



Company Introduction

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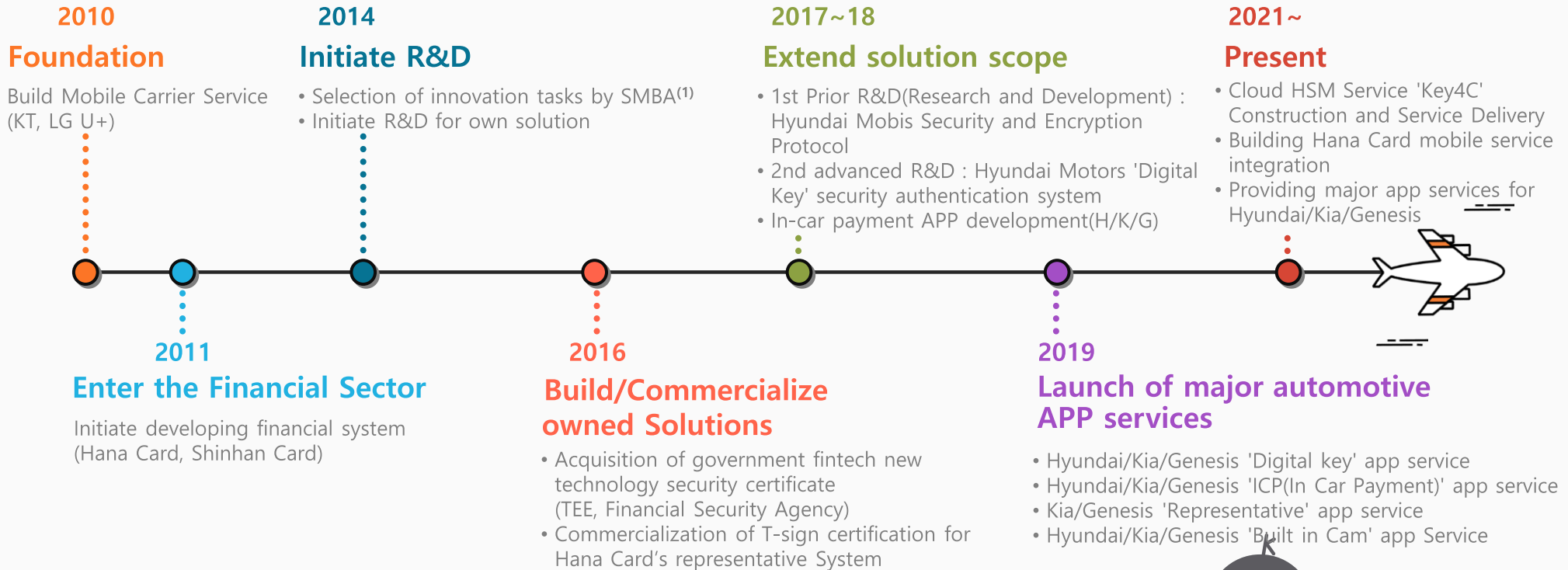
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01

Our Career

Our Career



" KSMARTeCH is **growing continuously** in **telecommunications, finance, and automotive industries** based on **security/certification solutions.** "

