

# Self-service Banking Card Renewal & Dispensing



COOPERATION

MODESTY

LOYALTY

# *CONTENTS*

**1. Background Study**

**2. System Overview**

**3. AOK & BCIK**

**4. Kiosk Management System**



# Background Study



## Main Challenges and Issues for Banks & Card-holders during Card Renewal

- Application: does not support onsite data capturing & verification, and application acceptance.
- Centralized Card Issuance: long waiting queue, low active rate.
- De-centralized Card Issuance: miscellaneous preparation material and jobs, huge manpower requirement, few card artwork layout options.
- Card Dispensing: it requests long time for operator to find the correct cards, low efficiency, long waiting queue, bad customer experience.



## One-stop Service Station

- New account opening
- Upgrade Magnetic Card to EMV Chip Card
- Banking Card Replacement & Card Renewal & Active
- Banking Card Dispensing



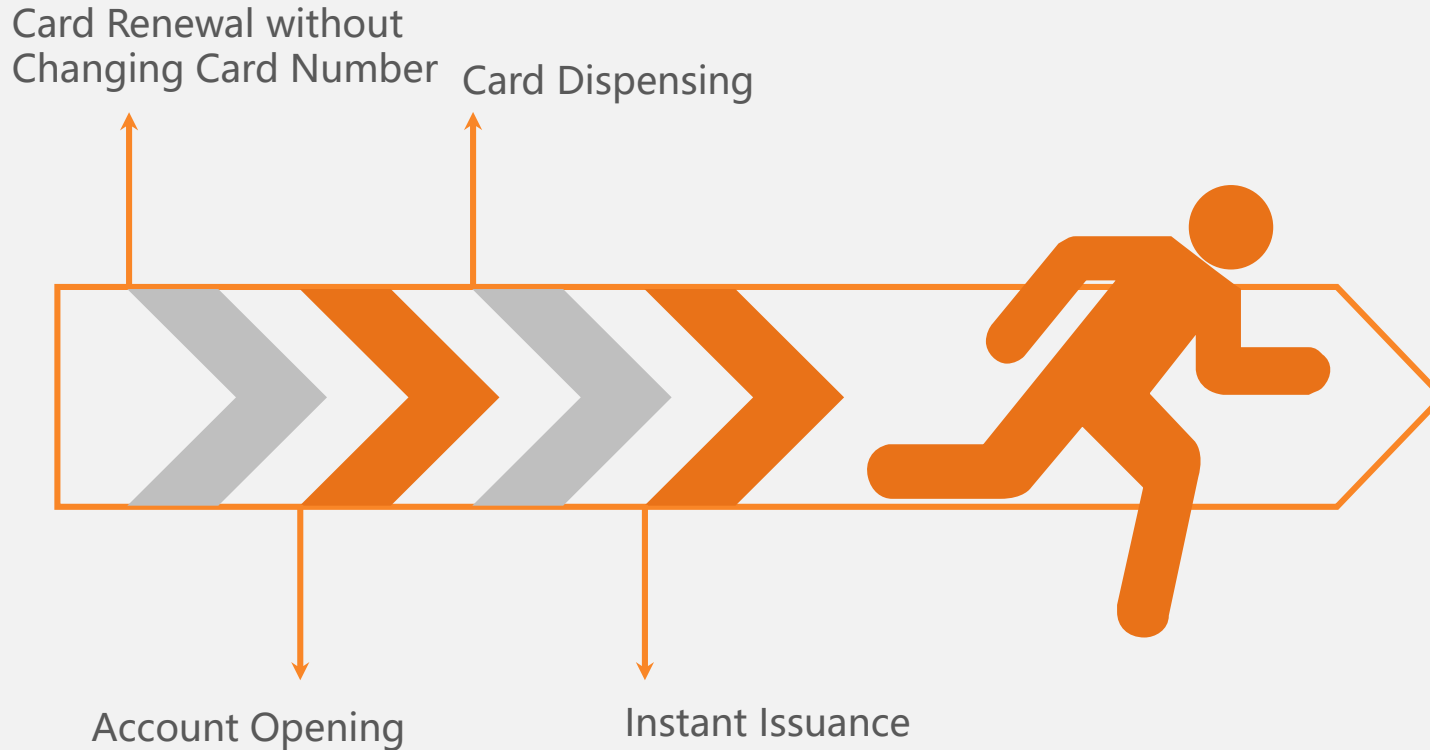
**Emergent demand for Banking Card Renewal and Replacement (without changing Card Number)**



# System Overview



# System Overview



## Account Opening

Self-service to open new account

## Card Renewal

Upgrade Magnetic Card to EMV Chip Card  
Upgrade Cardholder's Personal Info  
No needs to change card number

## Card Dispensing

Personalized credit card, debit card,  
swallow card, etc.

## Instant Issuance

Support chip encoding, embossing,  
tipping, thermal printing.

Improve the efficiency, Reduce the manpower  
Simplify the operation.

## Self-service

### ■ In **1** Minute:

New Banking Card Application, Acceptance, Issuance and Dispensing.

### ■ In **1** Minute:

Banking Card Renewal (without change card number).

### ■ In **10** Seconds:

Personalized Banking Card Dispensing.

