



Intelligent Residential Solution

Technological Innovation Leads Smart Living

Oversea Enterprise Solution Department

2020.04

Current Situation

Isolated System



High Labor Cost



Poor Satisfaction of Owners



At the same time, traditional solutions can no longer meet the diverse and intelligent needs of customers. In the traditional solution, **each system is relatively independent, data is not interconnected**, and **experience and flexibility are poor**, which make management very difficult and consume a lot of manpower and resources.

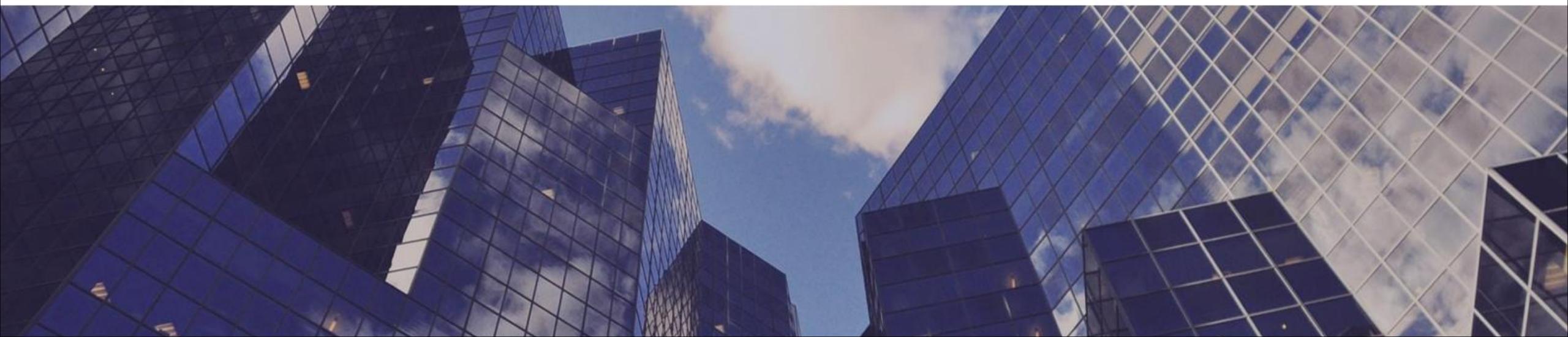
Solution Overview | Technological Innovation Leads Smart Living



01

Smart Security

- AI Empowers Community Safety
- Multi-layer Protection



AI Empowers Safety

Intelligent Security

- With active deterrence camera, push sound and light notice when something happen, efficiently prevent accident from happening.



Warning Area,
please leave
ASAP



Perimeter



Simplifies Community Management

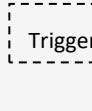
- When illegal activities happened in community, property manager can get the alarm immediately and give warning to the owners.



