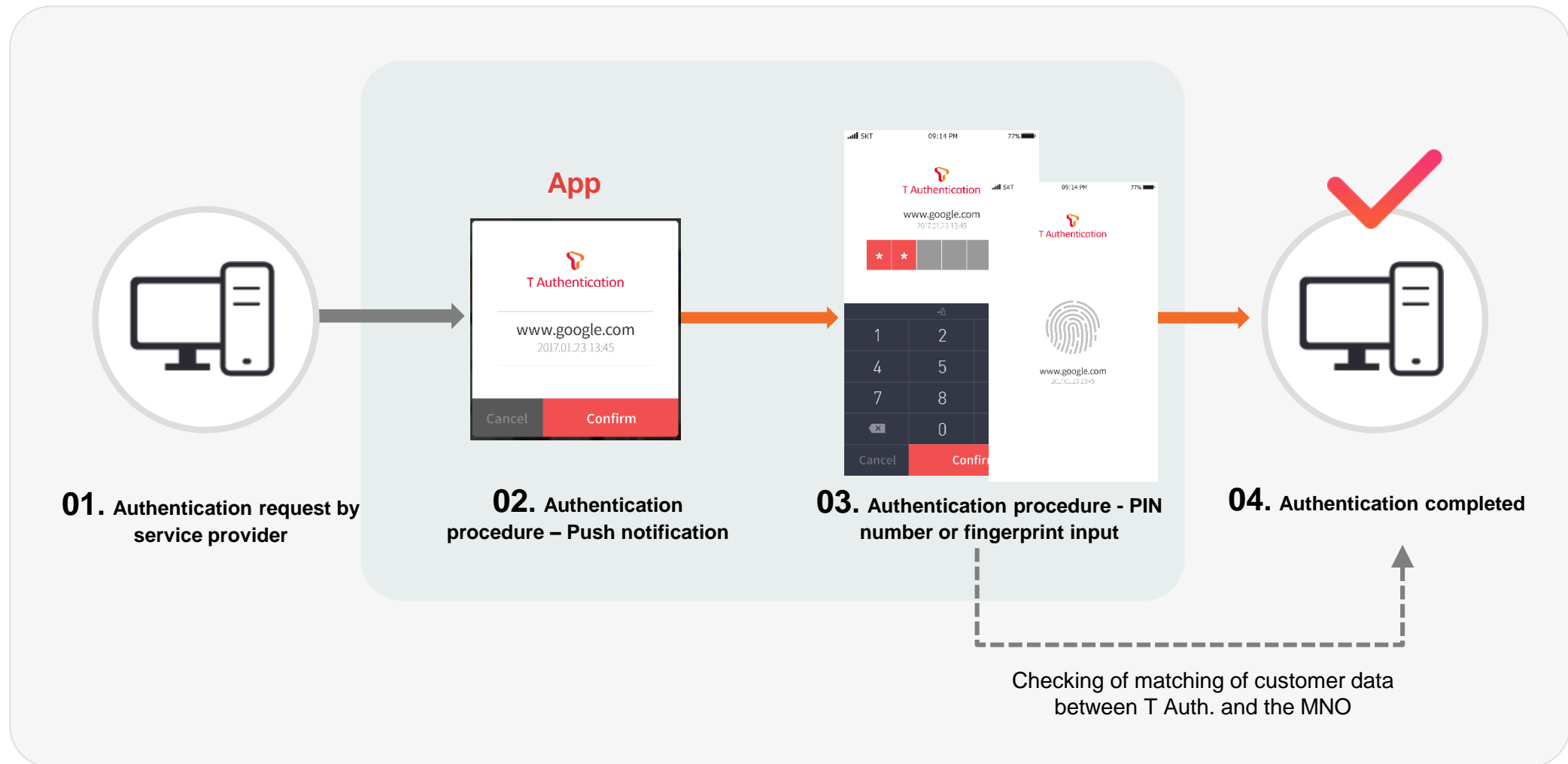**Money Transfer**

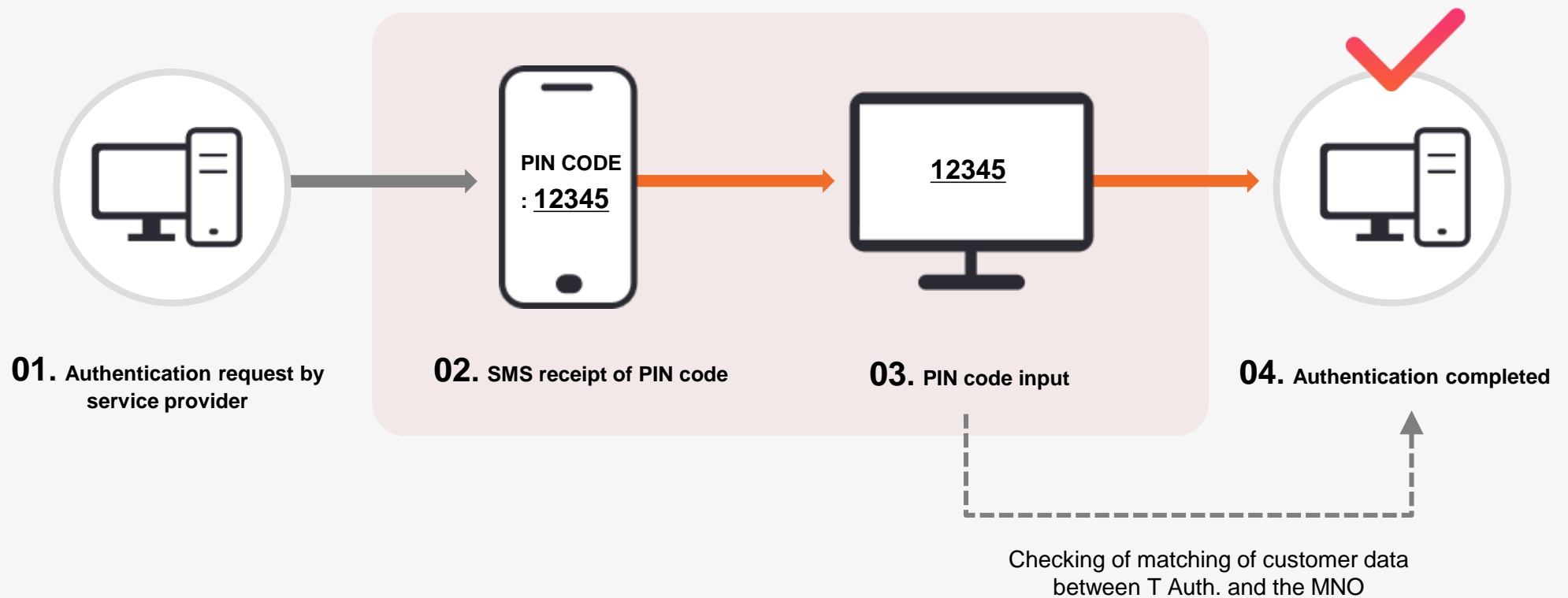| Enter the transfer information | Request for identity authentication for remittance | T Authentication | Money transfer completed |

*KB Kookmin Bank is South Korea's largest bank with 1,037 branches and 120 branch offices.