## One-stop Self-service Station

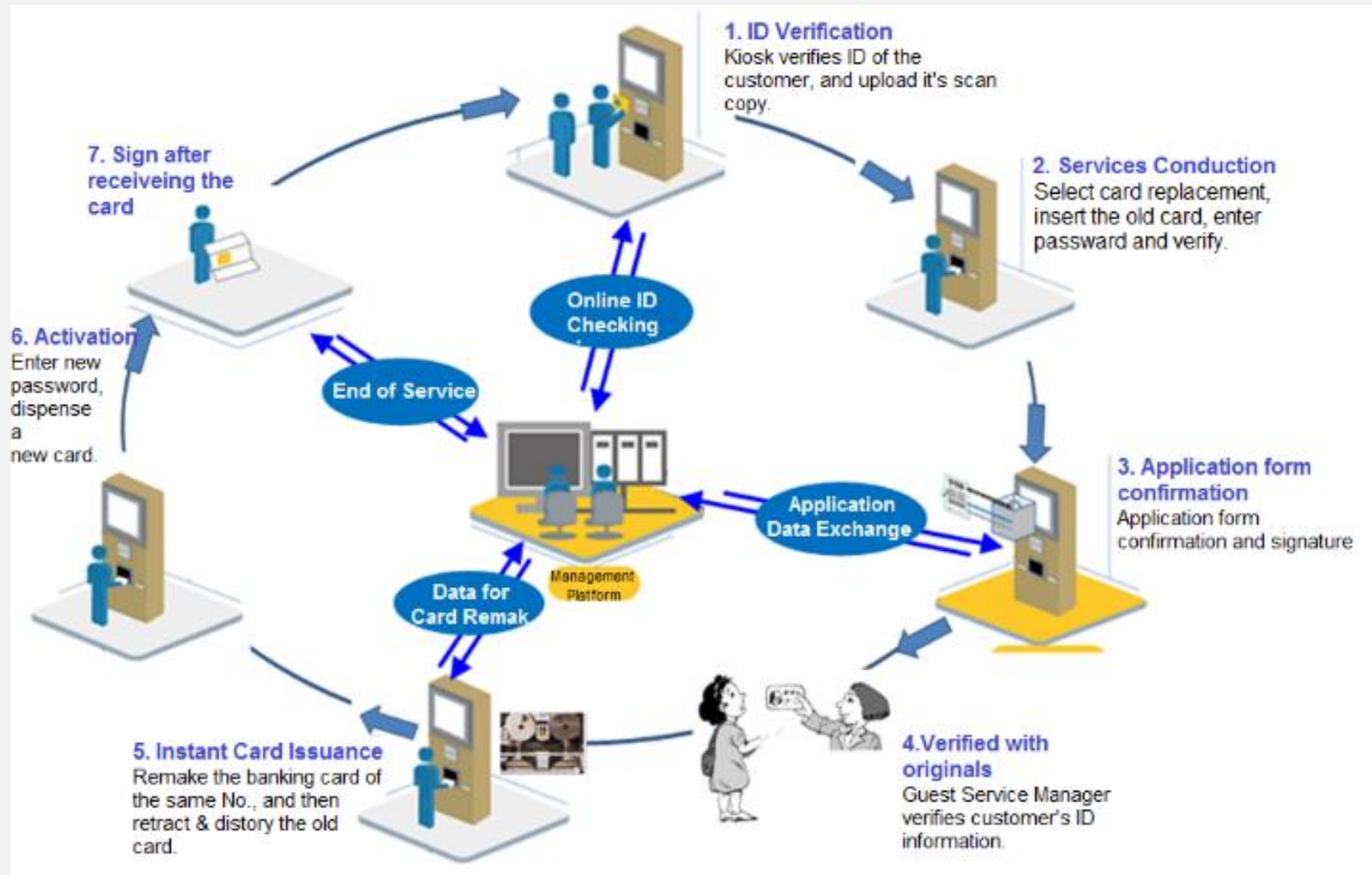
- Account Opening Application & Acceptance
- Banking Card Replacement & Card Renewal & Active
- Banking Card Dispensing