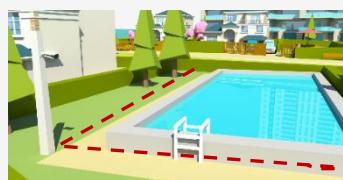
Green Belt, No
Parking here



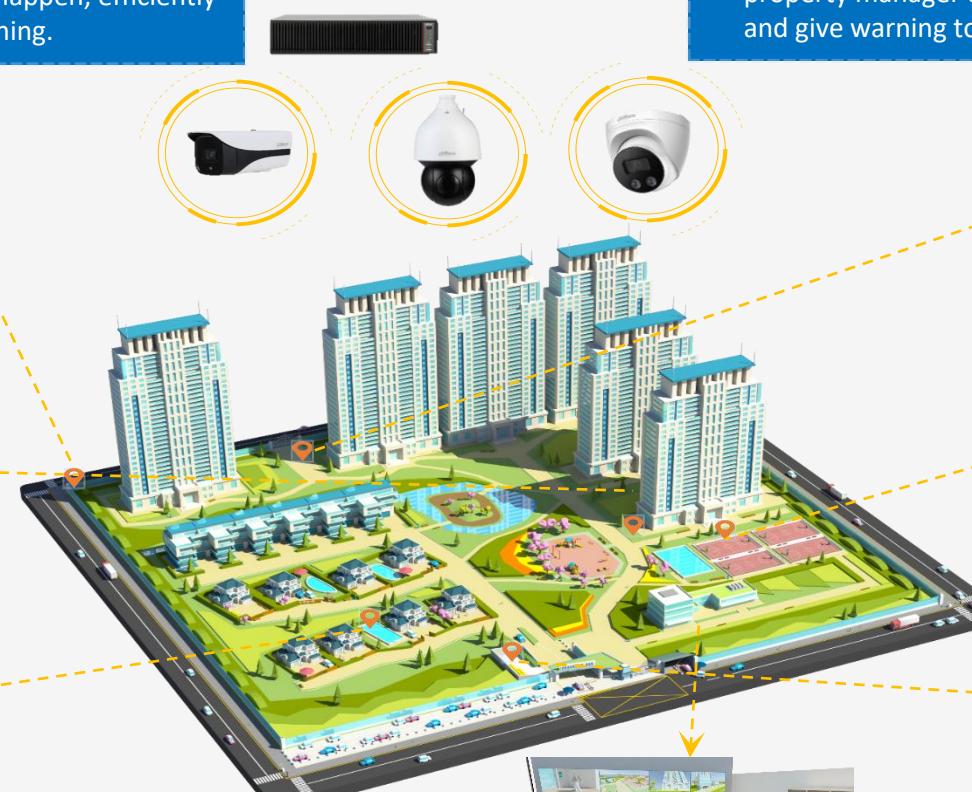
Green Belt Protection



Trigger Alarm



Swimming Pool Detection



Behavior Detection



Fire Lane Blockage and Illegal
Parking Detection



Trigger Alarm



Block Object Falling Detection



Trigger Alarm

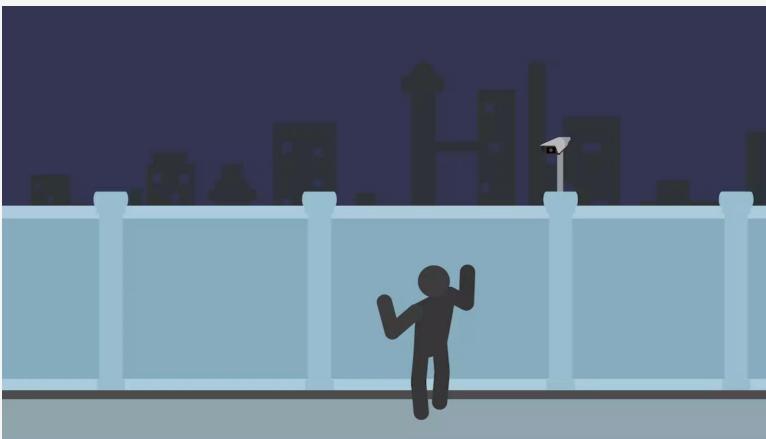


Garbage Overflowing &
Exposure Detection



Trigger Alarm

AI Empowers Community Safety



Perimeter Detection



Green Belt Protection



Swimming Pool Detection



Fire Exit/Lane Blockage Detection

Block Object Falling Detection



With excellent low-light performance, as well as wide dynamics, backlight compensation, fog penetration and other functions



Use the camera to monitor from bottom to top to avoid taking pictures in residents' homes



Use a medium-telephoto lens to effectively cover high-rise buildings



4 households one floor, only 3 cameras can cover

Beforehand: Deterrence, prevention

In the event: alarm, processing

After the event: Responsibility and improvement



Support middle and high floors, multiple cameras used in combination



Effectively filter out interference from drying clothes, quilts, etc.



It can identify objects corresponding to the size of **20*20 pixels** at a resolution of **8MP**, and the detection rate will be reduced if it is too small



Accuacy:85%

Garbage Detection



Garbage Exposure detection

Confetti, leaves, cartons are not recognized, household garbage bags, piles of garbage are recognized



Garbage Overflow detection

Domestic plastic trash cans support recognition



Unrecognizable trash can

The trash can cannot be identified, and overflow detection is not allowed

Fire Lane Blockage Detection

Motor Vehicles



**Non-motor
Vehicles**



Fire Lane Blockage



- Parking of motor vehicles or non-motor vehicles in the detection area
- Vehicle attributes and license plate recognition are temporarily not supported

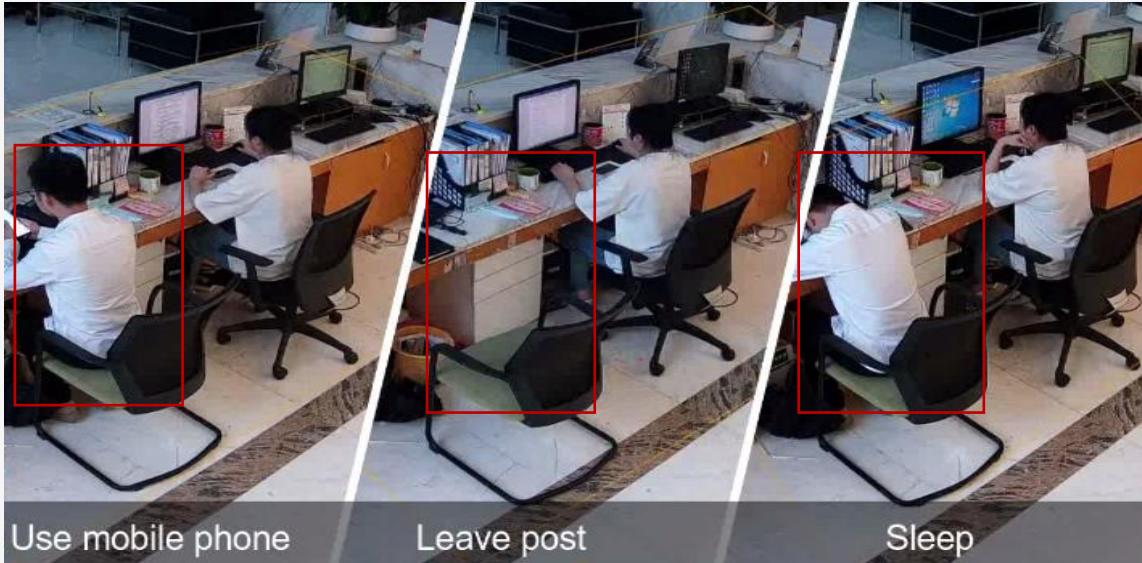
- Indoor fire lane are occupied, luggage and boxes are stacked illegally

The detection accuracy >85%

Property Management Service | Behavior Detection

Playing Mobile Phone

- Hold the phone in the hand for a period of time, the phone needs to have a clear cross-section in the image



Absence Detection

- The number of personnel in the area is less than the set value within the specified time

Sleeping

- Sitting still in the seat for a long time or lying on the table for a long time

AI
Intelligenc
e

Accurately identify personnel on-duty, off-duty, and sleeping conditions

Make
Services
Better

Provide a basis for the evaluation of the personnel on duty in the monitoring room, and provide better services

Shared Facility Protection | Easy Manage the Facility and Security

Pain Point

- Hidden safety hazards, such as **stranger break in and destroy the facility**.
- Difficult to get the evidence video and find the suspicious person.



Comprehensive Center Entrance



Gym



Laundry Room



Business Center / Club House Machine Room



Face Recognition



QR Code

Door Open Video Linkage

Each door open can link CCTV camera to record the process, Provide videos for video forensics to protect the safety of owners.

Face Recognition Access Control

By using AI face access control, owners can use Face to enter the shared facility area directly, while strangers can't. In this case, protect the safety of residents and the facilities.

✓ Strict Authority Control and Protect Residents

✓ Reduce Safety Risks



Door Open Camera Linkage Video

Public Area Protection | Scenario Defined Cameras

Pain Point

- Public Area with large area and hard to respond in time when accident happens.
- Multiple cameras installation increase the labor and installation cost.



Corridor

- One camera can cover two directions.
- Wireless connection and small camera match the space.



Elevator



Lobby

- One camera cover the whole environment and provide 360° degree view.



Playground

- 4 camera stitching, cover large field of view and replace multiple cameras.

