ACTi Introduction

About ACTi

- Since 2013. 9
- Headquarter : Taipei, TW
- Branch : **Irvine, U.S.**
- Employee : 400

(50% R&D team)

Cloud-based Analytics Solution

ACTi provides corporate BI & Operation Management solution based on cloud big data platform.

Retailer Challenges

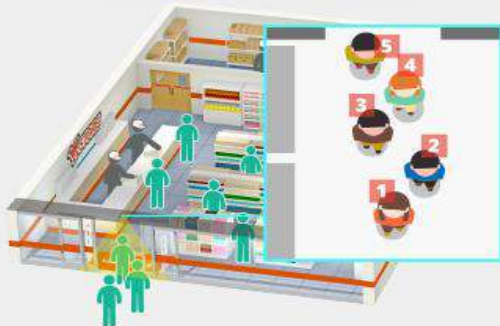**Challenge on operation?**

1. Streamline report in branches.

2. How to evaluate KPI from marketing activities?

3. Store layout –
        product & brand locations

4. TA analysis

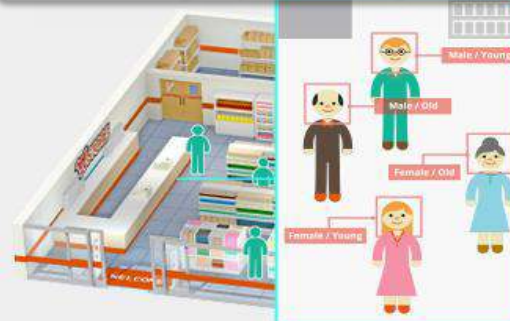5. Visitor numbers & flows

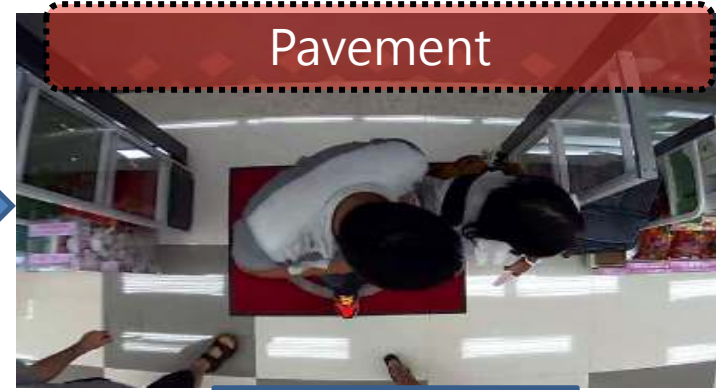# Smart Retail
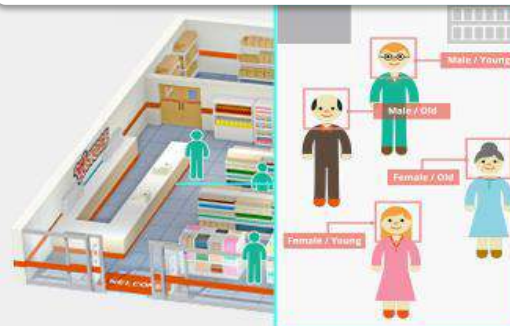
Foot traffic – People Count
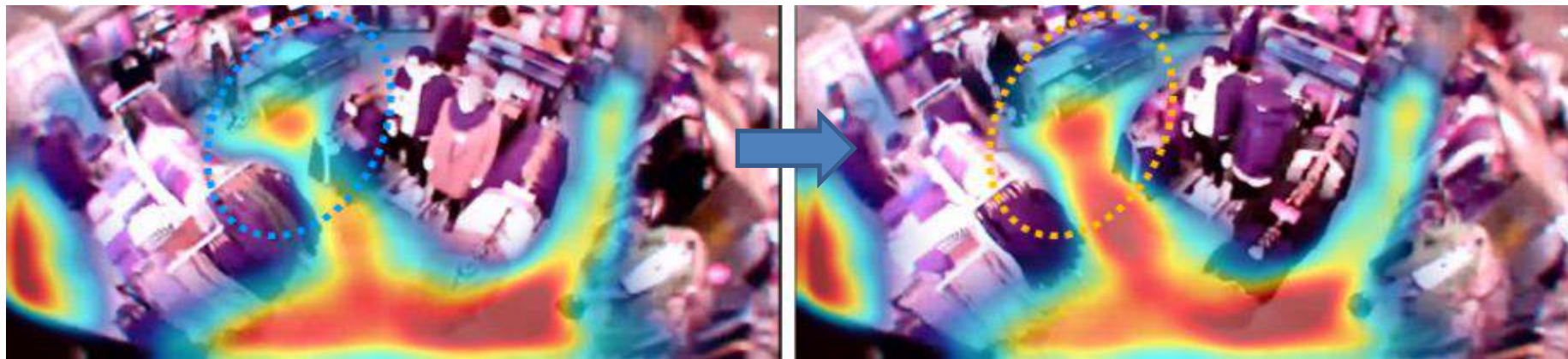