**Value-added Service: each kiosk supports 50+ card artwork layout.**



# System Workflow



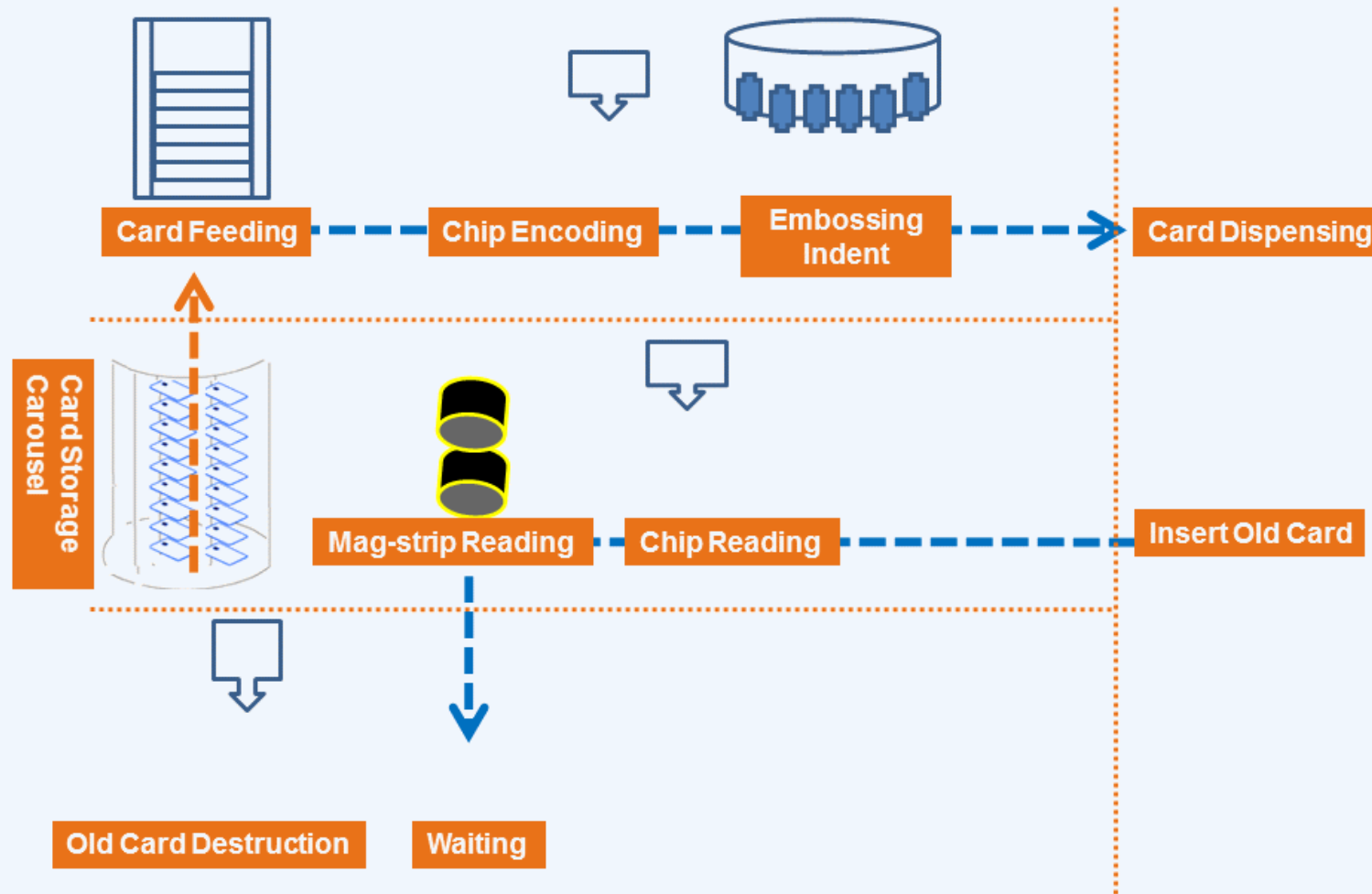
# ▶ Banking Card Renewal Work Flow



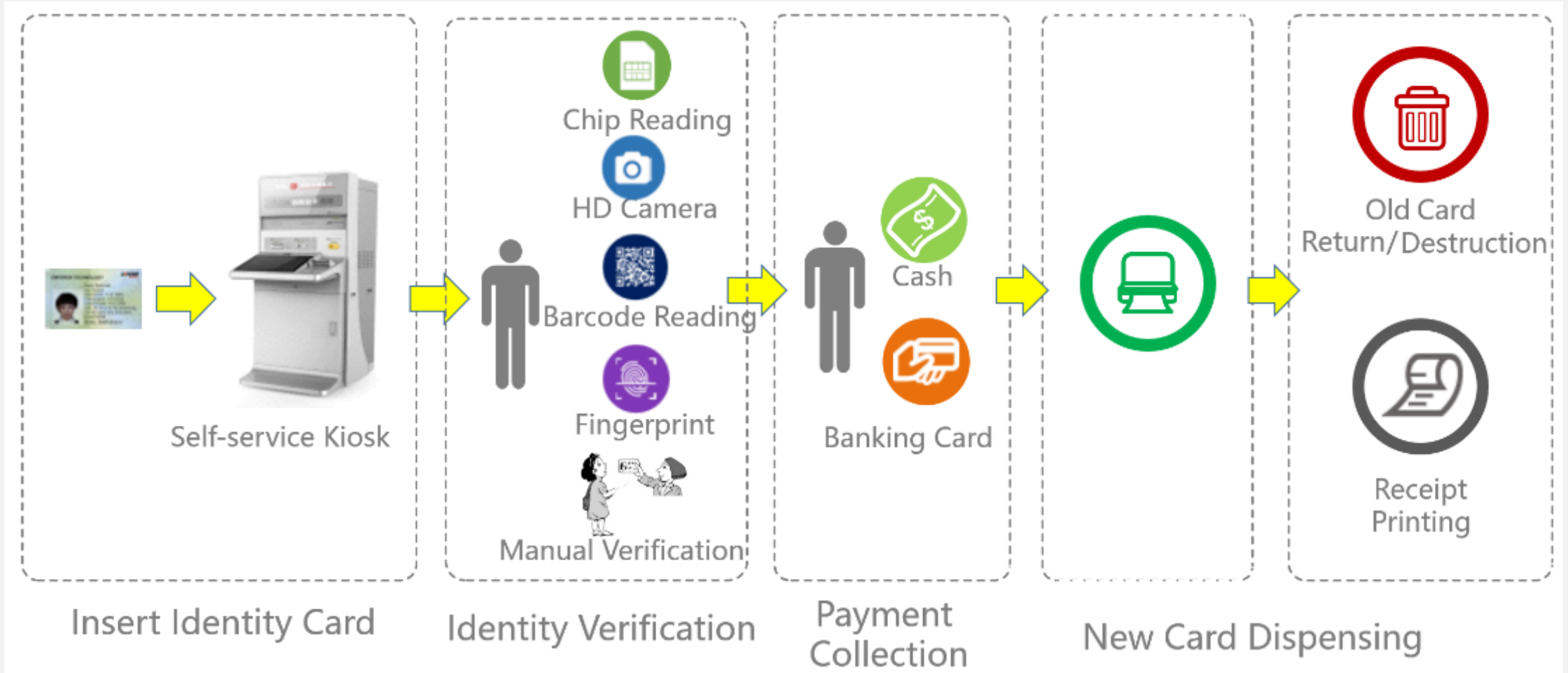
- Fully comply with EMV and CUP standards.
- One-stop self-service station, reduce bank manpower.
- User-friendly human-machine-interaction, good customer experience.
- Onsite application, acceptance and instant issuance.
- Pre-storage of blank cards with 50+ different artwork layout.
- Real-time synchronization of back-end bank system, support card number customization.