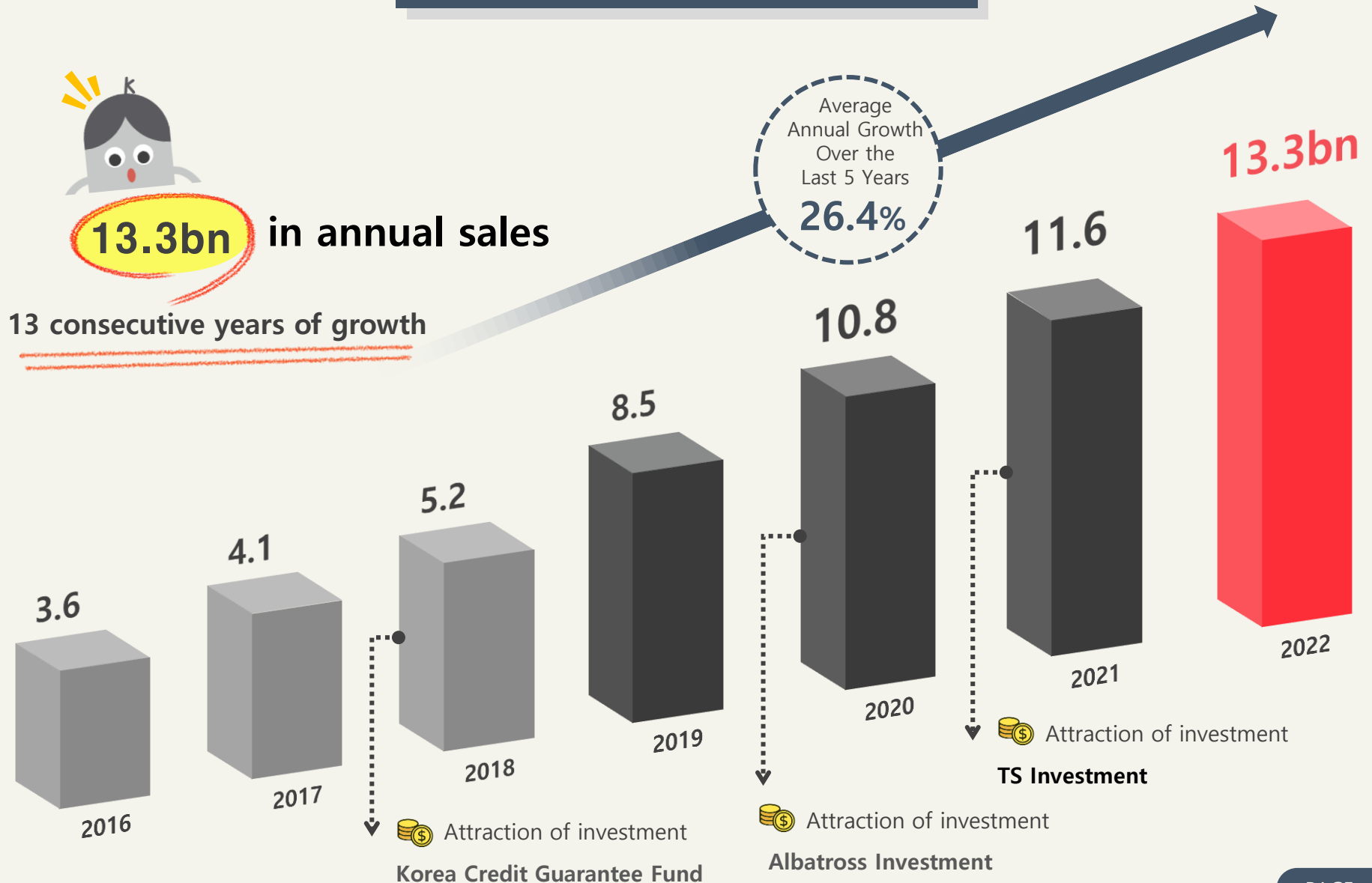


(1) SMBA : Small and Medium Business Administration

02

Our Growth

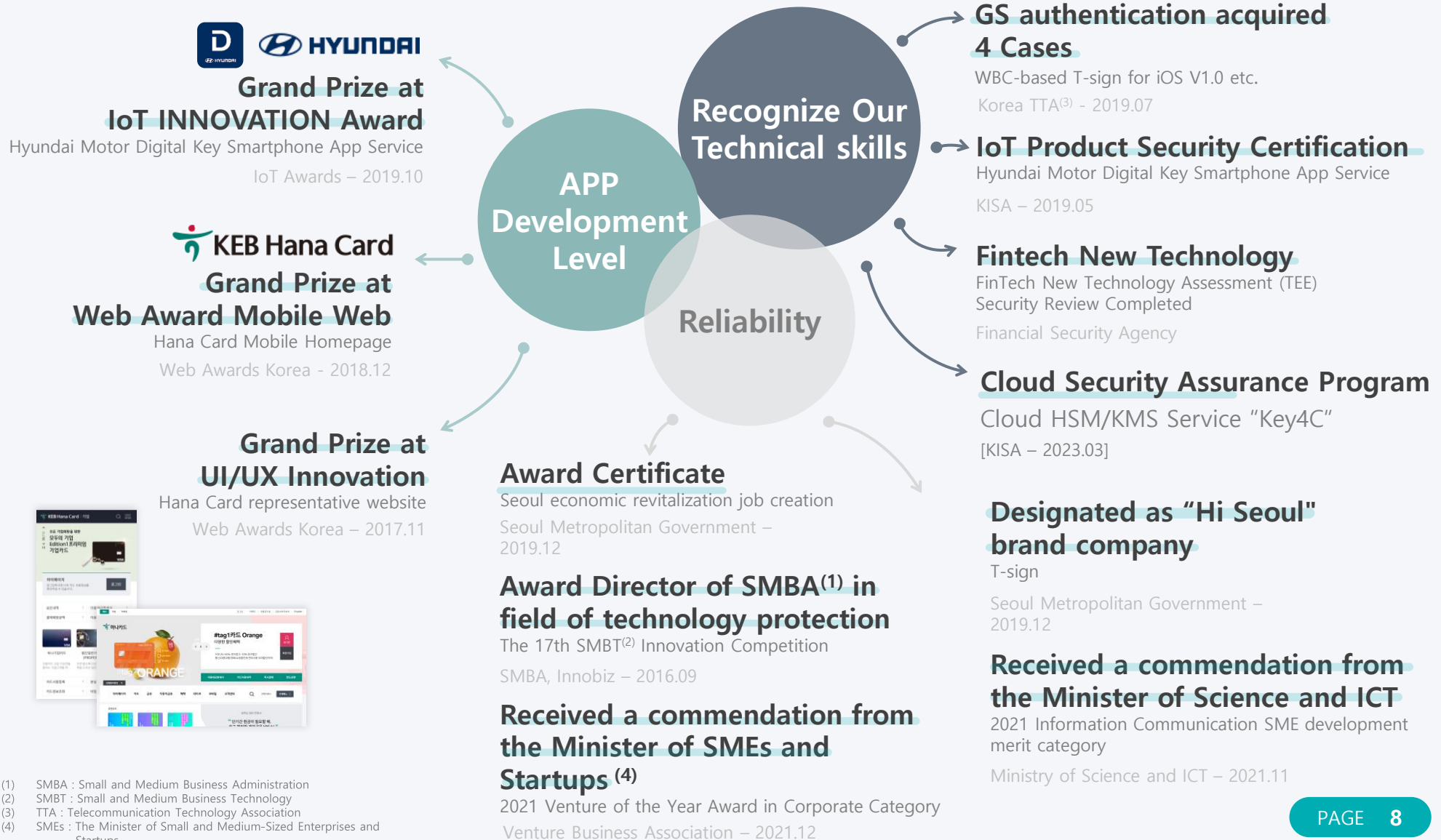
Our Growth



03

Our Awards

Our Awards



04

Business Areas / Features

Business Areas / Features



SI System Integration

SM System Management

Solution

- ✓ **Build APP/WEB in the financial sector**
 - Build 'Hana Card' Representative App and Payment System
 - Build 'BC Card' Tourism app and system
 - Build 'Hana Capital' Representative App
- ✓ **Build Hyundai Motor Group APP/WEB**
 - Build specific services and Representative APP/WEB
 - Build commercial vehicle system APP/WEB
- ✓ **Hana Card mobile service operation**
- ✓ **Hyundai Motor Group service operation**
 - Integrated operation of
 - Digital Key Service
 - Built-in Cam Service
 - In Car Payment Service
 - Genesis Representative App

- ✓ **Key Management Security Solutions**
 - Zero Trust-Based Key4C
- ✓ **Financial Security Authentication Solution**
 - Application of personal secondary authentication method
- ✓ **Automotive Key Security Solution**
 - Hyundai / Kia / Genesis Digital Key