T Auth. support authentication through a smartphone app to ensure safer authentication.
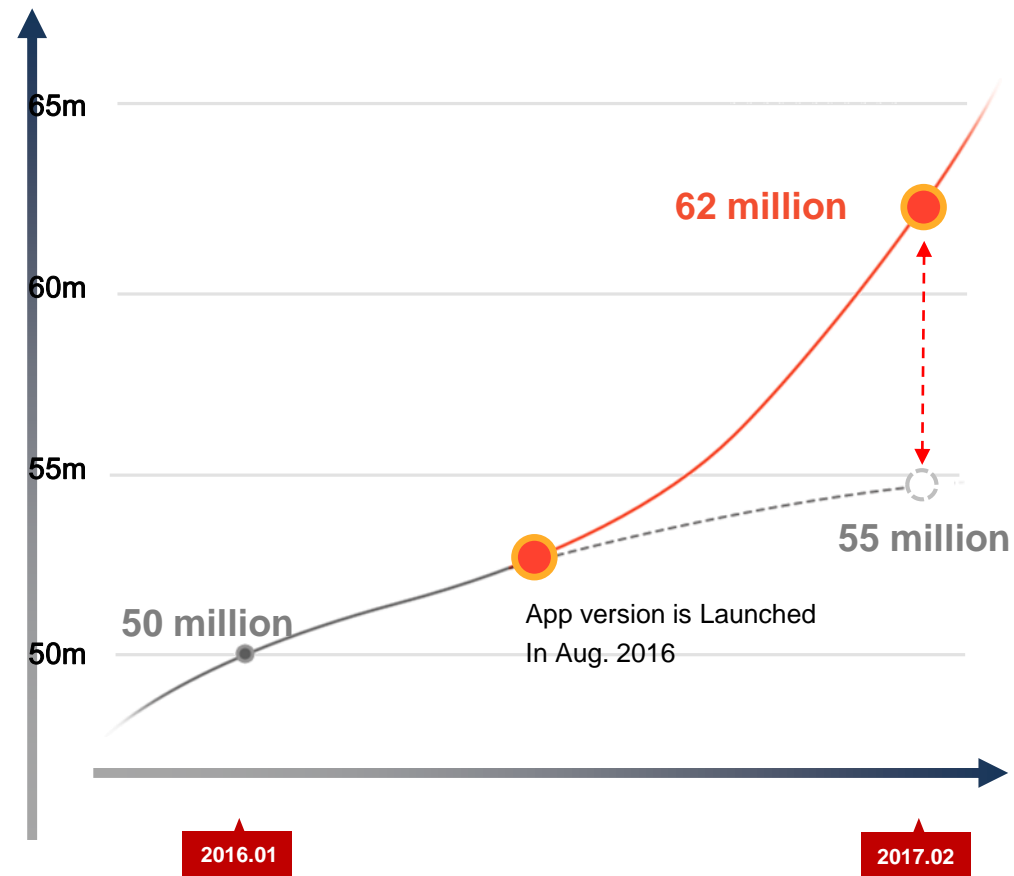
App

T Authentication

www.google.com
2017.01.23 13:45

Cancel   Confirm

SKT   09:14 PM   77%

T Authentication

www.google.com
2017.01.23 13:45

⋆ ⋆

1	2
4	5
7	8
⌫	0

Cancel   Confirm

SKT   09:14 PM   77%

T Authentication

www.google.com
2017.01.23 13:45

01. Authentication request by service provider

02. Authentication procedure – Push notification

03. Authentication procedure - PIN number or fingerprint input

04. Authentication completed

Checking of matching of customer data between T Auth. and the MNO

If the quick adoption is needed,
the T Auth. support authentication through SMS OTP.

PIN CODE
: **12345**

12345

01. **Authentication request by service provider**

02. **SMS receipt of PIN code**

03. **PIN code input**

04. **Authentication completed**

Checking of matching of customer data
between T Auth. and the MNO

Phenomenal Growth after Launching

Monthly Uses

62 million

55 million

50 million

App version is Launched
In Aug. 2016

2016.01

2017.02

- ▪▪▪ **Authorizations with SNS based T-Auth. service**
- ▬ **Authorizations with T-Auth App**