# ▶ Banking Card Renewal Work Flow

## Inside Kiosk

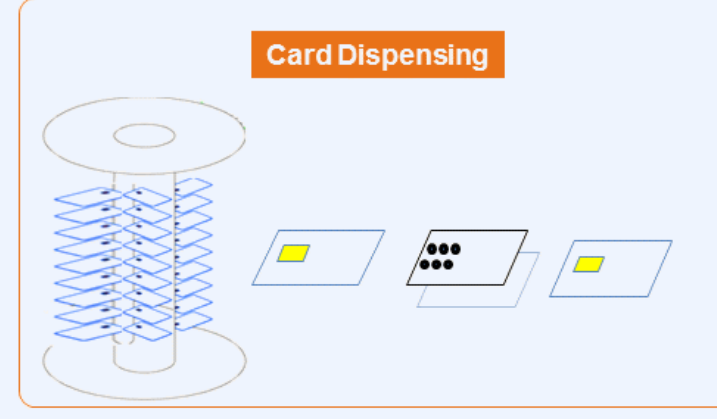
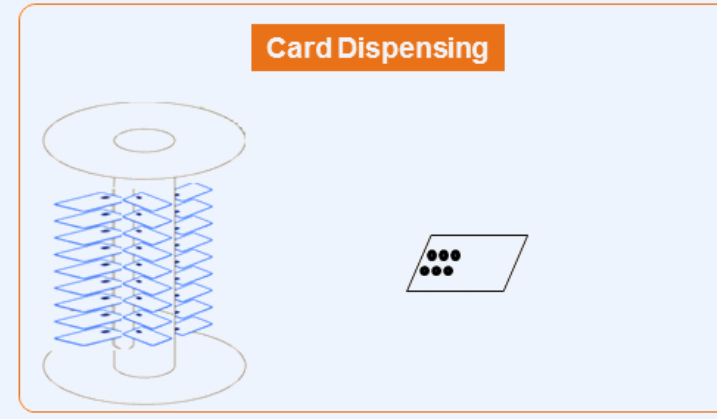
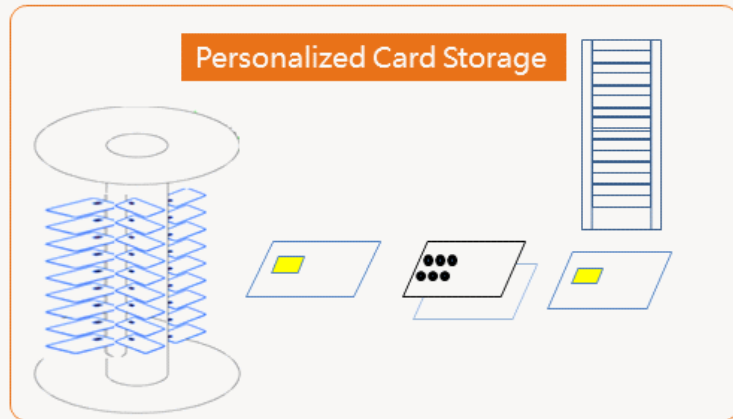
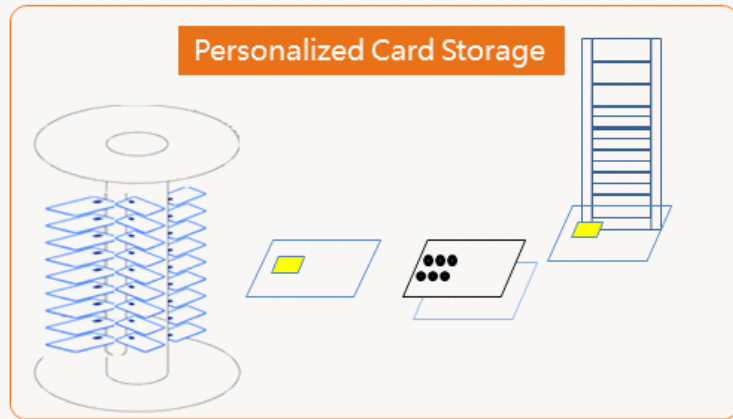


# ▶ Banking Card Dispensing Work Flow



# ▶ Banking Card Dispensing Work Flow

## Inside Kiosk





**AOK & BCIK**

# ▶ Account Opening Kiosk — AOK

## ■ Account Opening Kiosks

- Upright Kiosks
- Comprehensive functions includes document printing and Scanning
- Small footprint
- Modular design, function modules could be customized according to requirement.





# Account Opening Kiosk Appearance



## Graphic Symbol

- A** – Pinhole Camera
- B** – 19" Touch Screen
- C** – Card Ingress
- D** – Receipt Egress
- E** – Signature Pad
- F** – A4 Printer
- G** – Barcode Reader
- H** – ID Card Reader
- I** – Pin Pad
- J** – Fingerprint Scanner
- K** – Cash Ingress



# ▶ Highlights & Features



Automated workflow for self-service banking account opening with biometric identification

- Multi Biometric verification
- Personal info enrollment by keyboard or touch screen
- Thermal printer for receipt printing
- Signature pad for signature enrollment
- Document scanning for record
- Small footprint and easy maintenance
- Custom configuration available
- Dimension: 650 (L) x 650(W) x 1300 (H) mm
- Net Weight: 180KG