Lower Cost

One panoramic and fisheye camera can replace multiple normal cameras to cover large field of view.

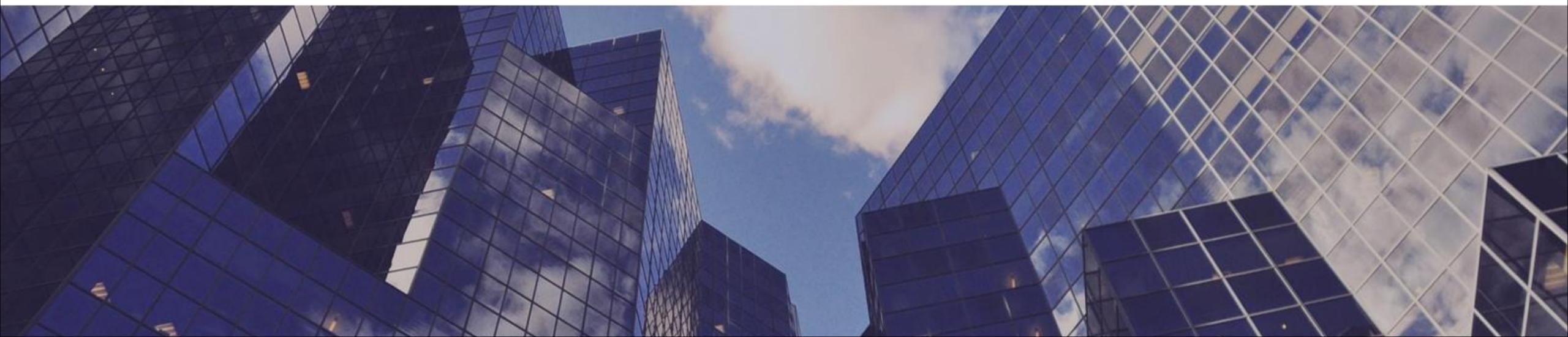
Easy Installation

All the device are support all in one design and easy to install.

02

Smart Living

- Touchless Passage
 - Visitor Management
 - Wide Lane License Plate Recognition
 - Touchless Elevator
- Smart and Safe Home



Solution Overview | Technological Innovation Leads Smart Living



Invite Your Family Member Now! | No Need to Move to Service Center Any More



The screenshots show the following sequence:

- Account Management**: Shows a main account for "admin101" (IP:10.20.30.25 Port:7000) and a sub-account section.
- Personnel Management**: Shows multiple sub-accounts for "Lily" (Validity Period: 2021/02/30-05/30).
- Add Sub Account**: A modal for adding a new sub-account for "Lily". It asks for a password and confirmation, with an "OK" button at the bottom.
- Account Management**: Shows the addition of a new sub-account for "Lily". It includes fields for "Phone No.", "Credential No.", and "Mailbox".
- Sub Account Details**: Detailed view of the newly added sub-account "admin10100" for "Lily". It shows the validity period as 2021/05/21-2021/06/21, and options for "Change Password", "Freeze Account", and "Delete".

Add New Member

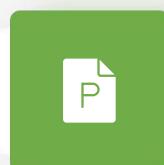
Input Member Information and Associated Account

Success

Member Management

Flexible Member Management

- The Owner can **Add/Modify/Freeze/Delete** Member Account on the Mobile APP
- **Password Change**: If the member forget the password, also can find and change password.
- **Upload Face picture via APP Directly**.



Room QR Code Information Sharing

- Owner can **Share Room QR Code** Information to Family Member or Tenant, they can **easy download and register into the system**, no need to go to service center to register.

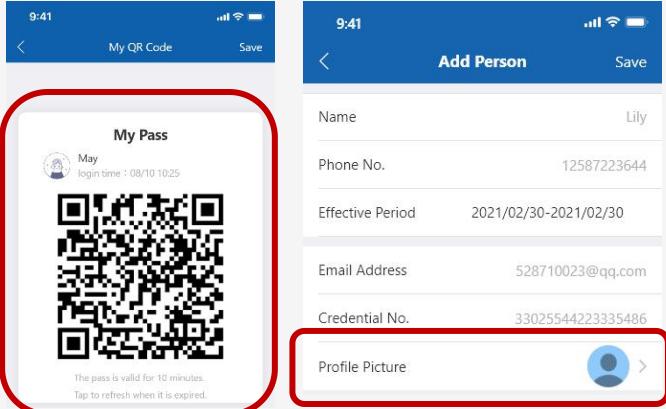


- **Remote Management Sync to platform**: All the Information in the APP would upload to the platform. **Basic transactions do not need to bother the property, Owner can handle them.**



More Efficient Property Work

Touchless Passage



Residents can get
their own **QR Code**.

