DE Technology· Smart Screen Management Platform Introduction
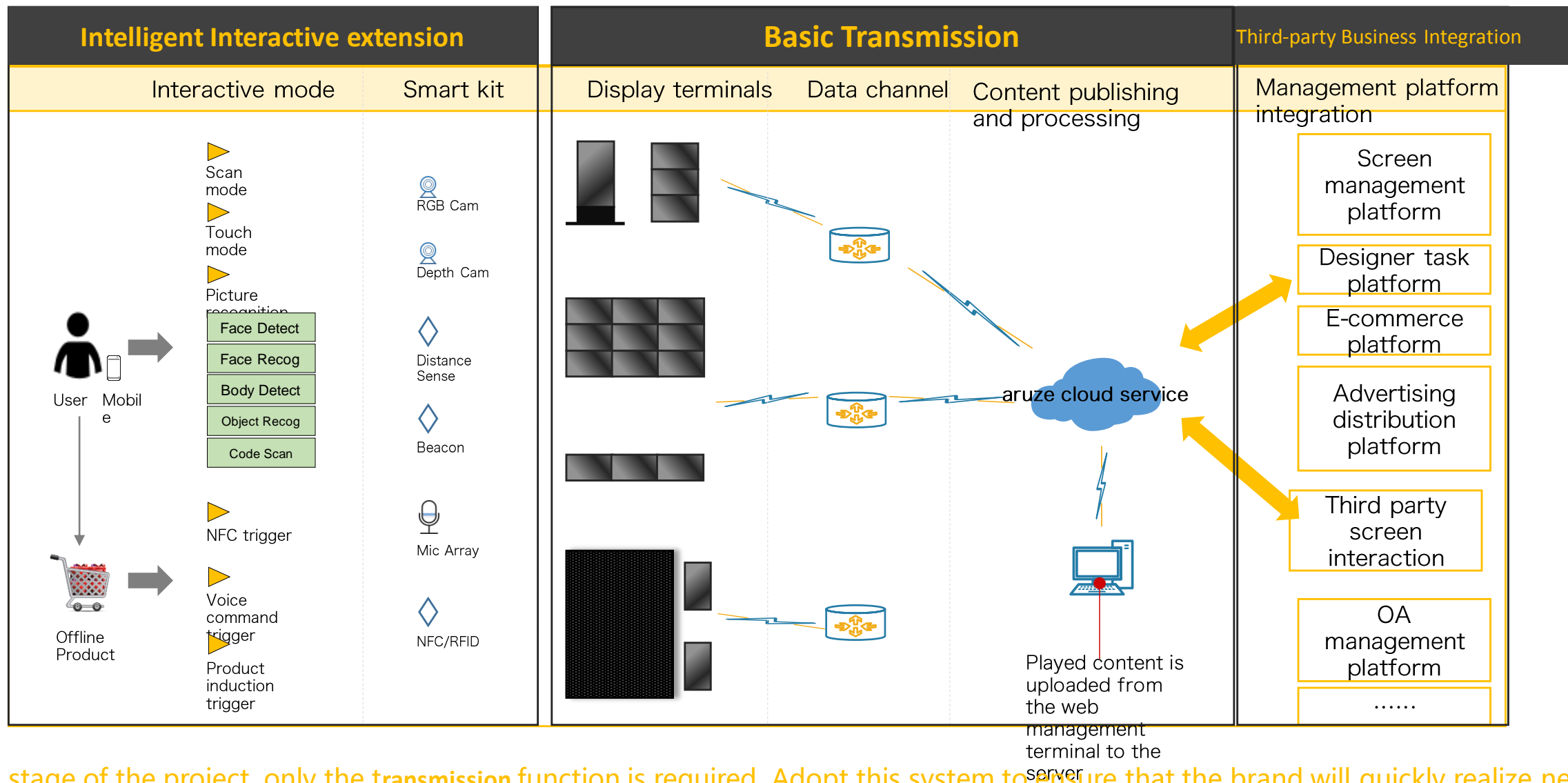
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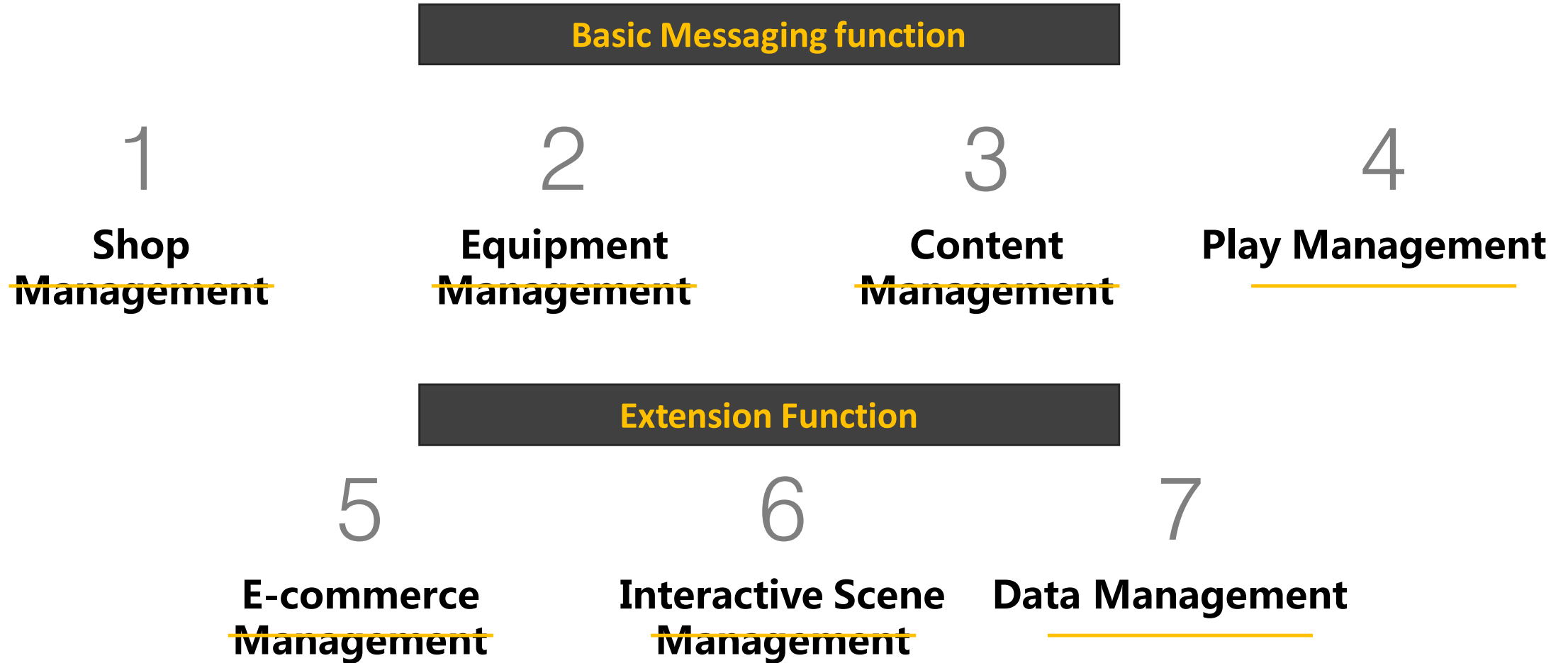# PART ONE