# ▶ Functional Modules of AOK

No	Functional Module	Introduction	Remark
1	HD Camera	Automated Adjustment	
2	ID Card Reader	Support Contact & Contactless Reading	
3	Fingerprint Scanner	Access Control, Identity Verification	
4	Card Slot	Insert Banking Card For Reading Holder' s Information	
5	Pin Pad	Password Verification And Reset	
6	Touch Screen	19" , Operation Interface,	
7	Signature Pad	Signature Collection	
8	Thermal Printer	For Printing Receipt	
9	A4 Printer	For Printing Account Information	
10	Barcode Rader	For Reading Receipt' s Information	
11	Cash Slot	For Cash Payment	

# ▶ Banking Card Issuance Kiosk—BCIK



- Multi Functions in a small single unit
  - Instant Banking Card Issuance
  - Card issued complies with Visa, Master, Union Pay standard
  - Old card renewal
  - Old card destruction after new card issued
  - Available for card retract once new card couldn't be taken in a certain time
  - Total storage up to 1200 cards
  - Dispense personalized cards
  - Dispense swallow cards



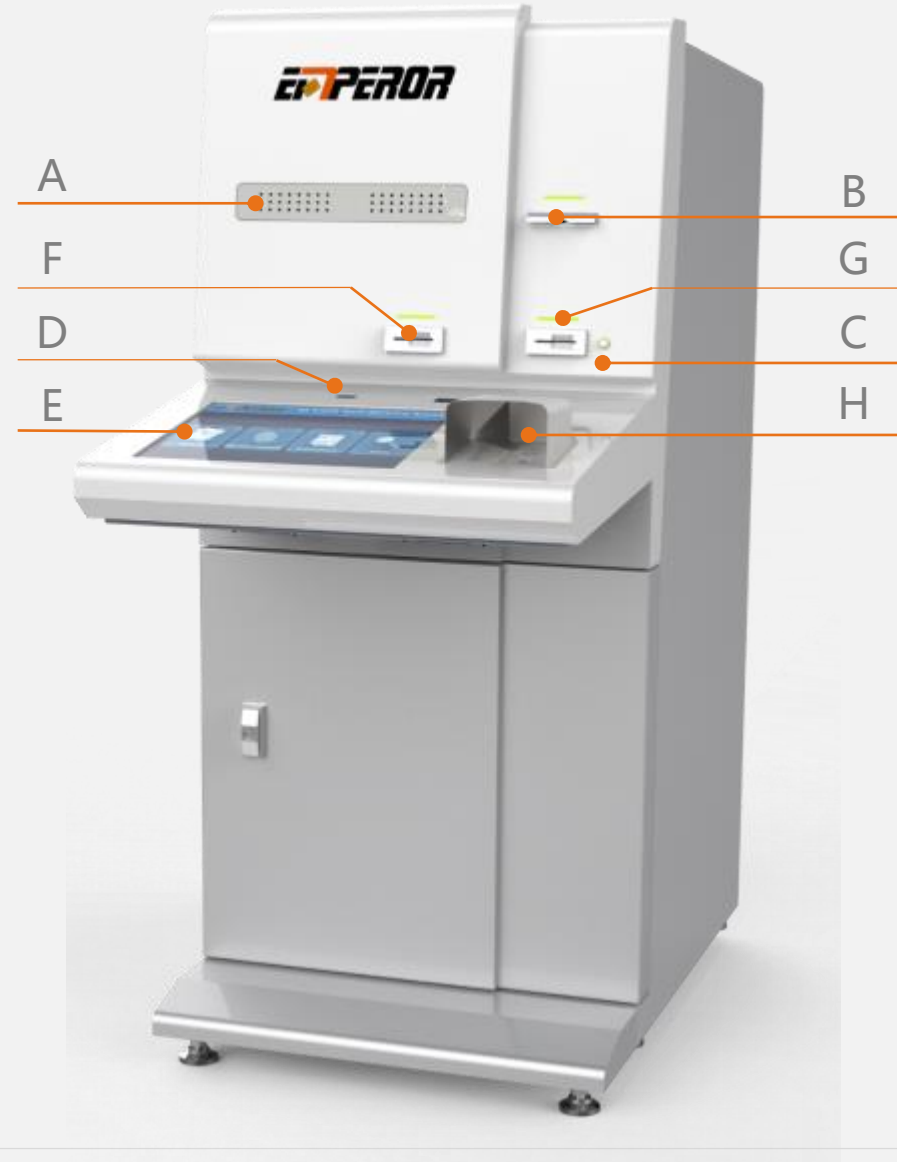


# Banking Card Issuance Kiosk Appearance



## Graphic Symbol

- A** – Speaker
- B** – Receipt Egress
- C** – Card Return Button
- D** – Pinhole Camera
- E** – 17" Touch Screen
- F** – New Card Egress
- G** – Old Card Ingress
- H** – PIN Pad



# ▶ Highlights & Features



- Small footprint with all functions loaded.
- Full EMV-compliant banking card personalization.
- High speed: 10~60 seconds per card.
- Convenient front-facing operation.
- 7 compartment input magazines, support 7 types of card layout.
- Lockable input magazine, convenient plug-in usage.
- Full-color and monochrome thermal printing on both card sides, edge to edge printing.
- Embossing / Indent: one single drum with 150 characters, support front / rear and both sides embossing / indent printing.
- Support black, golden or silver tipping, easy ribbon replacement in 5 seconds.