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Our Solutions

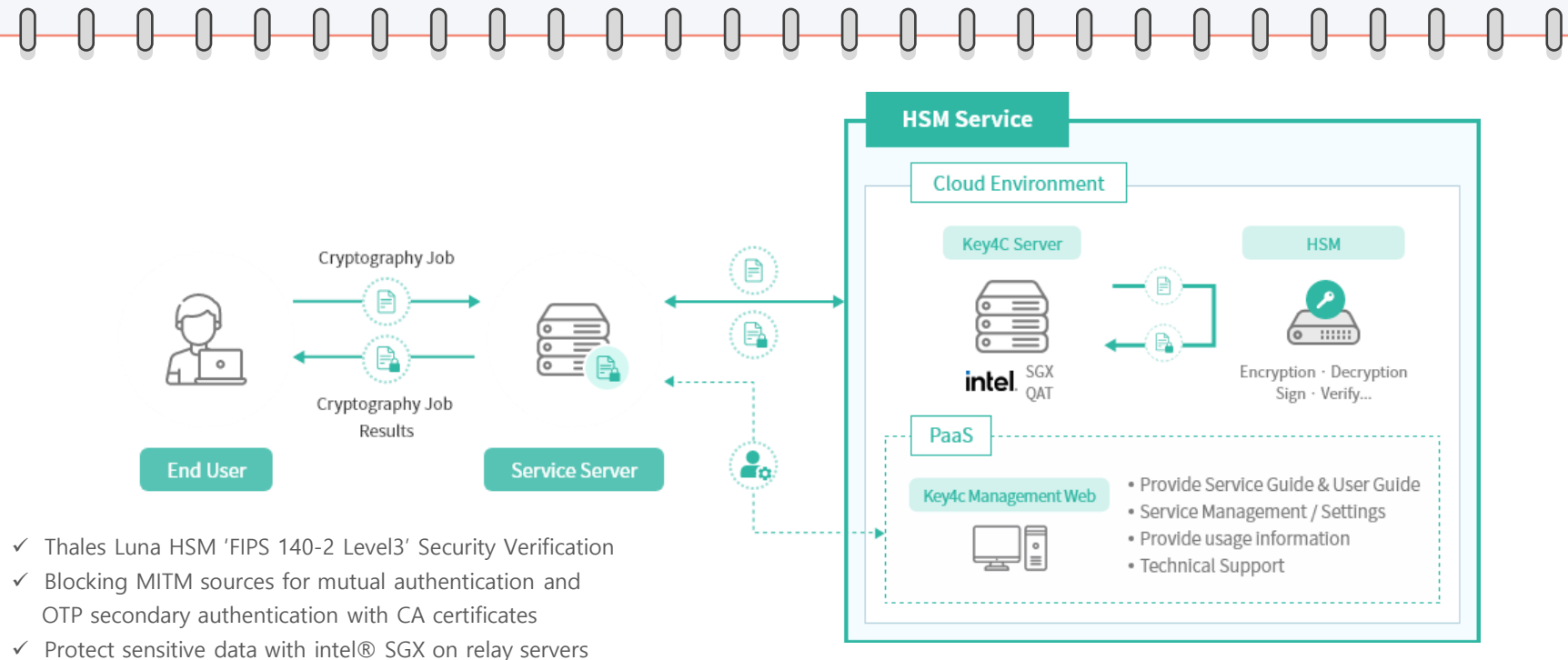
Our Solutions

CloudHSM

(Key4C)

Hardware Security Module (HSM) equipment is no longer required to be purchased or installed directly.

It is a security solution that provides HSM functions such as certificate management, key management, and monitoring on a web console basis by building a standard security interface (PKCS#11) library so that **you can quickly, conveniently, and safely use the hardware security module(HSM)** that strongly generates and protects encryption keys in a cloud environment.



- ✓ Thales Luna HSM 'FIPS 140-2 Level3' Security Verification
- ✓ Blocking MITM sources for mutual authentication and OTP secondary authentication with CA certificates
- ✓ Protect sensitive data with intel® SGX on relay servers

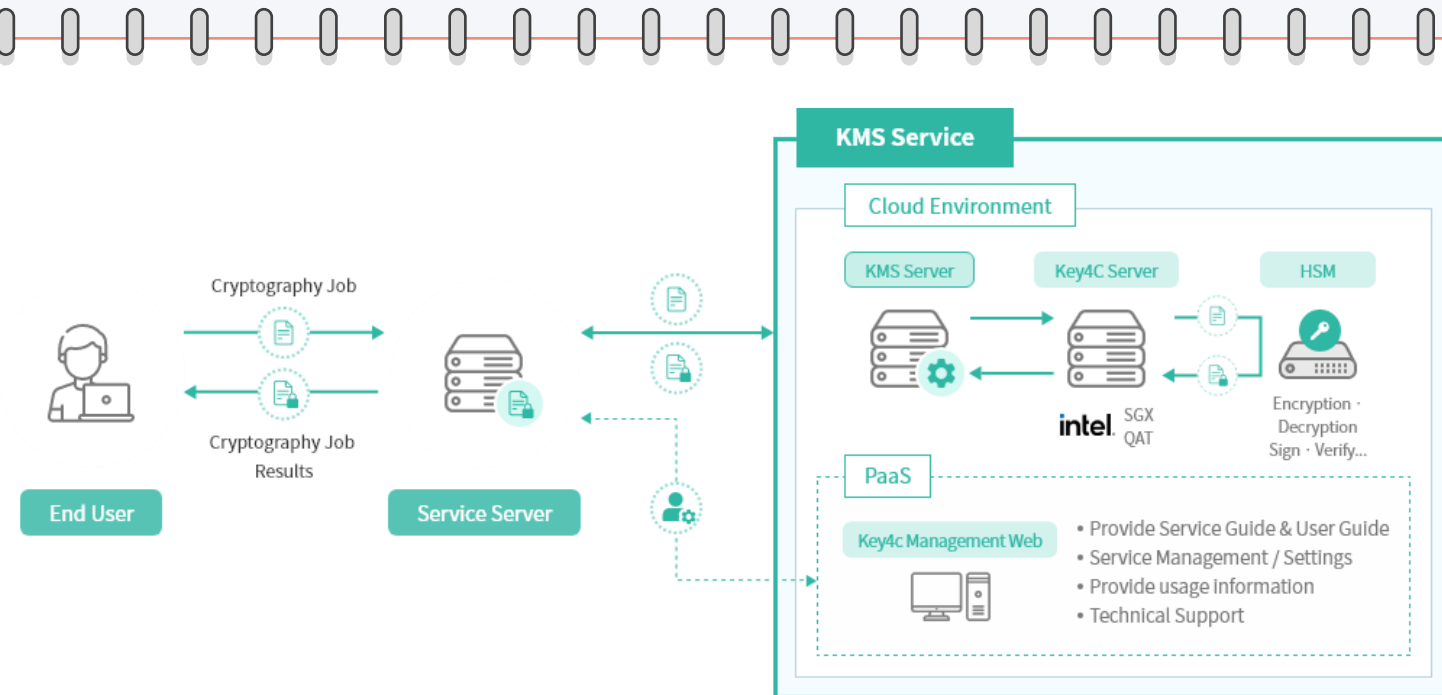
Our Solutions

KMS

(Key4C)