Pavement

Store Entrance

Store

- Target customer analysis before rollout.
- Understand target customers category in different time periods.
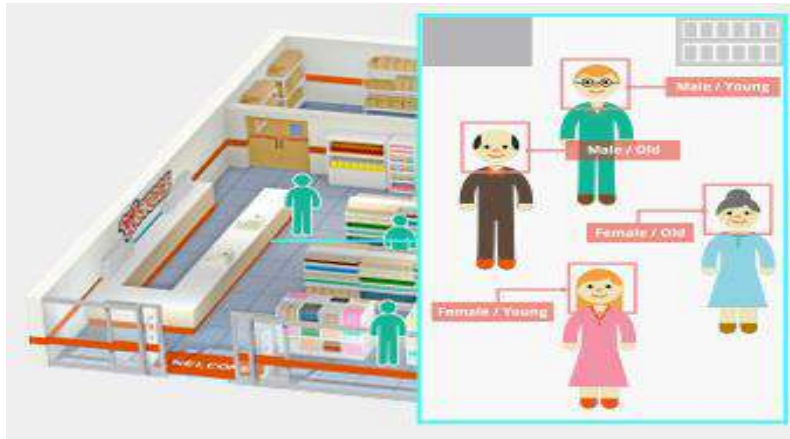
Heat Map & Dwell Time Analysis

- Understand customers' preference & shopping route.
- Optimize layout efficiency.
- Effectively expose hot products & brands, revenue +50%

Visitor Demographic Analysis

> ➤ **Gender & Age Detection**

Detect visitors gender & age through camera at the entrance.
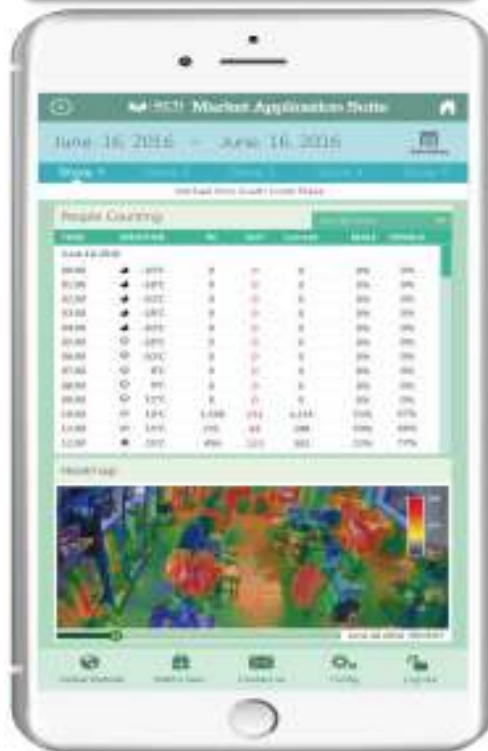Analyze visitors and set short, mid, long-term strategy.

Smart Retail App

Gender Analysis

People Count

Heat Map

Smart Retail Application Suite

VIP Face Recognition

> Detect VIP visit at the entrance.
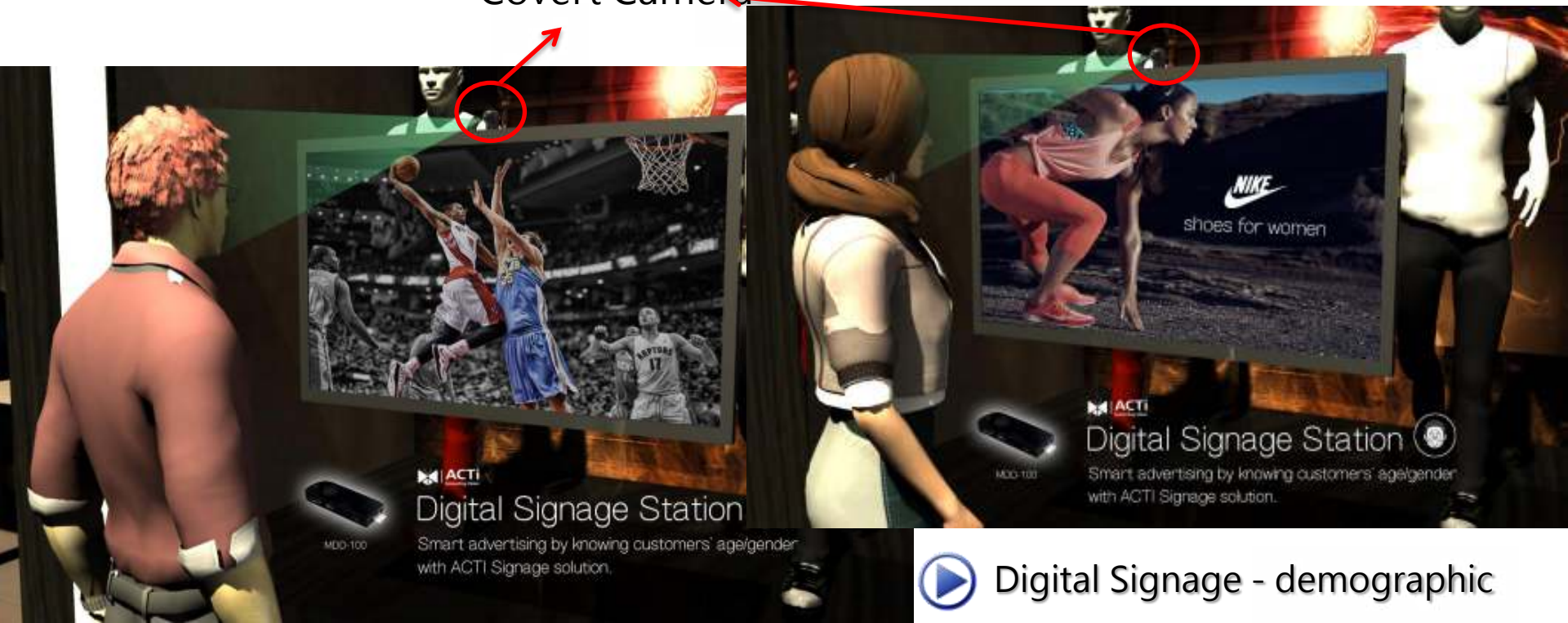> Application : Luxury industry, Banking, Hospitality ...VIP