Active Users of T Authentication

T-Auth.
App Open

5 million

8 million

| 2016.07 | 08 | 09 | 10 | 11 | 12 | 2017.01 | 02 |
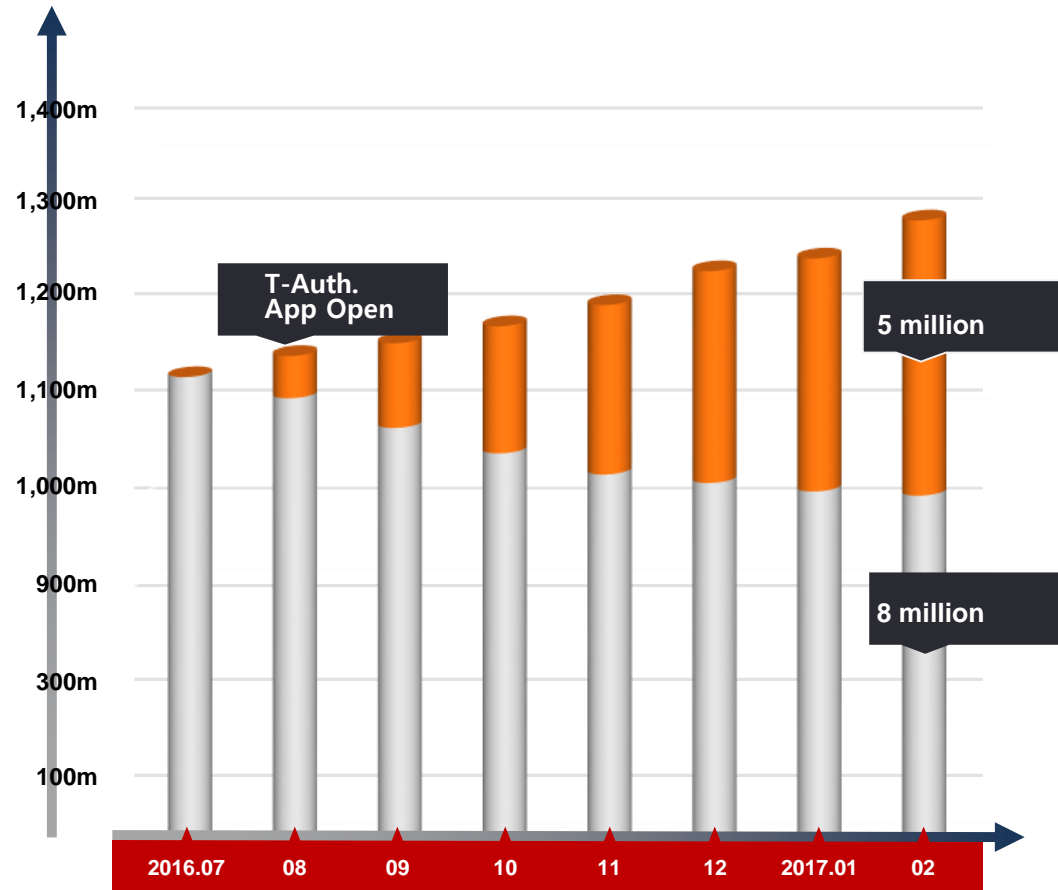
- ▪ **SNS based Authorization Users**
- ▪ **T-Auth. App User**

SKT enabled several "Value Add" services

While in short time, SKT could find meaningful "Profit" sources.

T Credit management
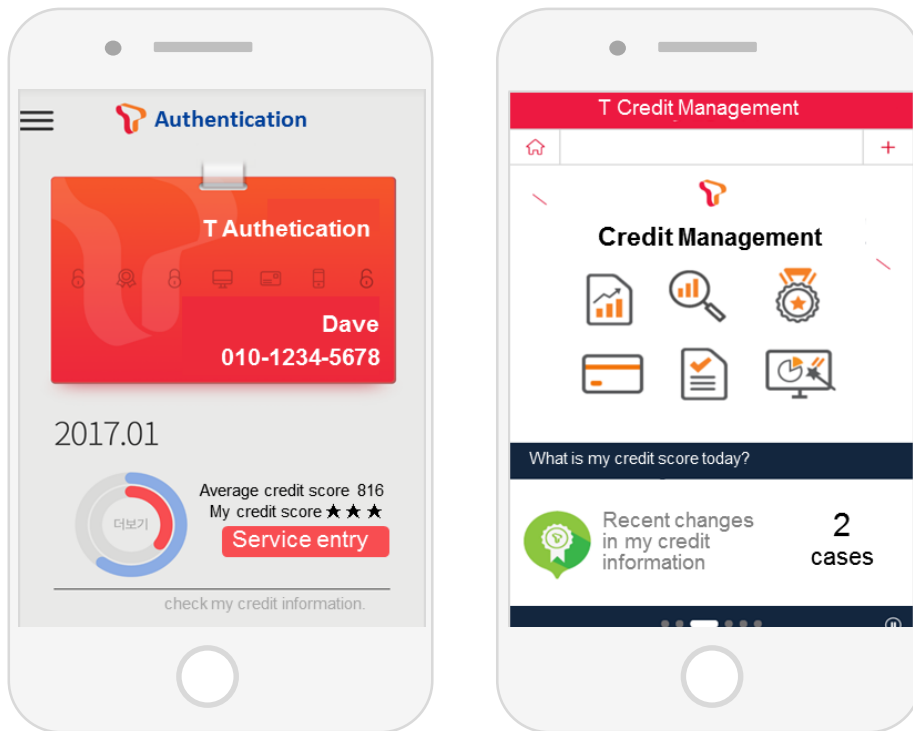
Credit check and management of rating