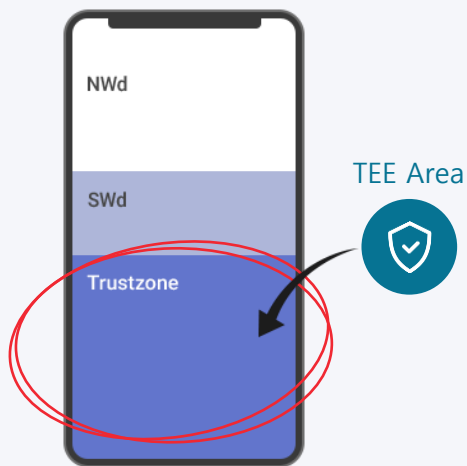
Key Management Services (KMS) that do not use the Hardware Security Module(HSM) are not complete.

This is a key management service that manages the lifecycle of a key and provides various functions for key management, such as generation, storage, backup, recovery, and disposal of encryption keys, **based on the Hardware Security Module (HSM)**, providing strong security and convenience.



Our Solutions

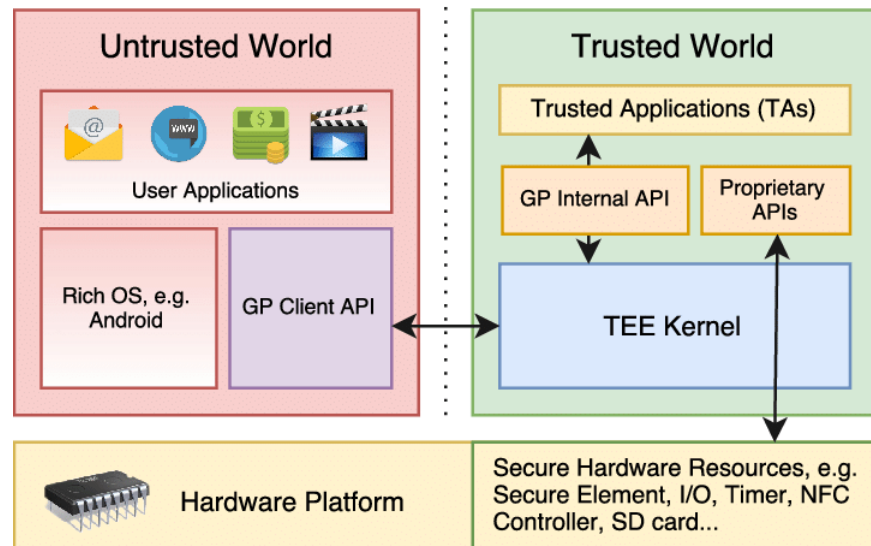
T-base Security



Solution utilizing the hardware security area in smartphone AP(CPU)

" T-base Security solution utilizes **TEE (Trusted Execution Environment)**, which is the physical security area of the smart terminal CPU, to safely operate major Data Storage / Authentication / Key Management. "

TEE architecture compliant with Global Platform



Our Solutions

T-base Security

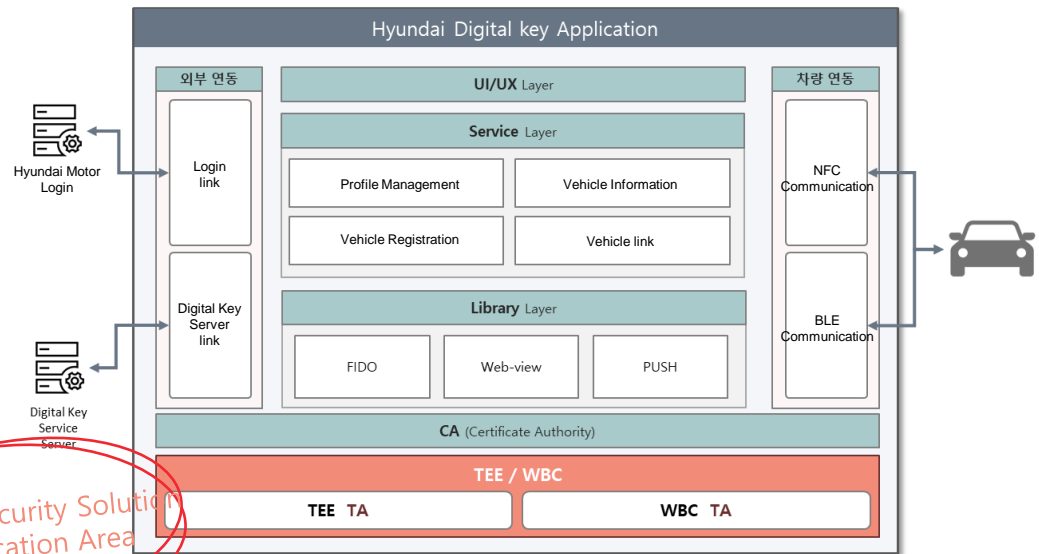
(Digital Key)



Operation of major data storage and management in the Trustzone's secure environment

" **Digital Key service** using T-base Security is a solution that safely operates key data storage and key management using **TEE** (Trusted Execution Environment) and **WBC** (White Box Cryptography)."