Platform Introduction

Platform Management Architecture

Intelligent Interactive extension		Basic Transmission			Third-party Business Integration
Interactive mode	Smart kit	Display terminals	Data channel	Content publishing and processing	Management platform integration

Intelligent Interactive extension

Interactive mode:
- Scan mode
- Touch mode
- Picture recognition
  - Face Detect
  - Face Recog
  - Body Detect
  - Object Recog
  - Code Scan
- NFC trigger
- Voice command trigger
- Product induction trigger

User — Mobile

Offline Product

Smart kit:
- RGB Cam
- Depth Cam
- Distance Sense
- Beacon
- Mic Array
- NFC/RFID

Basic Transmission

aruze cloud service

Played content is uploaded from the web management terminal to the server

Third-party Business Integration

- Screen management platform
- Designer task platform
- E-commerce platform
- Advertising distribution platform
- Third party screen interaction
- OA management platform
- ......

At this stage of the project, only the **transmission** function is required. Adopt this system to ensure that the brand will quickly realize new retail upgrades in the future.

Platform Management Content

Basic Messaging function

1
Shop Management

2
Equipment Management

3
Content Management

4
Play Management

Extension Function

5
E-commerce Management

6
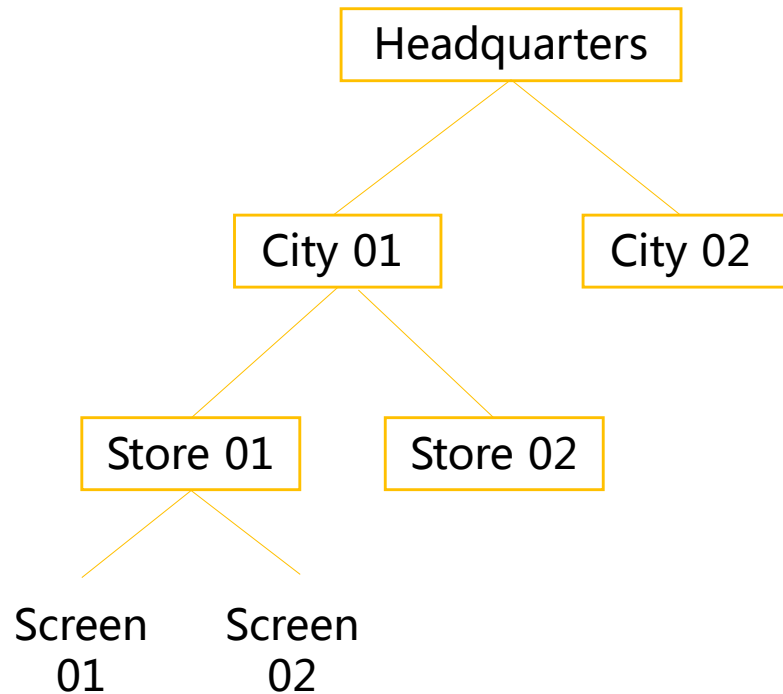**Interactive Scene Management**

7
Data Management

Note: Purchase the number of extension boxes, that is enjoy all the control functions of the platform, but also the extended function requires front-end configuration of interactive devices.

1

Shop Management

Multi-level Management Authority

Headquarters

City 01   City 02

Store 01   Store 02

Screen 01   Screen 02

- Headquarters, branches, and sub-departments can create different user groups and login user accounts.
- Support personalized role combinations to set access permissions for different users
- Scalable/multi-level management tree structure

Headquarters
  |-- region
    |--City
      |-- Head Shop
        |-- Shop
          |-- Screen