Fees : $ 3 / month

Launch : Jan, 2017

Registered Users : 30,000

T Stock information
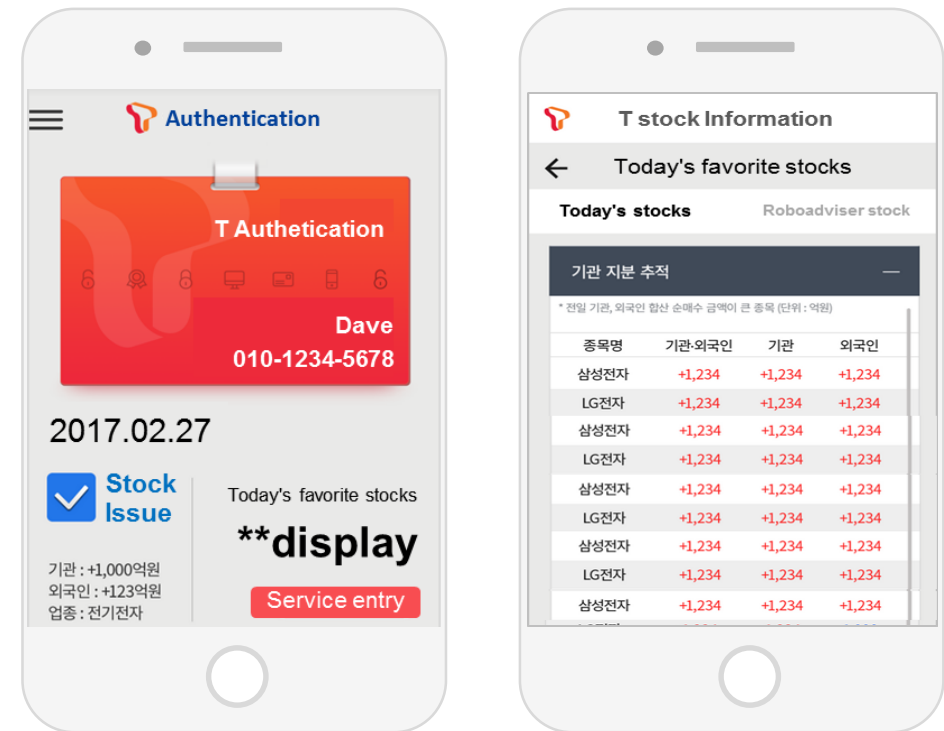
Daily stock market information from robo-advisor
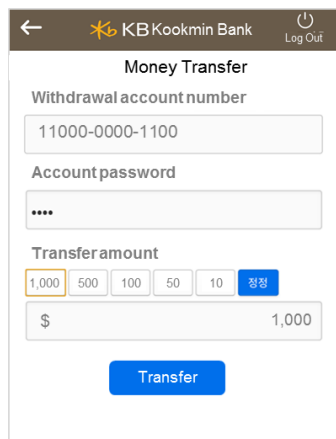
Fees : $ 10 /month

Launch : March, 2017

Case1_Banking Services

KB Bank could eliminate several layers of painful authorization steps

Simplification of funs transfer process (90s -> 15s)