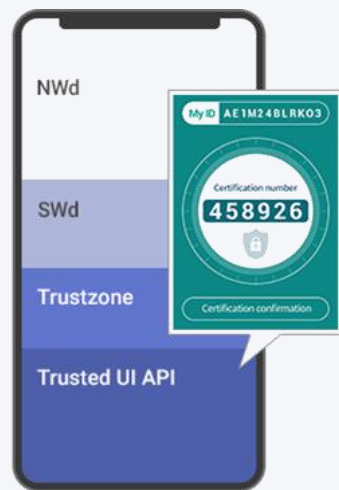
Service Summary Diagram



Our Solutions

T-base Security

(T-sign)

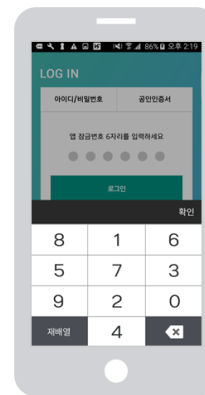


The user confirms the authentication number created in Trustzone through the Trustzone UI API.

" The **T-sign authentication** service using T-base Security, is a **2 Factor 2 Channel authentication method** that performs **secondary authentication** by delivering the OTP generated in the TEE area after **primary authentication** through PIN code. It is an authentication solution that provides enhanced security without compromising user convenience. "

Service Summary Diagram

Primary security PIN code authentication



TEE unsupported terminal

PIN Verification and Easy Login

Service System WAS

1. HTTPS
2. E2E encryption
3. Secure keypad encryption

TEE supported terminal

TA

T-sign Authentication Server

1. HTTPS
2. E2E encryption

1. HTTPS
2. E2E encryption

- PIN verification at TEE
1st authentication
- OTP Creation

- OTP verification
2nd authentication

06

Our Technology Experience

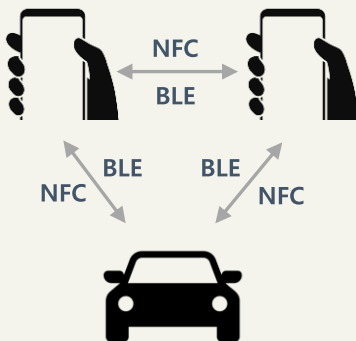
Our Technology Experience



Short-distance communication service Knowhow

(NFC / BLE)

- Credit card registration with NFC
- Proximity user authentication
- Data Transfer between devices
- Implementation of encrypted data in device-to-device communication



Cloud/On-premise environment-enabled encryption solutions

(Cloud HSM/KMS)

- Zero-Trust Based Design Solutions
- Create/Manage a Powerful Encryption Key
- Implementation of the Key to Security Solution
 - Web channel encryption, DB security
 - OTP & MFA
 - File system encryption



HSM-based arm/decryption key generation, management and application



Communication/control function between vehicle and mobile

(ignition / door opening / autonomous parking, etc.)

- Implementation of vehicle start, function control, etc. in APP using Hyundai Motor's Digital Key
- Interlocking/building automatic parking system



Vehicle Control / Communication

Hyundai Motor Digital Key



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Our Technology Performance

Our Technology Performance 1/4



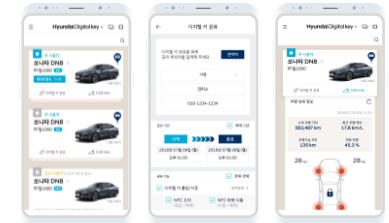
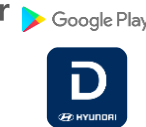
HYUNDAI Digital Key + T-Base

HYUNDAI Digital Key

IoT vehicle control service with T-Base Security solution

Remote and proximity control of the vehicle using NFC and BLE, the digital key can be shared with members through the APP.

- ✓ Client **Hyundai Motor**
- ✓ Categories **Mobile APP**
- ✓ Date **2017.12**

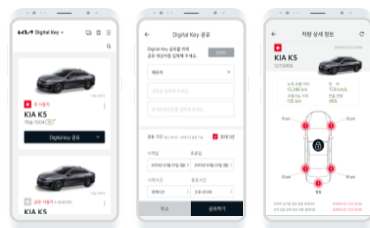


"If a vehicle produced by Hyundai Motor Company has a **digital key function**,
You can **start and drive** your car with your **smartphone**."