Seven-tier management architecture that seamlessly integrates brand business Thinking

Multi-level Management • Platform Interface

Content delivery for a single screen, or directly to a certain partition, city, etc.

2

Device Management

Multi-class Screen Compatible + Tag Management

Screen Type

| Projection and others | Any size LED | LCD/LCD splice | Like PAD Mobile device | Home/commer cial display | ...... |

Label Management

| Store: Four generations of stores | Brand: Digital extension machine | Location: Explosion area | ...... |

Multi-type screen management issues when fully considering future demand expansion

Remote Control

Remote switch machine, timed play function, only professional version V8 box has

Remote condition monitoring

Network: You can remotely view the operation status of different store screens, network conditions, etc. If 'Offline' is displayed, you can promptly check the store to check the network.

Screen capture: You can remotely view the screen to view the **content** of the screen, helping the merchant to monitor the screen playback status at any time.

Remote function setting

Switch on, restart, timing : The screen can be controlled and controlled remotely, and the machine can be turned on and off.

- **Disassemble** : If you do not need to retain the original delivered content, remotely select the disassemble function, that is release the screen serial code, activate the new screen, and delete the original screen content.

- **Change machine** : If you want to keep the original content, select the 'Change' function, remotely copy the content through the screen ID, you can transplant the original screen content to the new screen. No need to send it over the network again, saving traffic and saving time 。

Cross-screen linkage
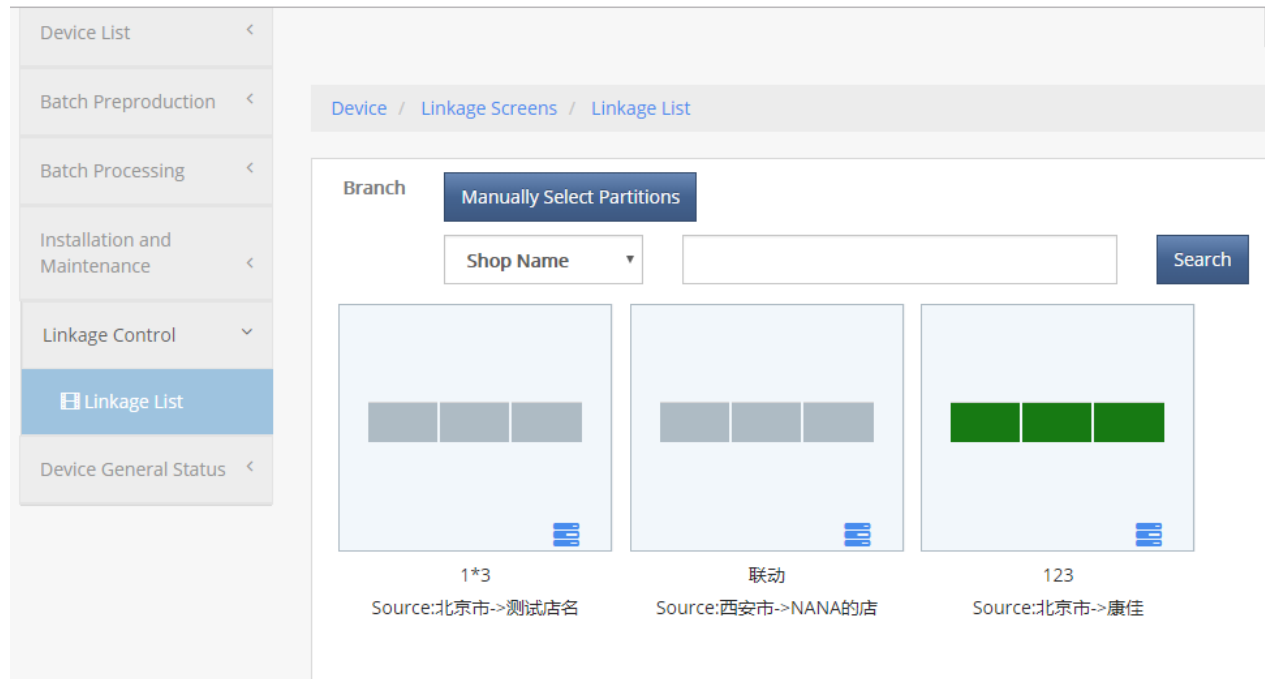
Linkage setting

Continuously installed screens that can be grouped into stitching groups

The same account can manage the splicing groups installed in different areas. The splicing method is flexible, and the splicing group can be cancelled at any time.