Check information	**T Auth. Authentication**		**complete**

Simplified Authentication
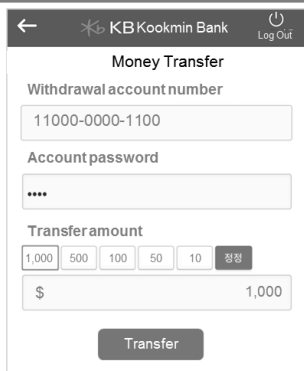
Check information	**Select Authorization**	**SMS authentication**	**OTP authentication**	**complete**
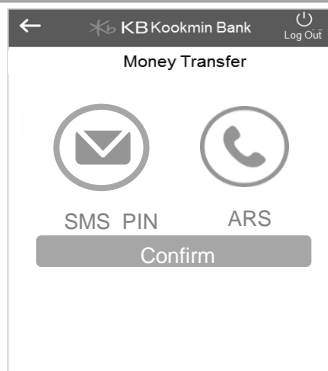
Money Transfer
Withdrawal account number
11000-0000-1100
Account password
Transfer amount
1,000 500 100 50 10 정정
$ 1,000
Transfer
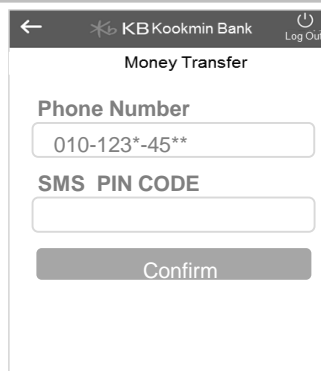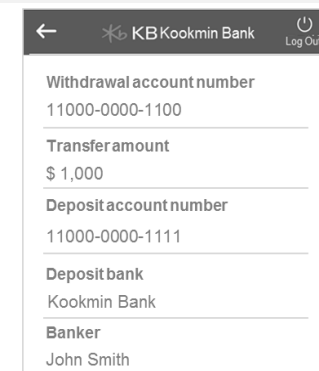
SMS PIN · ARS
Confirm
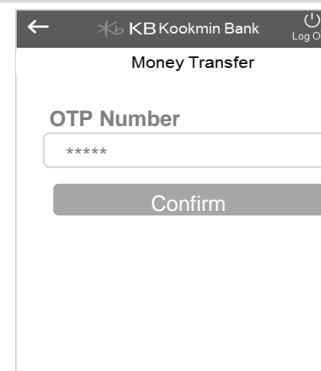
Phone Number
010-123*-45**
SMS PIN CODE
Confirm

OTP Number
*****
Confirm
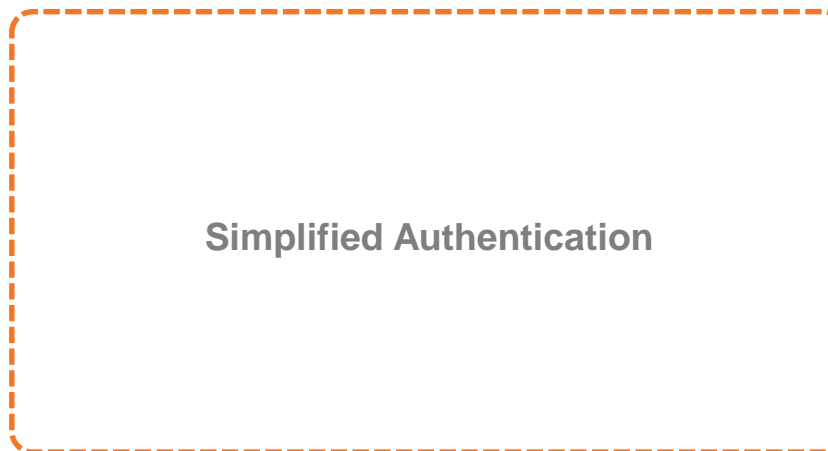
Withdrawal account number
11000-0000-1100
Transfer amount
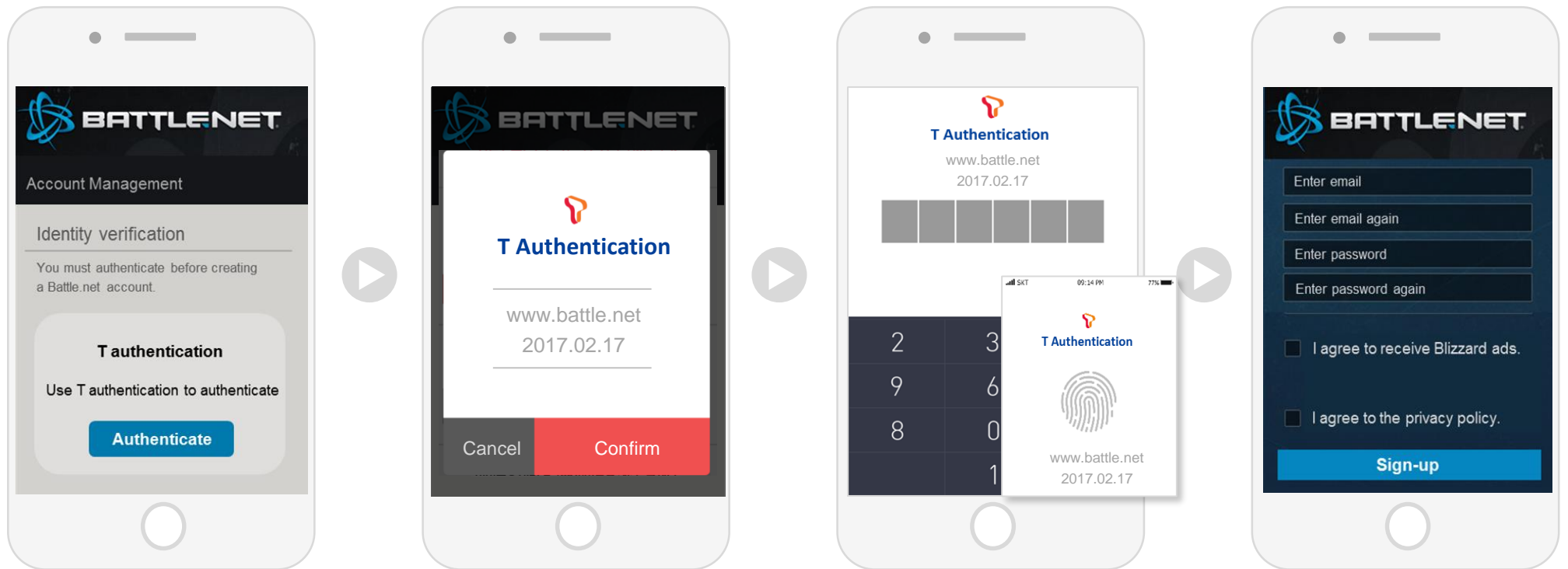$ 1,000
Deposit account number
11000-0000-1111
Deposit bank
Kookmin Bank
Banker
John Smith