KIA Digital key

- ✓ Client **Kia Motor**
- ✓ Categories **Mobile APP**
- ✓ Date **2019.12**

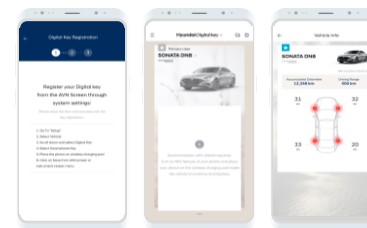
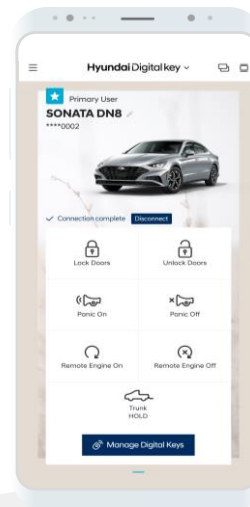


Google Play



North America Digital Key

- ✓ Client **Hyundai Motor(North America)**
- ✓ Categories **Mobile APP**
- ✓ Date **2019.12**

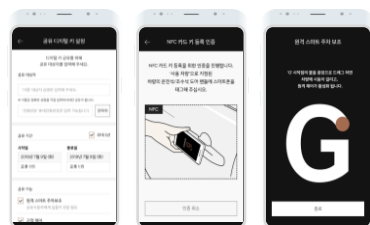
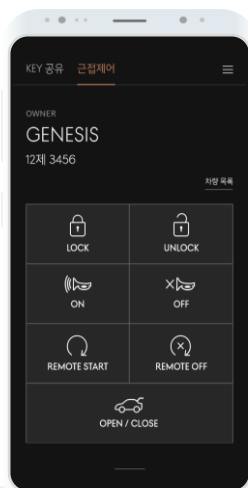


Google Play



GENESIS Digital key

- ✓ Client **Genesis**
- ✓ Categories **Mobile APP**
- ✓ Date **2020.01**

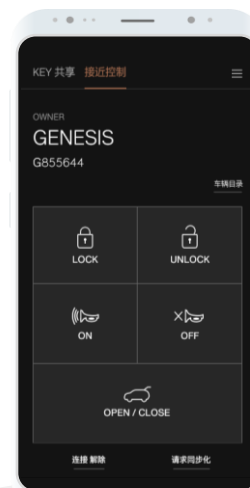


Google Play



China Digital Key

- ✓ Client **Genesis**
- ✓ Categories **Mobile APP**
- ✓ Date **2021.10**



Google Play



Our Technology Performance 2/4



Hana 1Q Pay Overseas Payment Service

Hana Card Representative APP Service

Personal credit/debit card registered in Hana 1Q Pay APP provides QR payment service compatibility and scalability between credit card companies, and provides **NFC / QR payment** and **offline payment** service abroad with VISA/Mastercard

- ✓ Client **Hana Card**
- ✓ Categories **Mobile APP**
- ✓ Date **2019.02**



" With just one card registration, you can easily pay
online or offline without a physical card."



Our Technology Performance 3/4



T-sign Convenient / Simple Authentication Service

Hana Card Representative APP Service

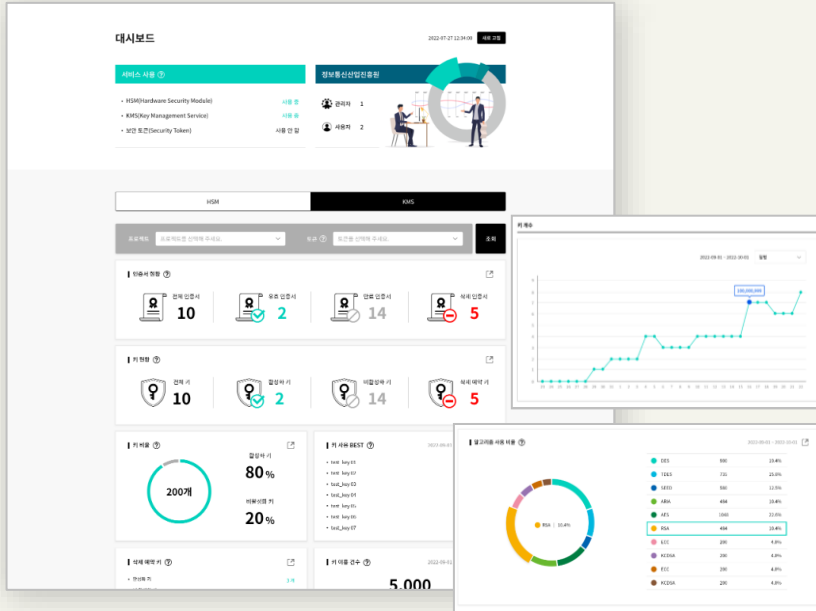
Simple authentication login service based on the TEE zone (TrustZone) in the self-authentication required when using the card service in the Hana Card mobile app. Additional development of fingerprint authentication and web-linked function.