Linkage/single screen switching display

Set timing, which can realize cross-playing of linked content and single-screen content.

Remote switch machine, timed play function that only professional version V8 box has

3

Content Management

Album Management

Screen auto adaptation

- The content can be automatically applied to screen size.
- Also can set different sizes of content for different screens.

H5 template (video, photo, animation, etc.)

- The H5 template is used as the bearer mode, and the terminal displays multi-layer content, not only simple videos, pictures, etc.;
- Dynamic effects stacking, floating, and more can be set.

Multi-content album management

- Multiple content can create albums and set labels for albums, enabling one-click placement of multi-content, multi-level screens.
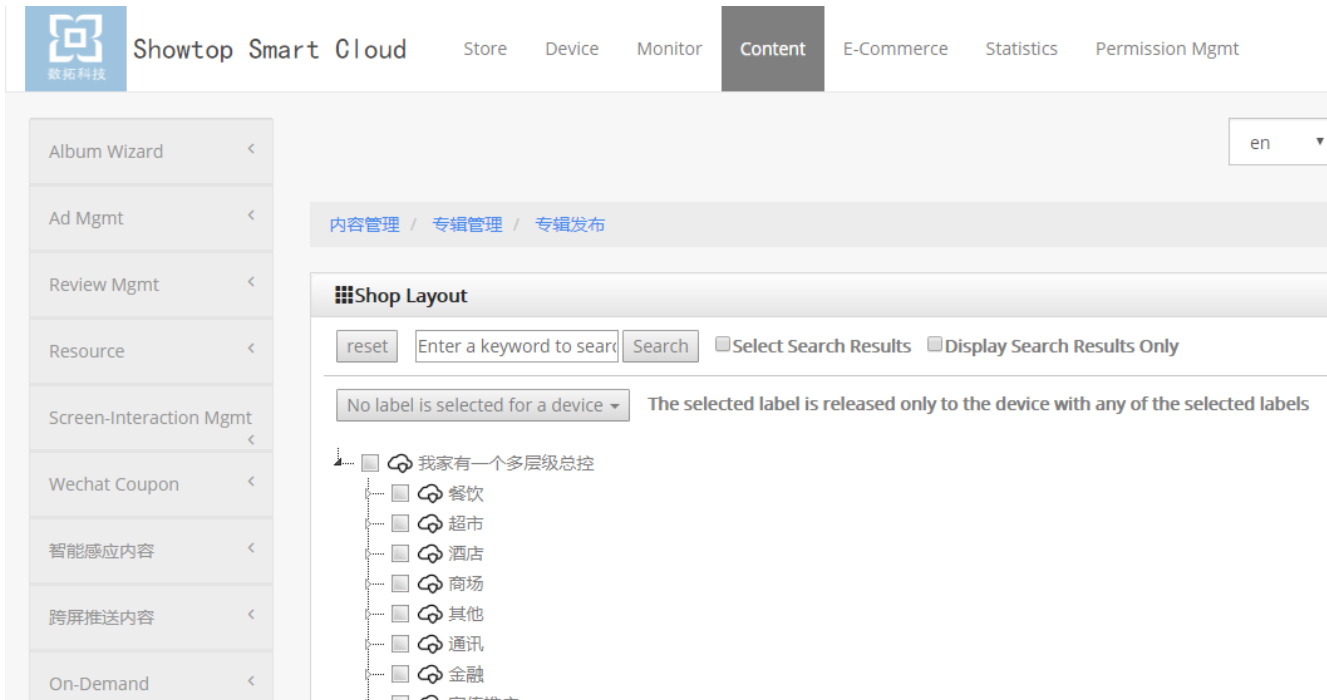
Sub-regional and time-phased delivery

- Can use one button to deliver multiple stores with multiple contents, or you can select the placement area according to the level of permissions;
- The playback time can be set for the content according to the marketing strategy.