Residents can
upload Face picture
via APP



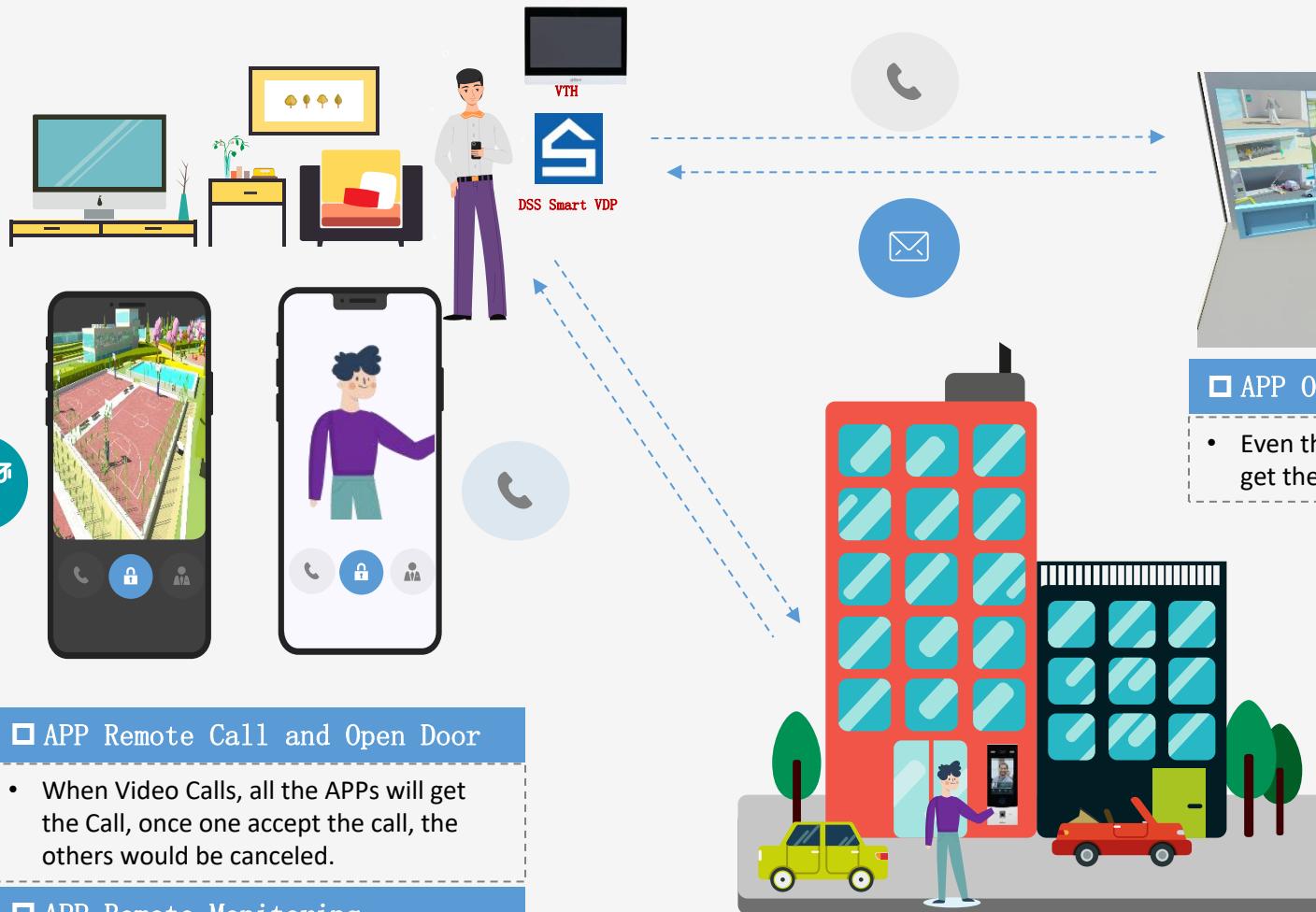
Residents and family member use **Face**,
QR code and **License Plate** to go through
everywhere



AI Technology helps to get a Fast
Recognize Speed.



Remote Visual Services



□ APP Offline Message Push

- Even the APP is disabled, the owner will get the message notification.

□ Property Information Release

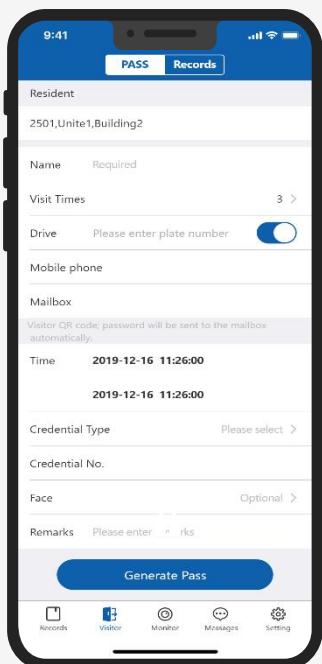
Convenient Visitor Management

Residents Invite Before Visitor Coming via APP

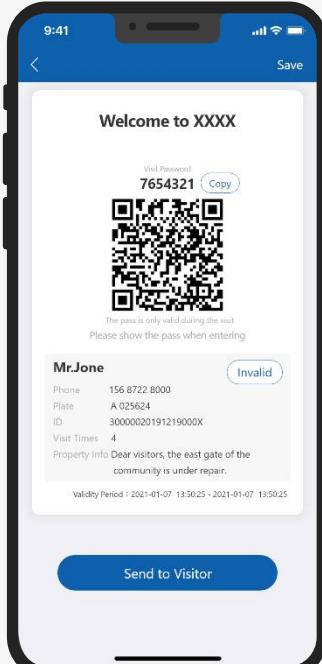


01

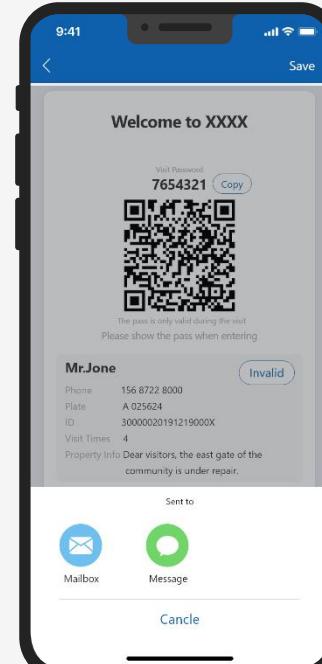
Manage Your own Visitors, No more Bother Property Center!



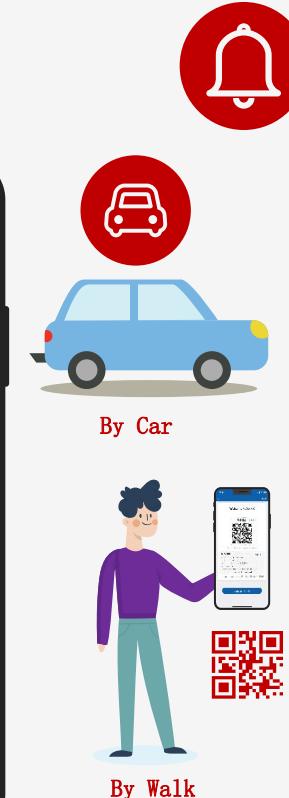
Input Visitor Info



Generate QR Code

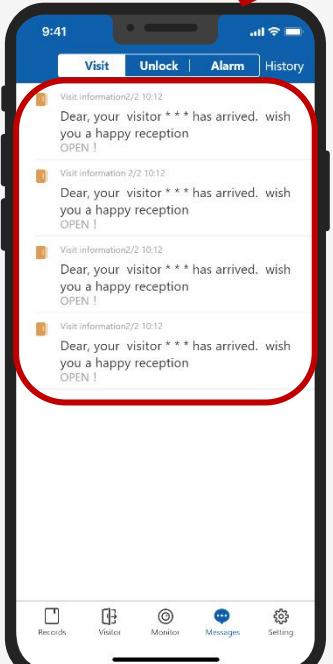


Share QR Code



Visitor Coming

Residents can get APP Message when visitor enter into community.