- ✓ Client **Hana Card**
- ✓ Categories **Mobile APP**
- ✓ Date **2016.11**

" It is a security service unique to Hana Card that safely stores **various personal information** such as app lock number and fingerprint in the **TEE security area!** "



Our Technology Performance 4/4



Cloud HSM Service Key4C

Hardware Security Module/Key Management Service

Provide HSM in cloud environments that strongly generate and securely protect/manage encryption keys used in encryption, HSM-based Key Management Services are also available

- ✓ Client **KT Cloud, Olacle Marketplace**
- ✓ Categories **Web**
- ✓ Date **2023.03 Launching**



Cloud Security Assurance Program

Acquired in March 2023

Cloud Service Verification System

Acquired in December 2022

PaaS-TA Platform Compatibility Certification

Acquired in November 2022

“ It is also registered in a nationally accredited cloud support system. ”



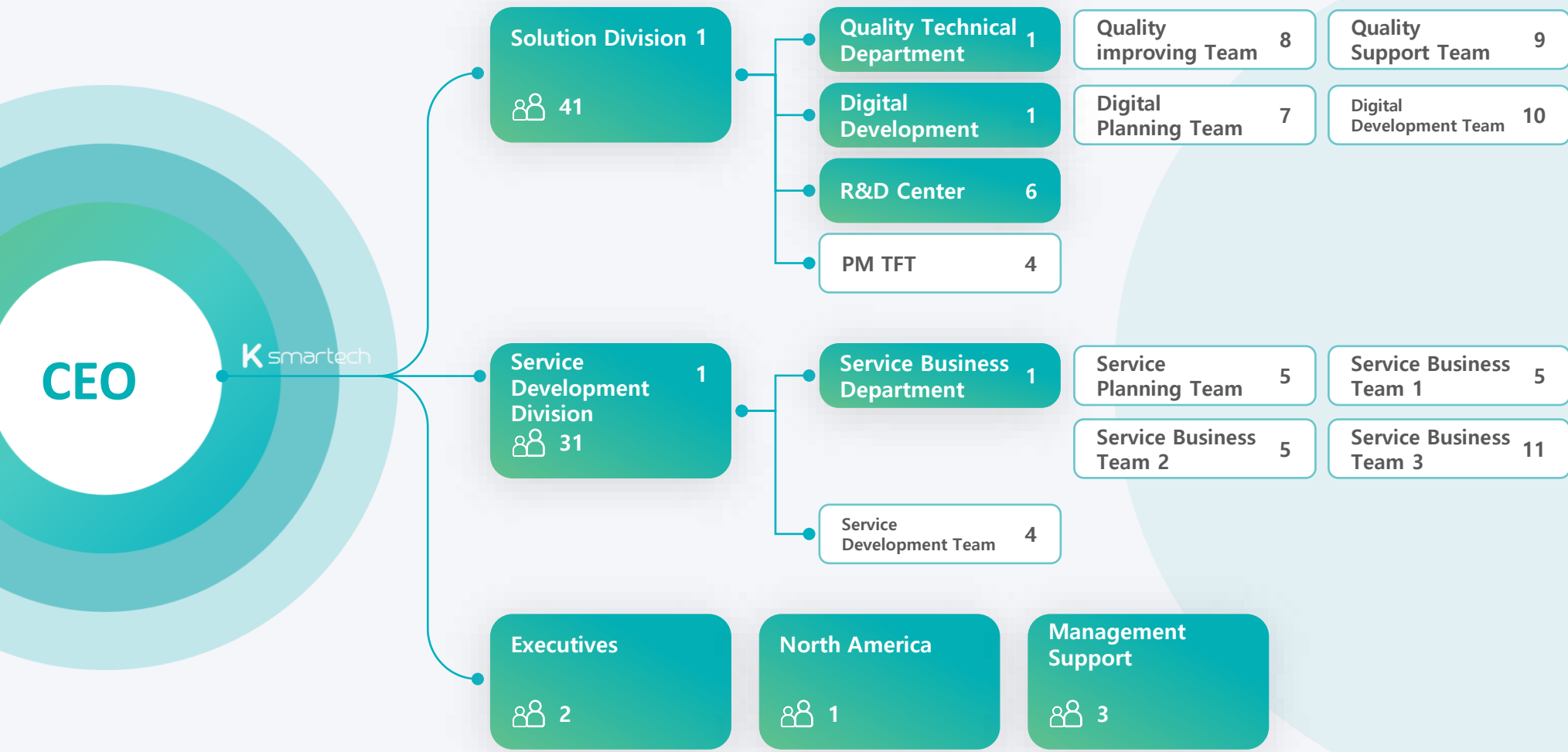
08

Our Team

Our Team



Our Team



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Thank You



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