4

Play Management

Customize Placement Area

Headquarters unified marketing

Manage large screens across the country through the cloud management platform and publish content to all screens with one click.
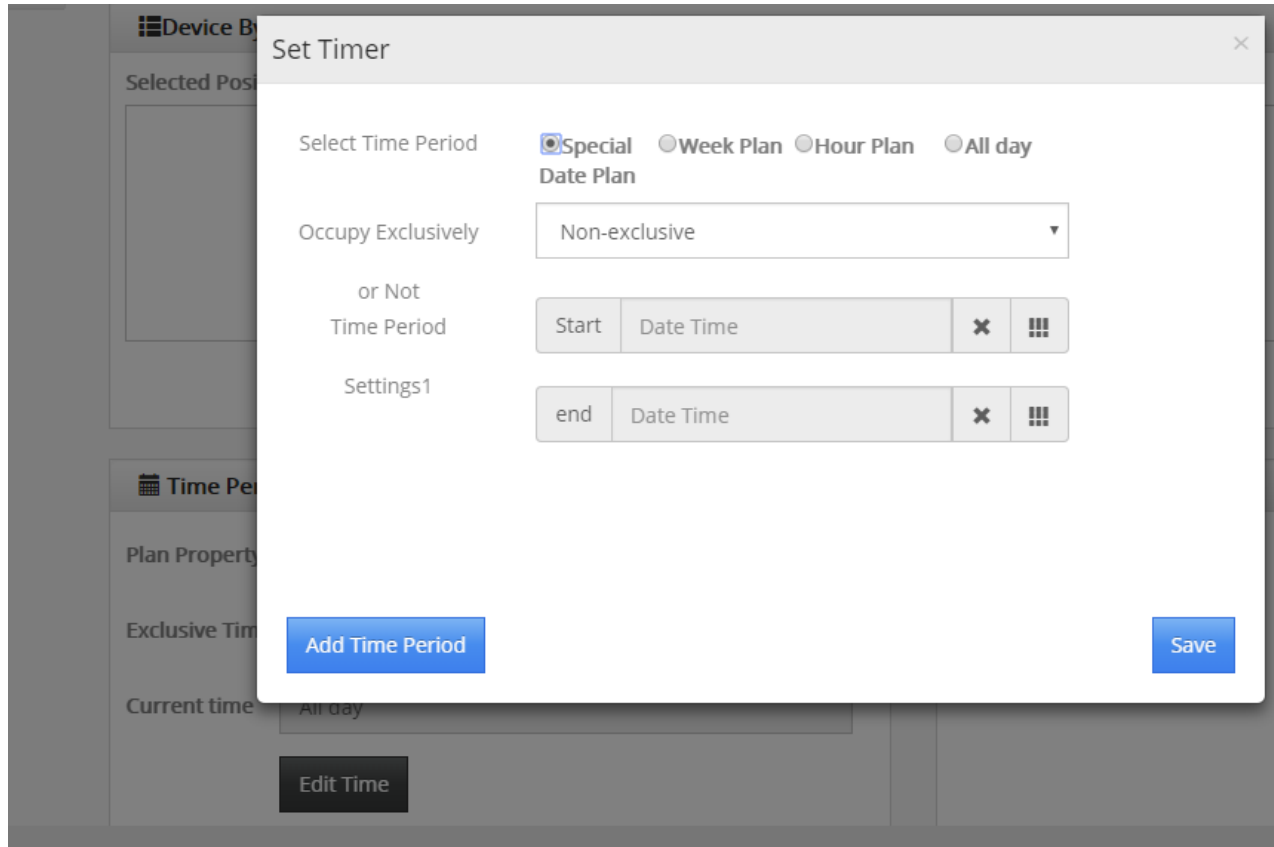
Sub-regional marketing

You can edit different content to play "album" and freely choose the branch or region to be placed.

Split screen content delivery

The smallest unit for content delivery is the screen, and the same store screen can display different content according to different needs.

Customize Play Time

Multiple play modes

For the album, set the playback mode (carousel, custom play, exclusive play), the play time can be selected weekly time, hour time

Preset Marketing time

According to the characteristics of the marketing campaign/product, set a specific playing time period to pre-schedule, and the screen automatically switches the content according to the setting period

No/Bad Signal• Emergency Delivery Strategy

1

Offline Package Mechanism

U disk encryption can be used to download offline packages for content replacement.

2

Master-slave Mechanism

Define the store host, download content from the external network to the host; can synchronize the content on the host through the LAN, other screen content, save external network traffic