APP Message Alert

02

Better Visitor Process, Make Everything Easier!

Elevator Control | A New Way to Rise High



Cover Multiple Business Scenarios

Notes: Face and QR code would be supported later in 2020 Q3.

01



Residents Back Home

- Enable the authority of floor by using **Card**, residents back home directly.

02



Residents Go Downstairs

- The owner presses the call button out of the elevator
- Support remote **public floor setting, no rights on public floor**

03



Visitor Mode

- Visitor call **security staff or residents** via VTO
- Visitor go into elevator within a certain time

04



Others

- One card multilayer Management**
- Fire alarm linkage**

Touchless Passage and Remote Visual Services



VTO Call APP Video



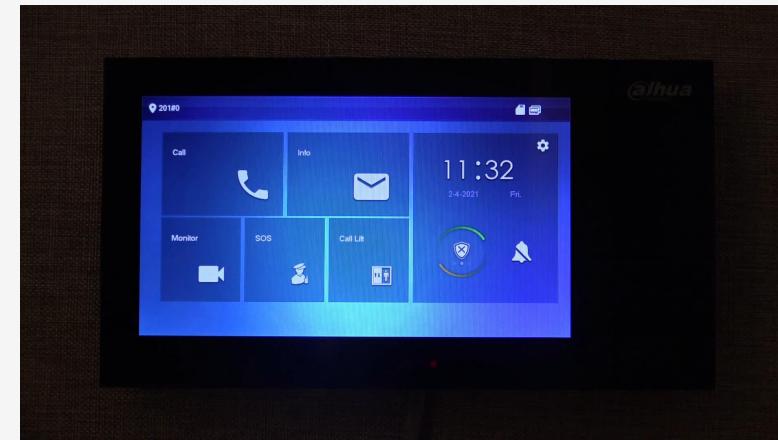
VTH Call Forwarding to APP Video



Multiple Residents Access Modes of Face Access Control Terminal



Owner Back to Home

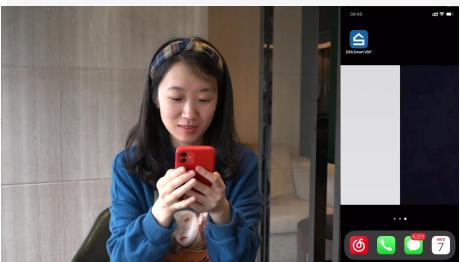


Owner Go Downstairs

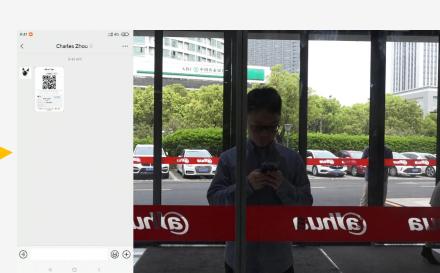


Visitor Mode

Touchless Passage and Remote Visual Services



Owner invite visitor via APP
Generate and Share to Visitor



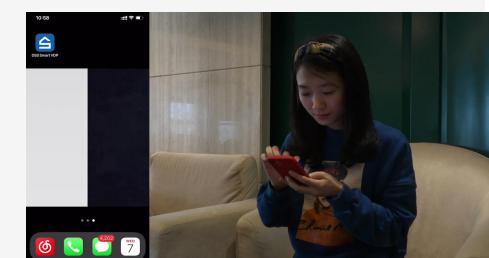
Visitor Enter into Community by Car
In the White List