***Kookmin Bank is the biggest bank in South Korea and has 1037 branches and 210 regional offices.**

Case2_Minimizing the Attrition Rate

A game service provider could reduce the attrition rate in the registration stage from 24% to 4%.

| Click on the Authenticate button | Request for T Authentication | T Authentication | Enter personal information |

*Need to authenticate to sign-up for Battle.Net in South Korea.

How SKT Build Ecosystem?
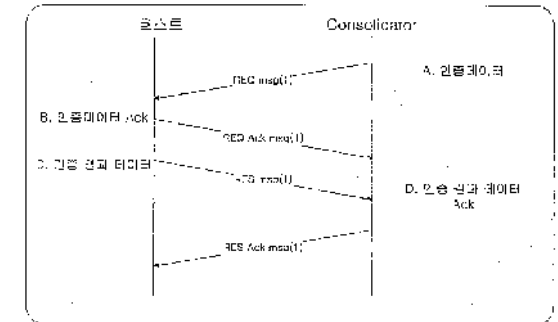
Provide Open Interface Spec. to all SP/Agent

Register, Approval, Contract, Signing, payment on one Website
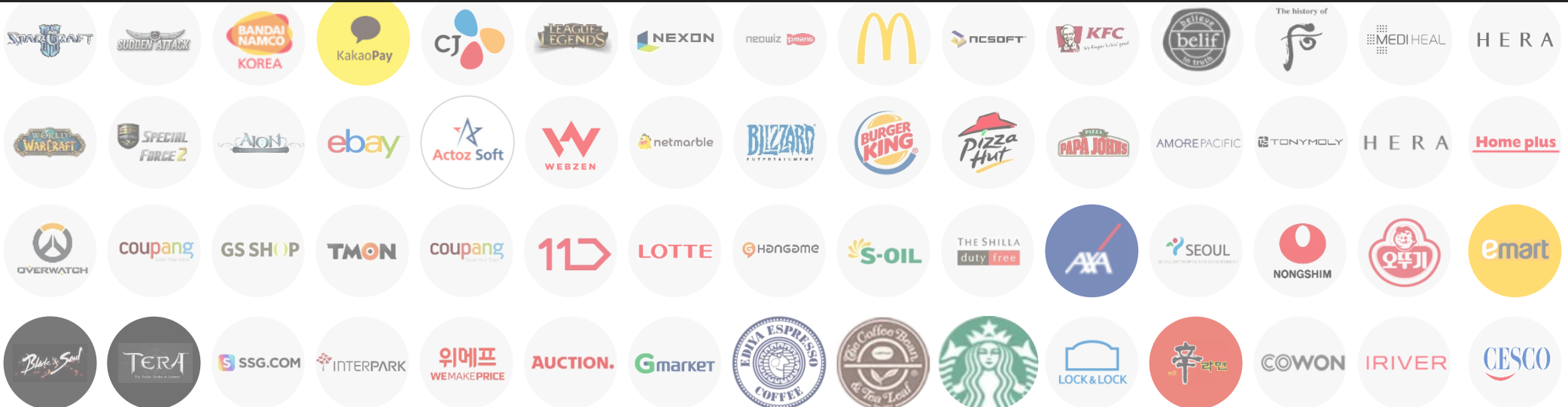