# Embedded Instant Banking Card Issuer



- Support front Indenting for debit Cards.
- Update the embossing drum could enable both front indenting and embossing for debit and credit



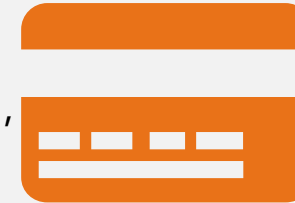
Indenting / Debit Card



Embossing / Credit Card

- Support contact chip, magnetic strip and contactless chip encoding

Magnetic Strip:  
3 tracks ISO 7811,  
HiCo& LoCo;



RFID:  
ISO14443  
Type A/B



Contact Chip:  
ISO7816 standard



- Support Photo printing , could provide edge to edge and double side printing



# ▶ Functional Modules of BCIK



No	Functional Module	Introduction	Remark
1	HD Camera	Automated adjustment	
2	ID Card Reader	Support contact & contactless reading	
3	Fingerprint Scanner	Access control, Identity Verification	
4	Instant Card Issuer	Magnetic strip encoding, contact/contactless chip encoding, thermal printing, embossing, indent printing, tipping.	Emperor original
5	Card Egress Slot	New card dispensing	
6	Card Storage	Capacity: 700 cards , 7* Magazines, 100 cards for each magazine Options: upgrade to slotted drum, with 500 cards capacity)	
7	Old Card Collection	Old card collection and destruction	
8	Pin Pad	Password verification and reset	
9	Touch Screen	17", operation interface, signature collection	

## Easy Card refilling

- Time saving

Plug-in and out design for input magazine,

Magazine swap could be finished in *5 seconds*

- Mistaken avoid:

Each magazine has sign to avoid the mistaken made by operator



## Easy Consumable replacement

- Plug-in and out mechanism
- Replacement could be finished in *5 seconds*



Thermal Ribbon



Tipping Tap



Indenting Ribbon

# ▶ Self-service Kiosk in Use





## Self-service Banking Card Issuance / Dispensing



**Customer**  
State Bank of India



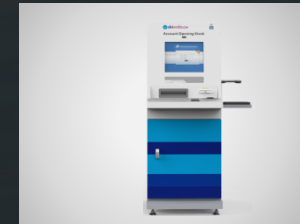
**Scope**  
250+ branches in India



**Equipment**



Instant  
Issuance Kiosk



Account  
Opening Kiosk

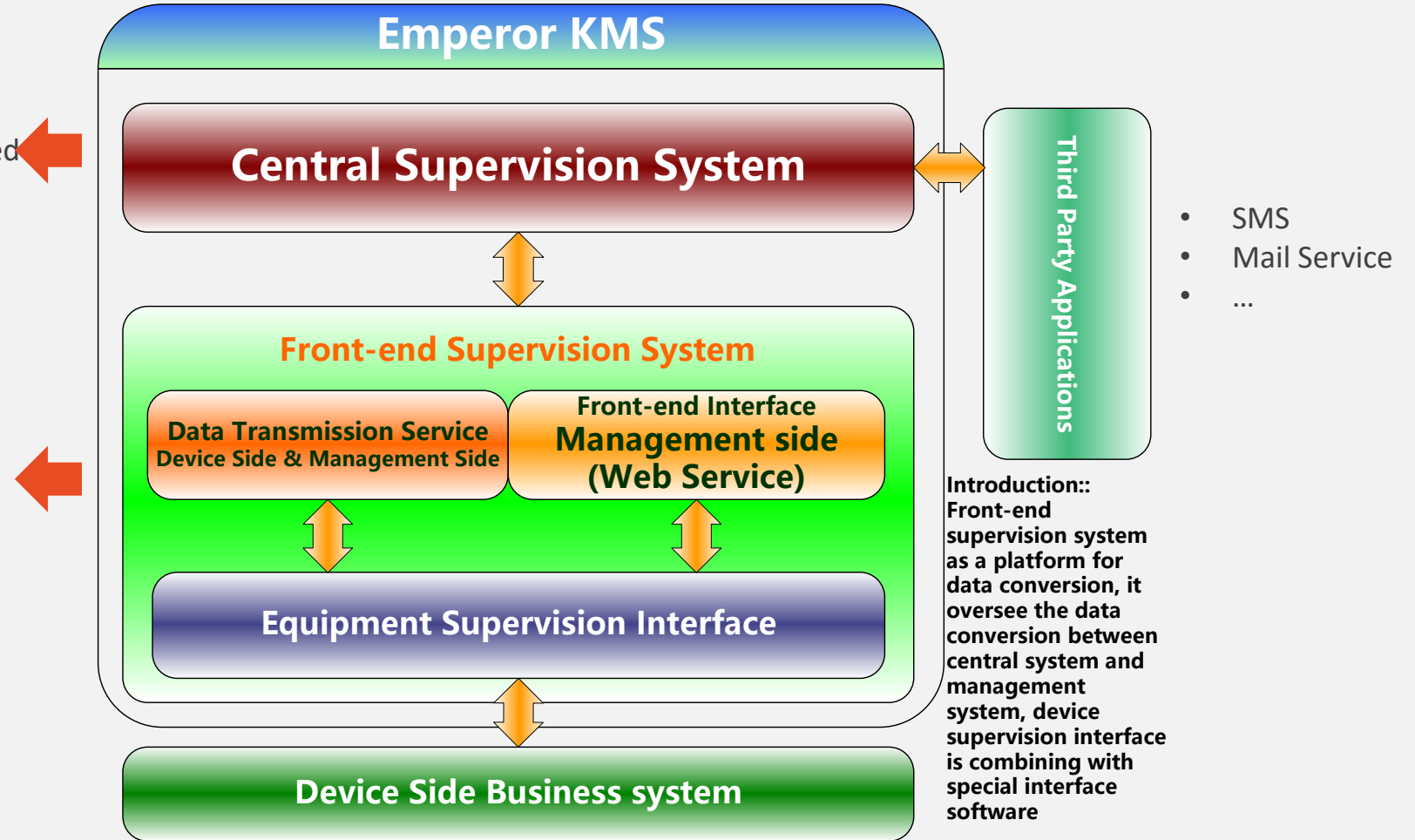


# Kiosk Management System

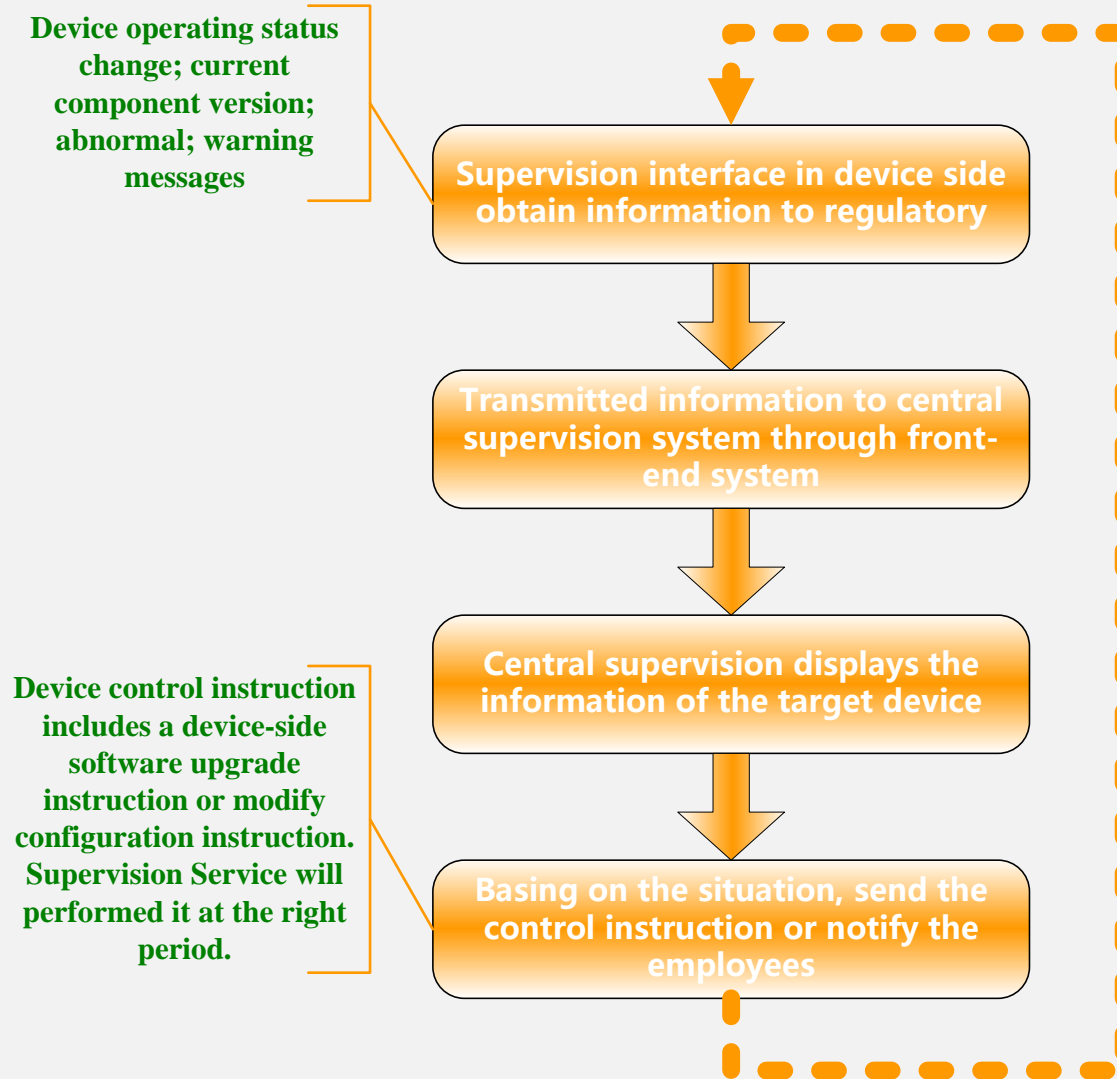
# ▶ System Composition

- Display equipment information collected from the front-end system
- Generate regulatory instruction to the specified device
- Daily Business management





- Collect device status information
- Deliver upgrades and other regulatory instructions to device



# ▶ Overall Process



# ▶ Main Functions of KMS

 <b>Monitoring</b>	 <b>Alarm</b>	 <b>Document Loading/Dispensing</b>	 <b>Inventory/Enquiry</b>
<ul style="list-style-type: none"><li>▪ Power supply status monitoring</li><li>▪ Hardware status monitoring</li><li>▪ Network abnormal detecting</li><li>▪ Communication status monitoring</li></ul>	<ul style="list-style-type: none"><li>▪ Door opening alarm</li><li>▪ Attack alarm</li></ul>	<ul style="list-style-type: none"><li>▪ Automatic document loading</li><li>▪ Double check when authenticating and dispensing</li><li>▪ Multiple Verification (Fingerprint, Barcode, ID Card, IRIS, etc.)</li></ul>	<ul style="list-style-type: none"><li>▪ Inventory check</li><li>▪ Database synchronize with remote database center</li></ul>