Visitor Enter into Community via Password
Owner get the Message via APP



Visitor Enter into Community via QR Code
Elevator Control Linkage

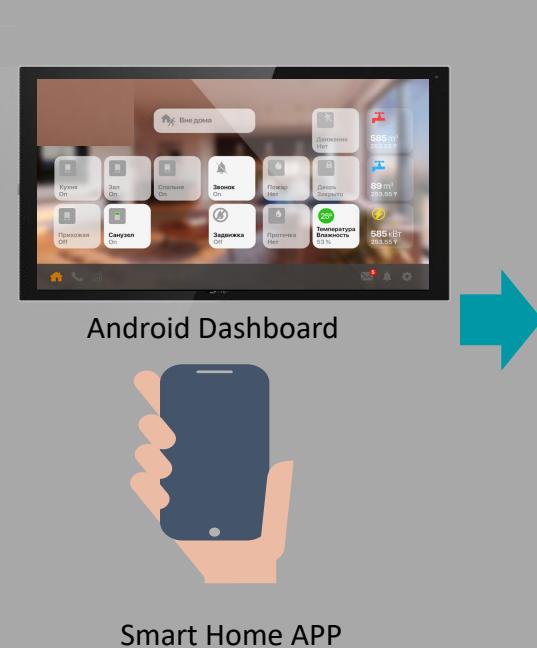


Owner get the Message via APP

Smart and Safe Home



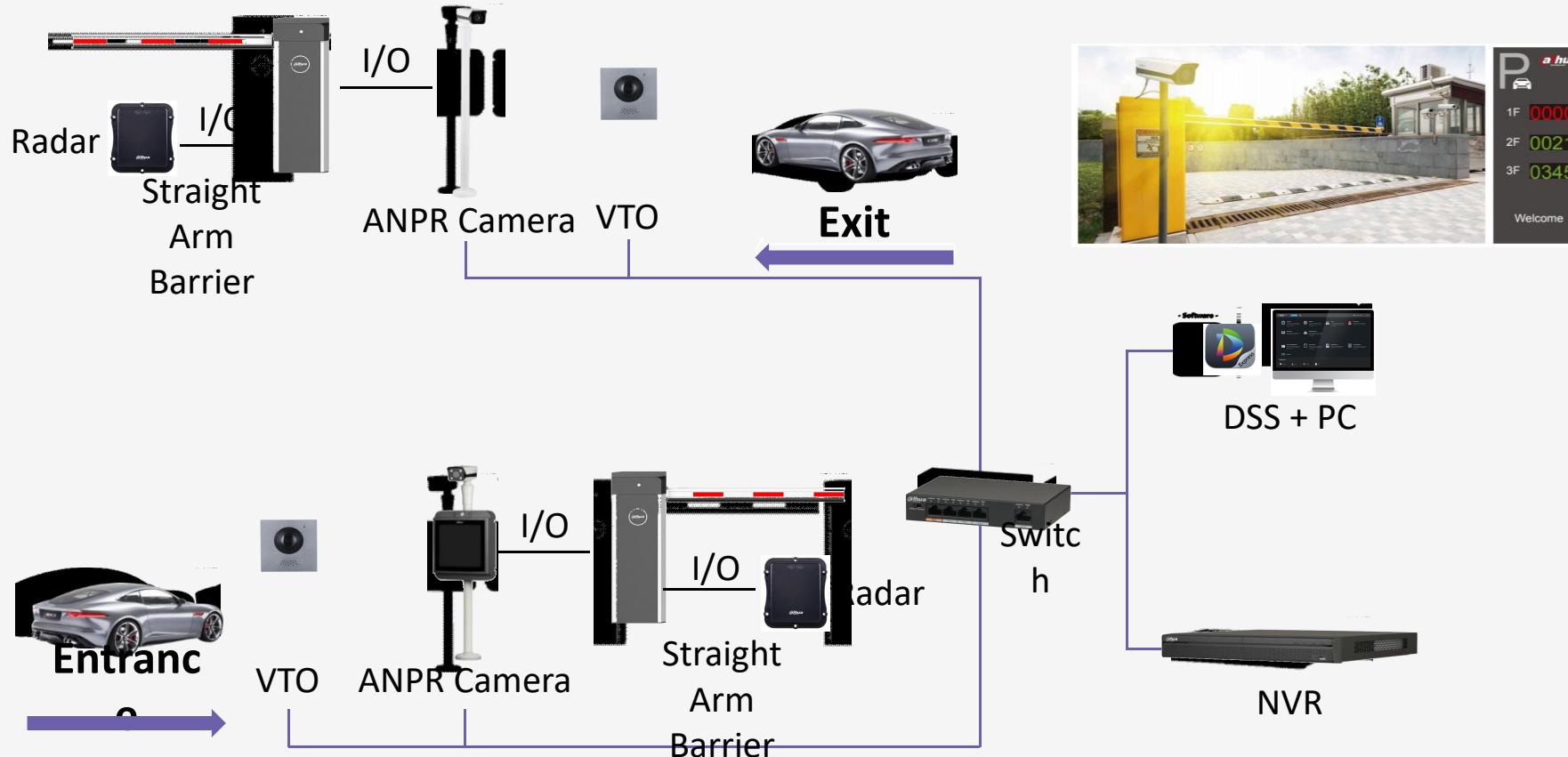
Android Indoor Station Integration



Value

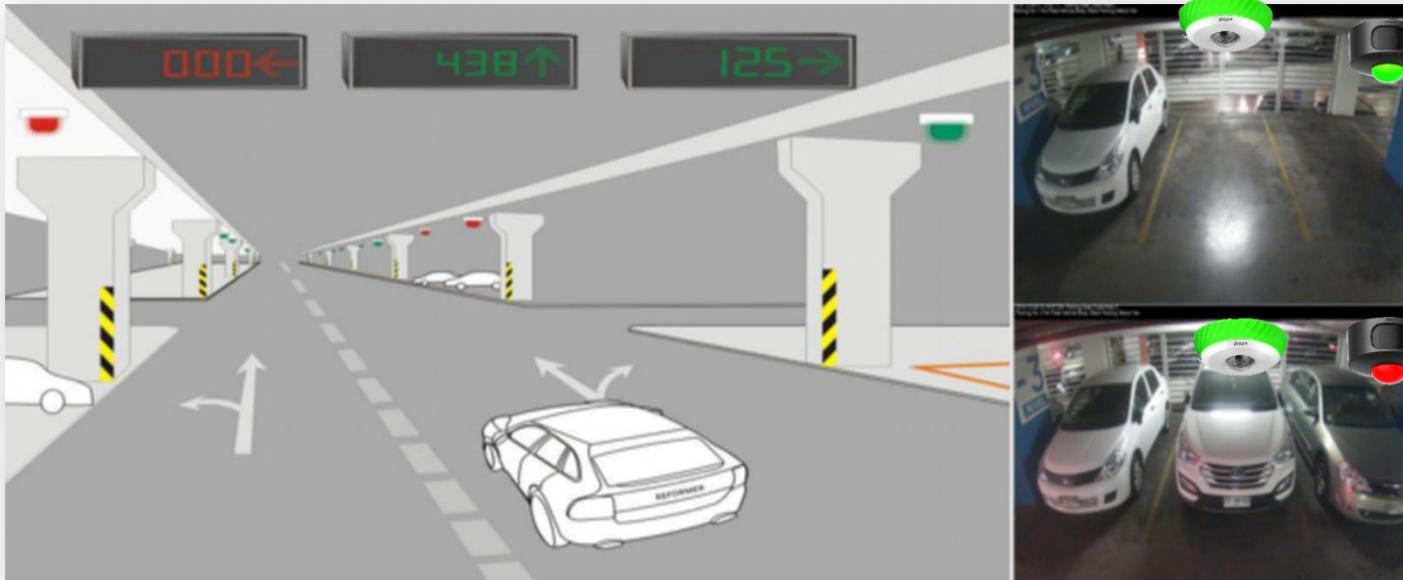
- Open design for Android VTH and support application embedding
- Embed our app into Developer's Smart Home APP
- Provide IOS/ Android SDK

Smart Parking | Vehicle Access| Entrance & Exit



- This solution adopts advanced ANPR technology and integrates intercom into a well coordinated vehicle management system, enabling a safe and efficient vehicle entrance & exit.
- Notice: Straight Arm Barrier must match a radar to achieve the control of pole falling and prevent hitting vehicles.