5
E-commerce management

6
Intelligent interaction management

7
Data management

E-commerce Management

Own E-commerce Database

Mature E-commerce Processing system

Intelligent Interaction Management
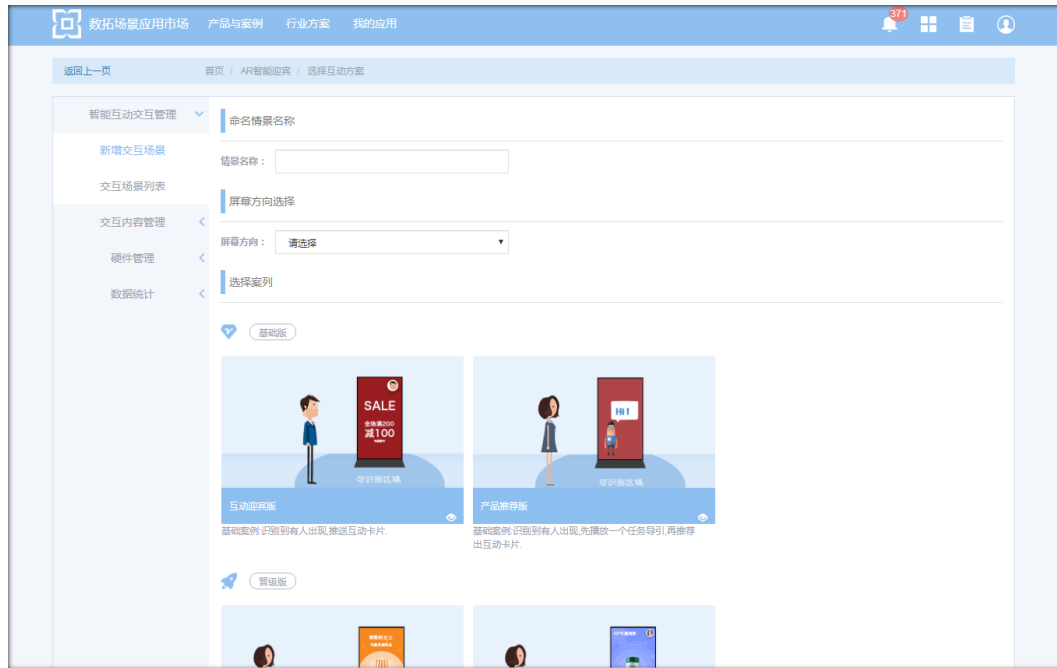
Camera Recognition
Interaction

Product Identification
Interaction Such As NFC

Data Management

Content And Crowd Cross Data
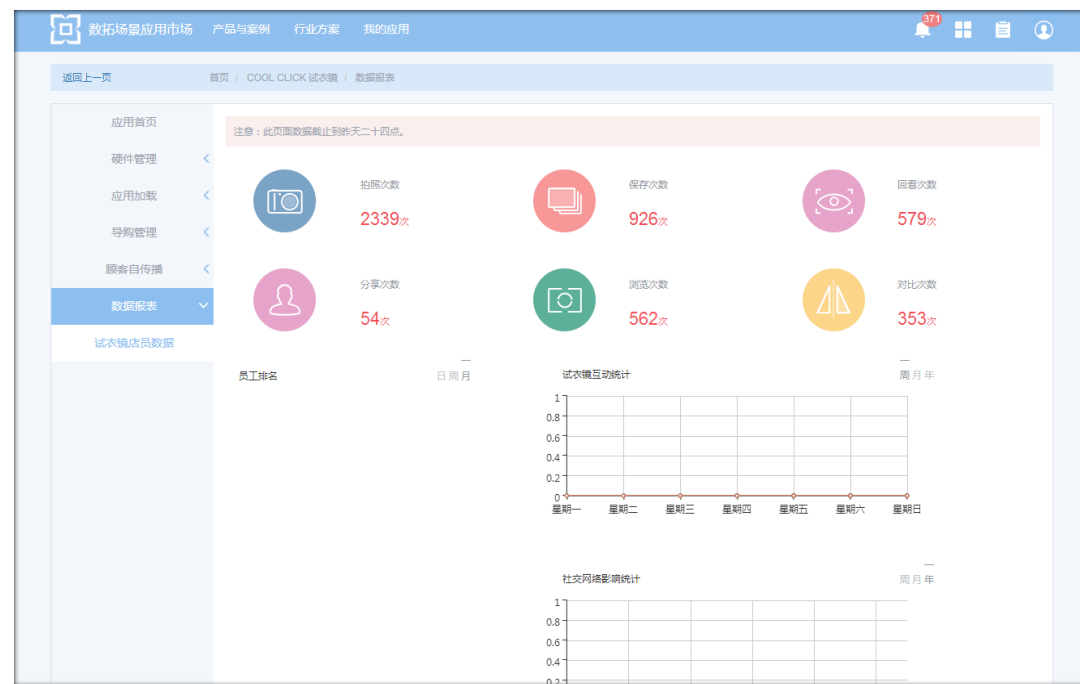
Consumer Behavior Data

PART TWO

Technical Advantages

Internet Service Engine

True open Internet architecture

- The Digital Extension Platform is an intelligent Internet platform for business display. It supports standard data interfaces and can be interfaced with third-party systems, databases, and devices.

- The digital extension platform has the ability of data acquisition and data analysis. The screen can collect environmental data, interaction data and user behavior through intelligent peripherals.