# ▶ System Security





# Main Interface of KMS

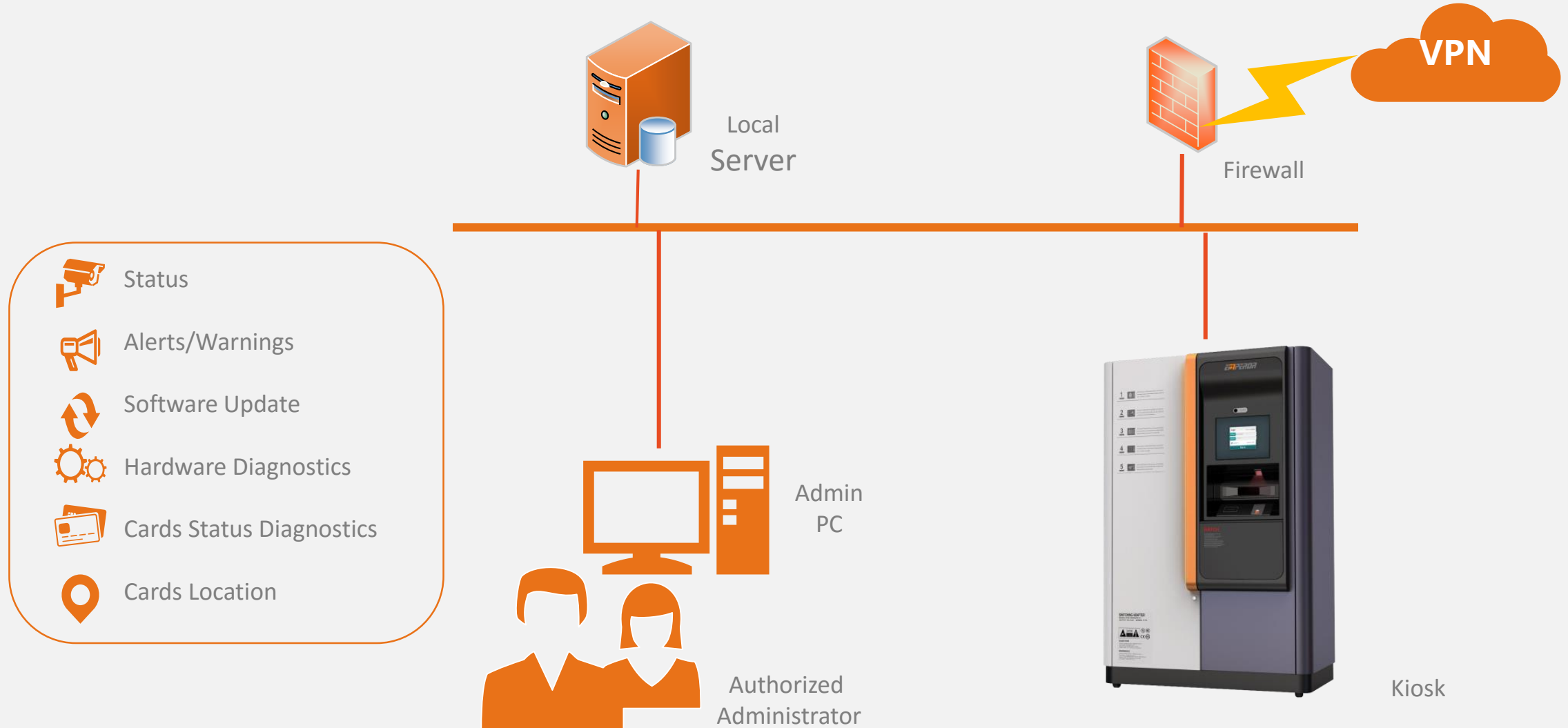


## Immigration Intelligent Management System

<p>Welcome! <b>Admin</b></p> <p>Last Login: 2014-05-20</p> <p>Password Changing</p> <p><b>Information Inquiries</b></p> <p>Branch Inquiries</p> <p>Visit Inquiries</p> <p>Passport Inquiries</p> <p>Machine Inquiries</p> <p>Passport Management</p> <p>Data Statistics</p> <p>System Management</p>	<p>▼ All Branch</p> <ul style="list-style-type: none"> <li>☐ Beijing</li> <li>☐ Shanghai</li> <li>☐ Tianjin</li> <li>☐ Chongqing</li> <li>☐ Hebei Province</li> <li>☐ Zhejiang Province</li> <li>☐ Jiangsu Province</li> <li>☐ Jiangxi Province</li> <li>☐ Guangdong Province</li> <li>☐ Yunnan Province</li> <li>☐ Shandong Province</li> </ul>				
	<p>No: 06057101</p> <p>Region: Zhejiang Hangzhou</p> <p>Reserves: 1745 <span style="color: red; font-weight: bold;">■</span></p>	<p>No: 06057102</p> <p>Region: Zhejiang Huzhou</p> <p>Reserves: 563 <span style="color: green; font-weight: bold;">■</span></p>	<p>No: 06057103</p> <p>Region: Zhejiang Jiaxing</p> <p>Reserves: 683 <span style="color: green; font-weight: bold;">■</span></p>	<p>No: 06057104</p> <p>Region: Zhejiang Jinhua</p> <p>Reserves: 942 <span style="color: green; font-weight: bold;">■</span></p>	
	<p>No: 06057105</p> <p>Region: Zhejiang Ningbo</p> <p>Reserves: 1527 <span style="color: green; font-weight: bold;">■</span></p>	<p>No: 06057106</p> <p>Region: Zhejiang Shaoxing</p> <p>Reserves: 788 <span style="color: green; font-weight: bold;">■</span></p>	<p>No: 06057107</p> <p>Region: Zhejiang Taizhou</p> <p>Reserves: 1611 <span style="color: red; font-weight: bold;">■</span></p>	<p>No: 06057108</p> <p>Region: Zhejiang Zhoushan</p> <p>Reserves: 90 <span style="color: green; font-weight: bold;">■</span></p>	

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# ▶ Network of KMS



THANK YOU

Jun 2016

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