Smart Parking | Indoor Parking Guidance

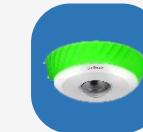


Highlights



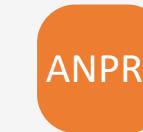
Guidance to Free Area

- Show the number of available parking space in each direction.



Indicate to Free Spot

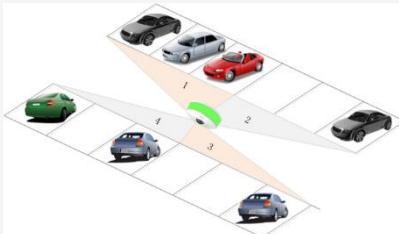
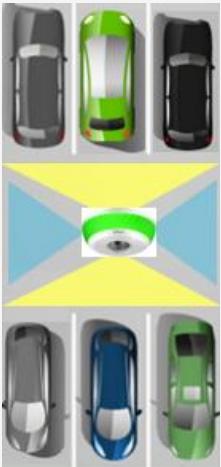
- Integrated indicate light of detection camera will show if the parking spot is occupied or not.
- Seven colors light could show different kinds of parking space



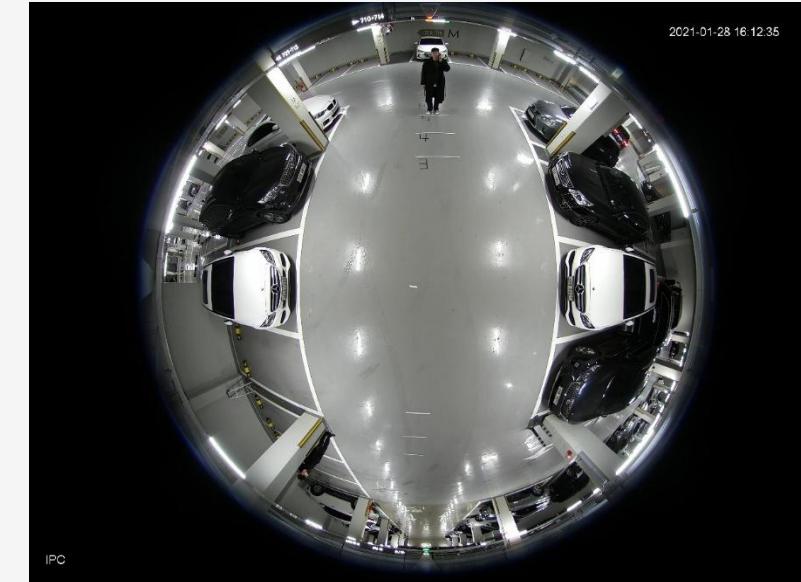
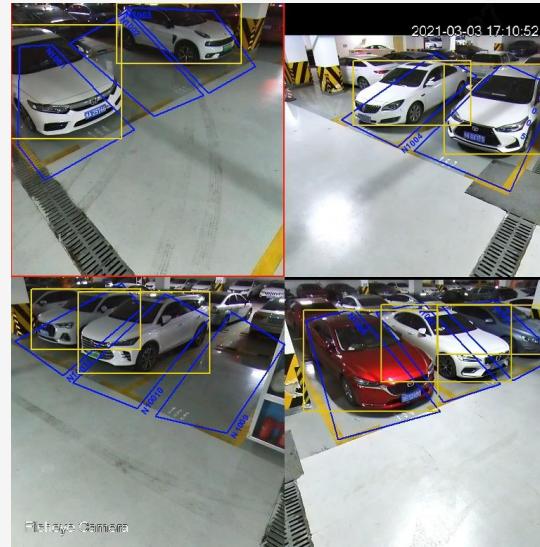
ANPR

- Identify the current license plate of the parking space

Smart Parking | Parking Space Recognition



More cost effective!



Clear Guidance

Six (6) and Twelve (12) parking lots coverage
Seven (7) colors available

AI Algorithm 1+1

Parking lots detection (up to 12 vehicles)
License plate recognition (up to 12 vehicles)
Multiple dewarp display modes

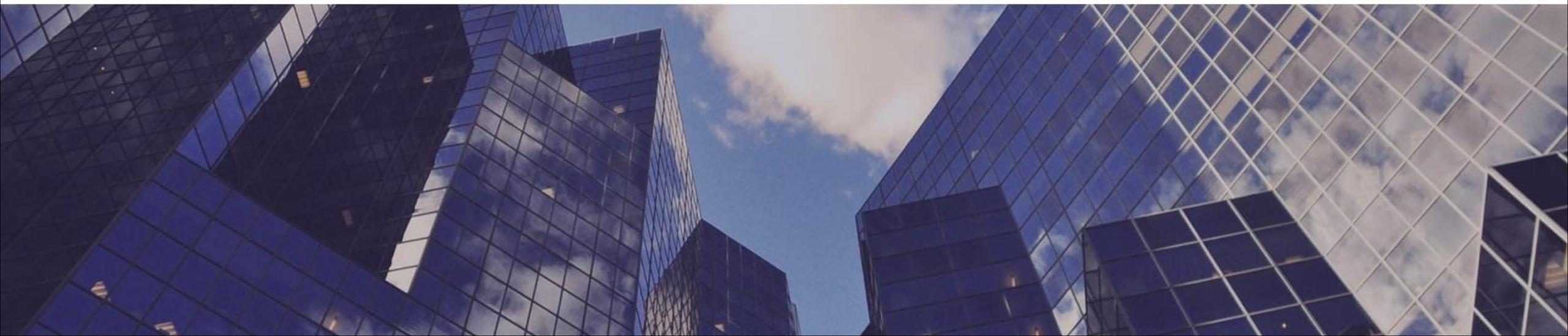
Complete Surveillance

Parking space monitoring
Drive lane monitoring
360-degree monitoring

03

Smart Property Management

- Convenient services for residents and their property
- Time Attendance Management
- Powerful Software and Unified Management



“One Click” Service | Better Service Better Experience



Indoor Station



Outdoor Station

01 Convenient Communication between Residents and Property

- “One Click” call concierge or surveillance for help
- Quick response and efficient communication



02 “One Click” Information Release

- Post Notice to one or multiple residents
- Post Notice or Advertisement on Digital Signage



AI camera



AD Serving

- **Display advertisement** according to the AI analysis



Information Release

- By using MPS, property manager can release the notices ASAP.
- Support different Display mode.