- It is also possible to identify the user, analyze the potential needs of the user, and generate a user portrait.
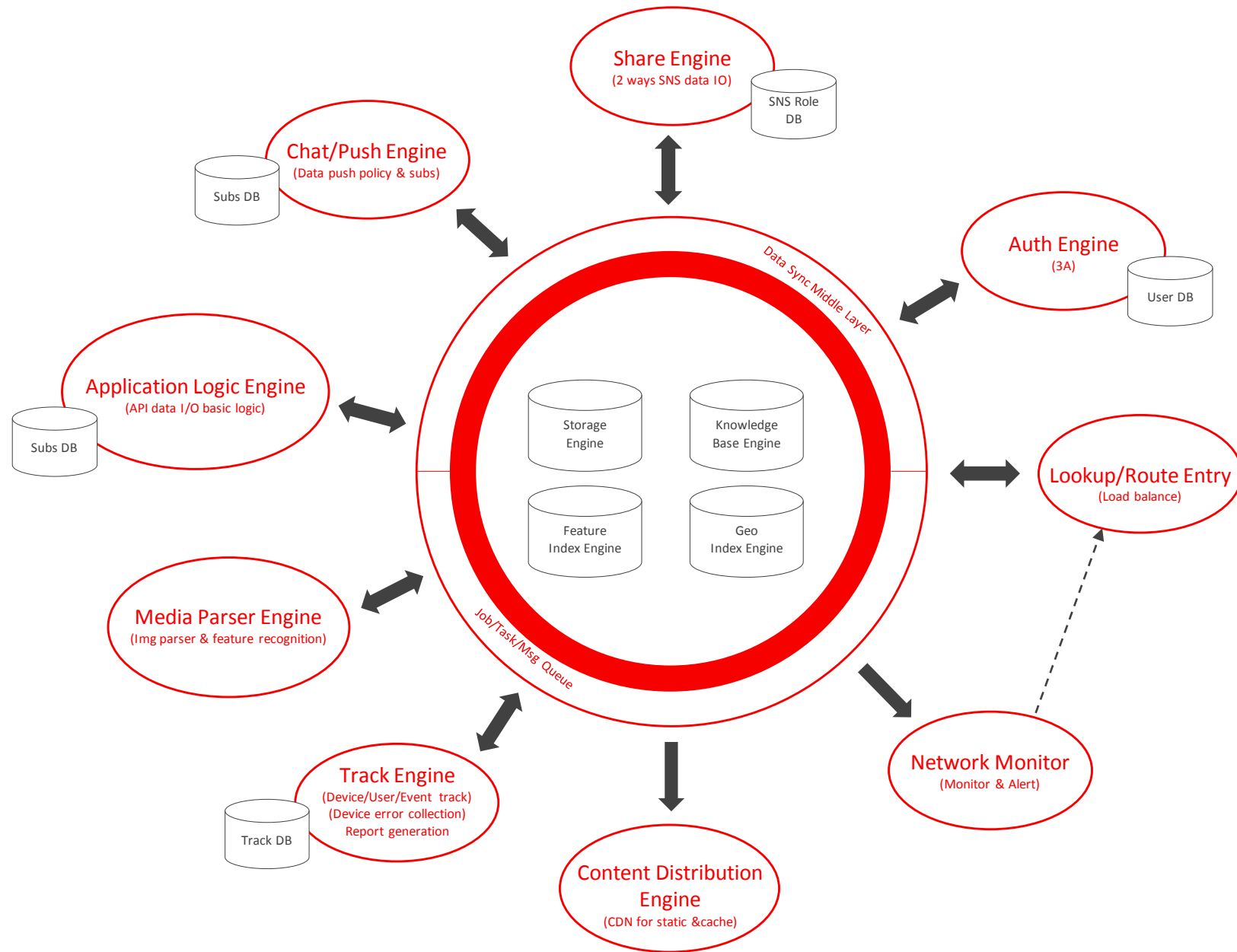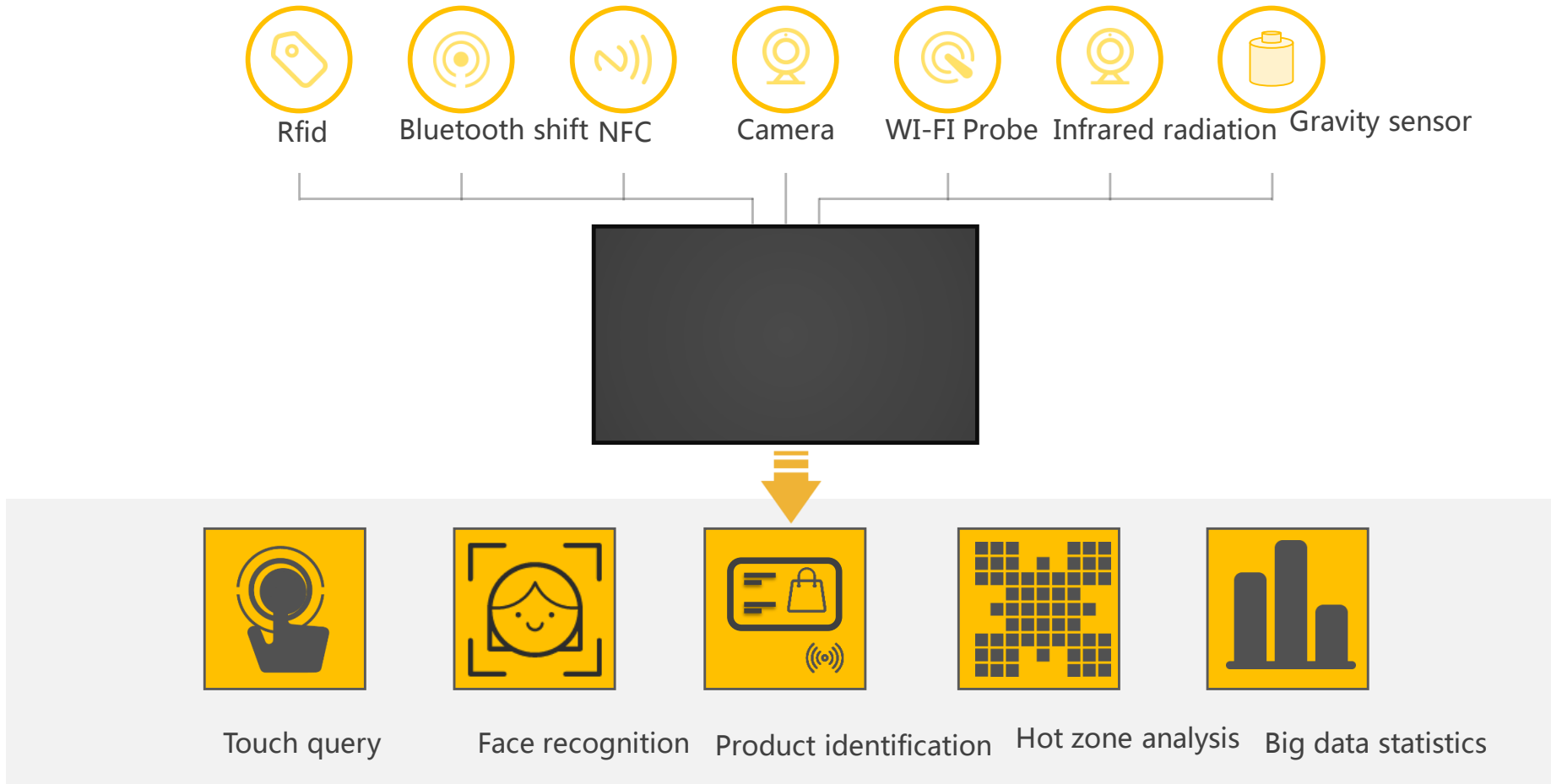
- Combined with the artificial intelligence expert system, it is possible to push the information most needed by the user to the front screen in real time.