Service Provider/Agent (Register)

Operator (Approval)

Economy of scale_3. Business Network

Over 26,000 companies are using T Authentication.

Equal price to all SP/Agent
3cent to 1dollar per each transaction/data field

| 대행사	인증구분	OTP인증수단	용시작년	용종료년	단가
코리아크레딧뷰로	B2C	SMS사용	2016–01	9999–12	33
		LMS사용	2016–01	9999–12	46
		ARS사용	2016–01	9999–12	33
		OFFLINE사용	2016–01	9999–12	33
		DATAPUSH사용	2016–01	9999–12	33
		T인증사용	2016–07	9999–12	33
		미사용	2016–01	9999–12	33
다날	B2C	SMS사용	2016–01	9999–12	33
		LMS사용	2016–01	9999–12	46
		ARS사용	2016–01	9999–12	33
		OFFLINE사용	2016–01	9999–12	33
		DATAPUSH사용	2016–11	9999–12	33
		T인증사용	2016–07	9999–12	33
		미사용	2016–01	9999–12	33
드림시큐리티	B2C	SMS사용	2016–01	9999–12	33
		LMS사용	2016–01	9999–12	46
		ARS사용	2016–01	9999–12	33
		OFFLINE사용	2016–01	9999–12	33
		DATAPUSH사용	2016–01	9999–12	33
		T인증사용	2016–07	9999–12	33
		미사용	2016–01	9999–12	33
한국모바일인증	B2C	SMS사용	2016–01	9999–12	33
		LMS사용	2016–01	9999–12	46
		ARS사용	2016–01	9999–12	33
		OFFLINE사용	2016–01	9999–12	33
		DATAPUSH사용	2016–01	9999–12	33
		T인증사용	2016–07	9999–12	33
		미사용	2016–01	9999–12	33

SKT analysis Authentication + customer Data & Providing Fintech service (Credit score, Asset Mngt.)
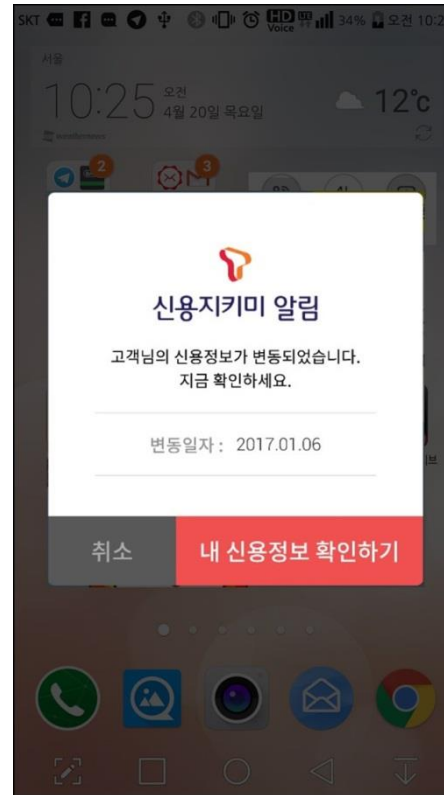
We care about

Location,

Pattern,

IP address,

Interval,

Etc.

We have

SIM based S/W OTP

SHA 512

AES 128

UICC authentication

Hacking detect solution

Where is Mobileconnect?

제안 조건 포함