Surveillance Center



Concierge



Software



Master Station

Time Attendance Management | Flexible and Open



Pain Point

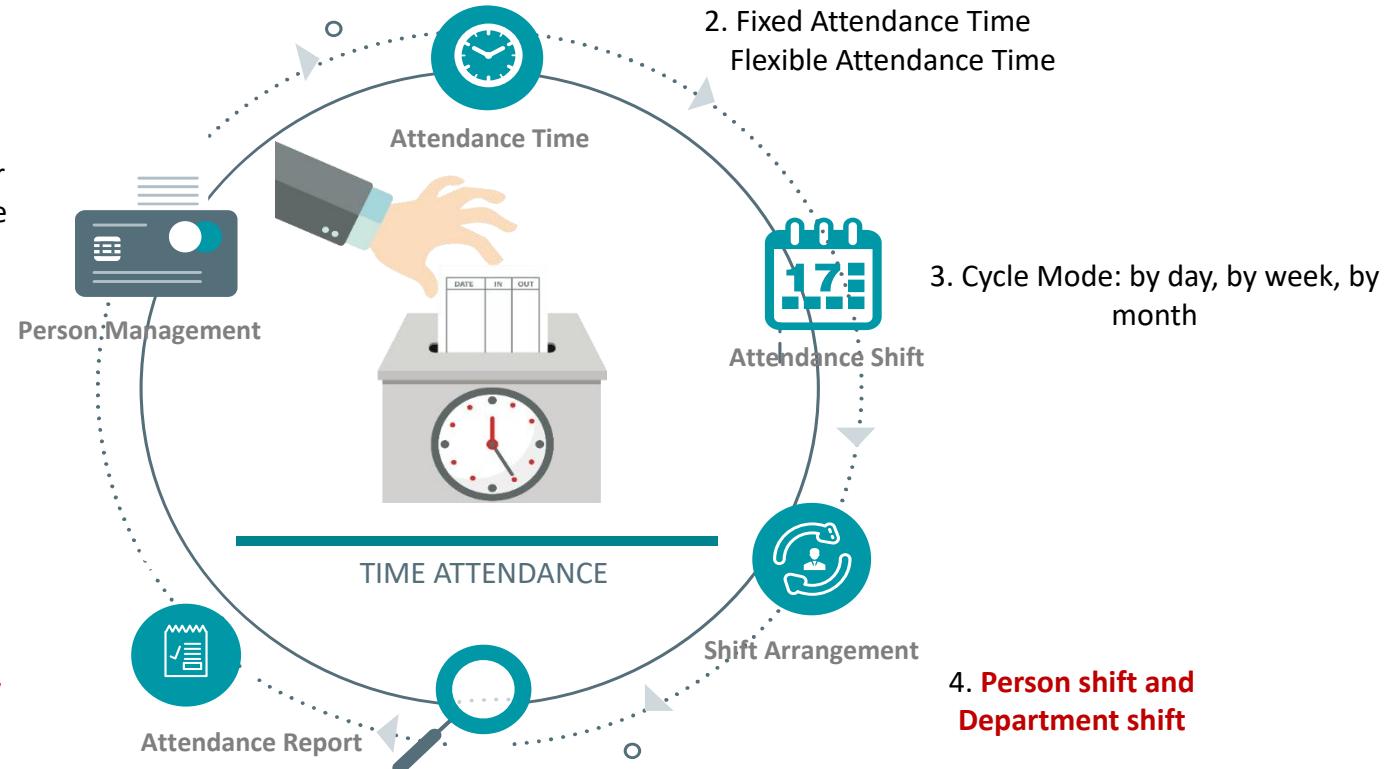
- There are lots of gaps in traditional property management, such as **fake time and attendance, absenteeism** etc.
- It is **difficult to unify management** of property management personnel in the community

Process

1. Set AI access control devices or attendance devices as attendance points



5. **Attendance Report, Card-swiping Record, Abnormality Report**



Value

- **Flexible Time attendance Management**
Avoid abnormal behavior such as Fake Time And Attendance
- **Open API and Easy Integration**
Output **standard API** of Time Attendance Data for 3rd party integration

Notes: QR Code Recognition would be realized in Q2.

Smart Management Software Provides a Smart Community

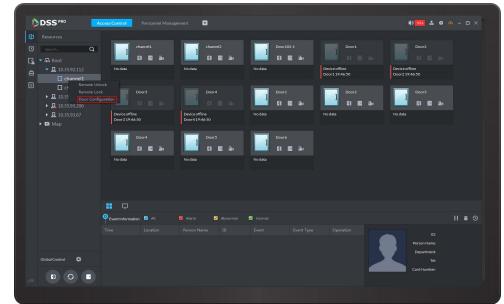
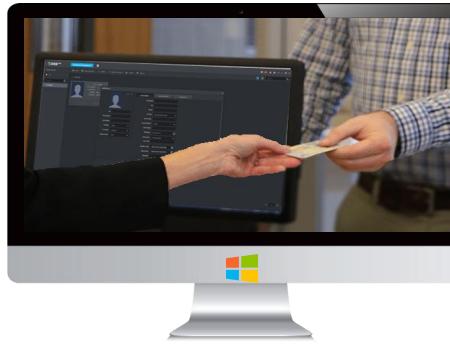


• Visitor Management

- ✓ Multiple visitor identification modes
- ✓ Visitor management
- ✓ Authority Control

• Video Management

- ✓ Convenient live view helps to keep all in control
- ✓ Multiple playback ways helps to find evidence quickly



- Software -



• Event Management

- ✓ Event center makes guards respond the abnormal immediately

• Call Center Management

- ✓ Support multiple call answer simultaneously.
- ✓ Support Integration with 3rd party call schedule system.

Better service in concierge and Powerful Platform to enhance operator efficiency