- The domestic platform is based on the aruze cloud platform. The overseas platform is based on the AWS platform. The backend server is supported by customized Linux OS and the frontend based on Android System. The system can be implemented by business specialty and customized requirements

Share Engine
(2 ways SNS data IO)

SNS Role DB

Chat/Push Engine
(Data push policy & subs)

Subs DB

Auth Engine
(3A)

User DB

Data Sync Middle Layer

Application Logic Engine
(API data I/O basic logic)

Subs DB

Storage Engine

Knowledge Base Engine

Feature Index Engine

Geo Index Engine

Lookup/Route Entry
(Load balance)

Media Parser Engine
(Img parser & feature recognition)

Job/Task/Msg Queue

Track Engine
(Device/User/Event track)
(Device error collection)
Report generation

Track DB

Content Distribution Engine
(CDN for static &cache)

Network Monitor
(Monitor & Alert)

Intelligent Peripheral Access

Rfid

Bluetooth shift NFC

Camera

WI-FI Probe

Infrared radiation

Gravity sensor

Touch query

Face recognition

Product identification

Hot zone analysis

Big data statistics

More possible with access, data and so on

Business Platform Docking

Digital Extension Service Platform

Open account docking interface

Open service docking interface

Billing system docking interface

CRM System

Commodity database

POS system

Online marketing system

Addressing server

AAA sever

Business logic server

database Cluster

Storage service Cluster

data analysis And mining

Message bus and Middleware

Digital Extension Service Portal (load balancing)

monitor server

Push in real time server

CND Distribution control

multimedia Processing server

Management system web platform

APP Function Iteration

Poster machine + Cloud stitching = **Cross-screen linkage**

Poster machine + NFC Identification = **Unmanned shelf**

Scenario application

Divide the industry, sub-scenarios, refine the requirements, provide targeted applications, and display screens more effectively 。

Application extension

The non-engineering development approach quickly responds to new demands in a standard APP approach to meet changing market demands.

Third-party application docking

Support for third-party applications, quickly integrate new features, and achieve unified management and control.

THANKS

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