Manage VIP data:

✓ Detect VIP upon entry.
✓ Attentive service.
✓ Increase customer
  service satisfaction.

Digital Signage Push

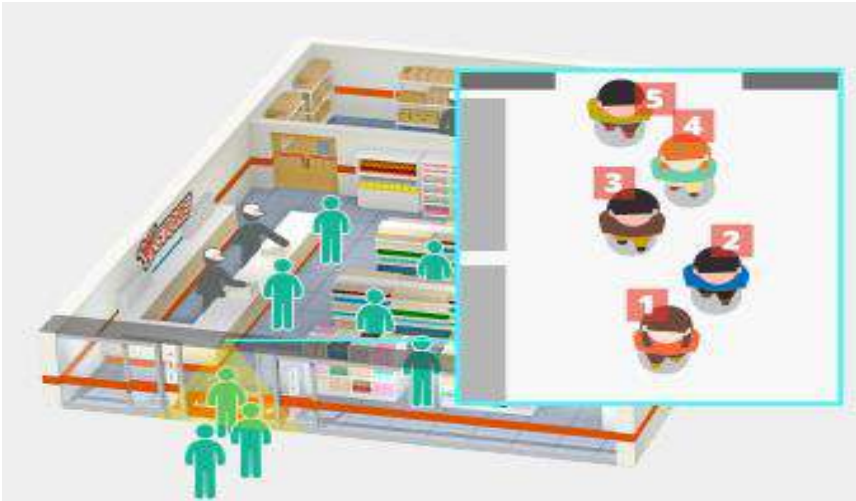> Sportswear store push advertisement based on gender of audiences.

Covert Camera

Digital Signage - demographic

Total Occupancy

➤ **Total Occupancy : people count application**

➤ Count by video. Avoid inaccuracy due to dust or high failure rate from traditional IR beamer.

Through people count you know..
1. Total occupancy – fire regulation
2. Flow in multiple stores & floors
3. Monthly comparison & long-term average analysis
4. KPI of marketing activities

Total Occupancy

Occupancy Signage

Current Time：2016/4/28 10:28
Location：ACTi 11F
Surface Area：25㎡
Maximum Capacity：100
Current Occupancy：89
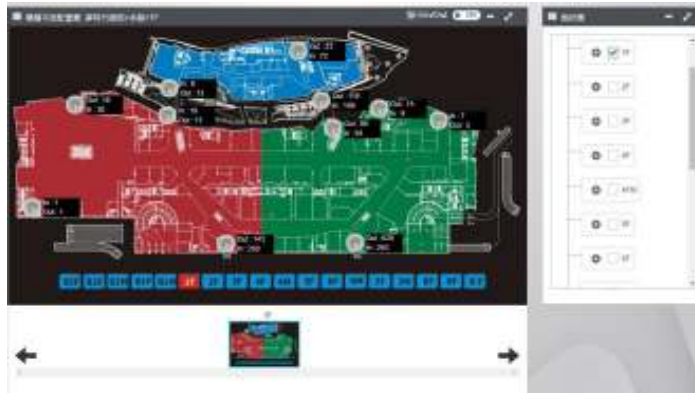Building ID：漢諾威大樓
CTi！

HOLD ON!
This floor has reached the max. occupancy, we thank you for your patience while waiting.

Max. occupancy : 161,506 people
Current occupancy : 161,285

Manage Interface

Report & people Count per area

Case Study

Taipei 101

Application：

People Count– Occupancy & traffic flow analysis

Scale：

43 entry/exits、escalators => 89 cameras

Max. flow/day：

30,000~40,000 visitors

Case Study

TW Kaohsiung - Dream Mall

Application : Total occupancy

Scale : 46 entry/exits => 64 cameras

Max. flow/day : 70,000~80,000 people

Case Study

New World Center – TW Neihu
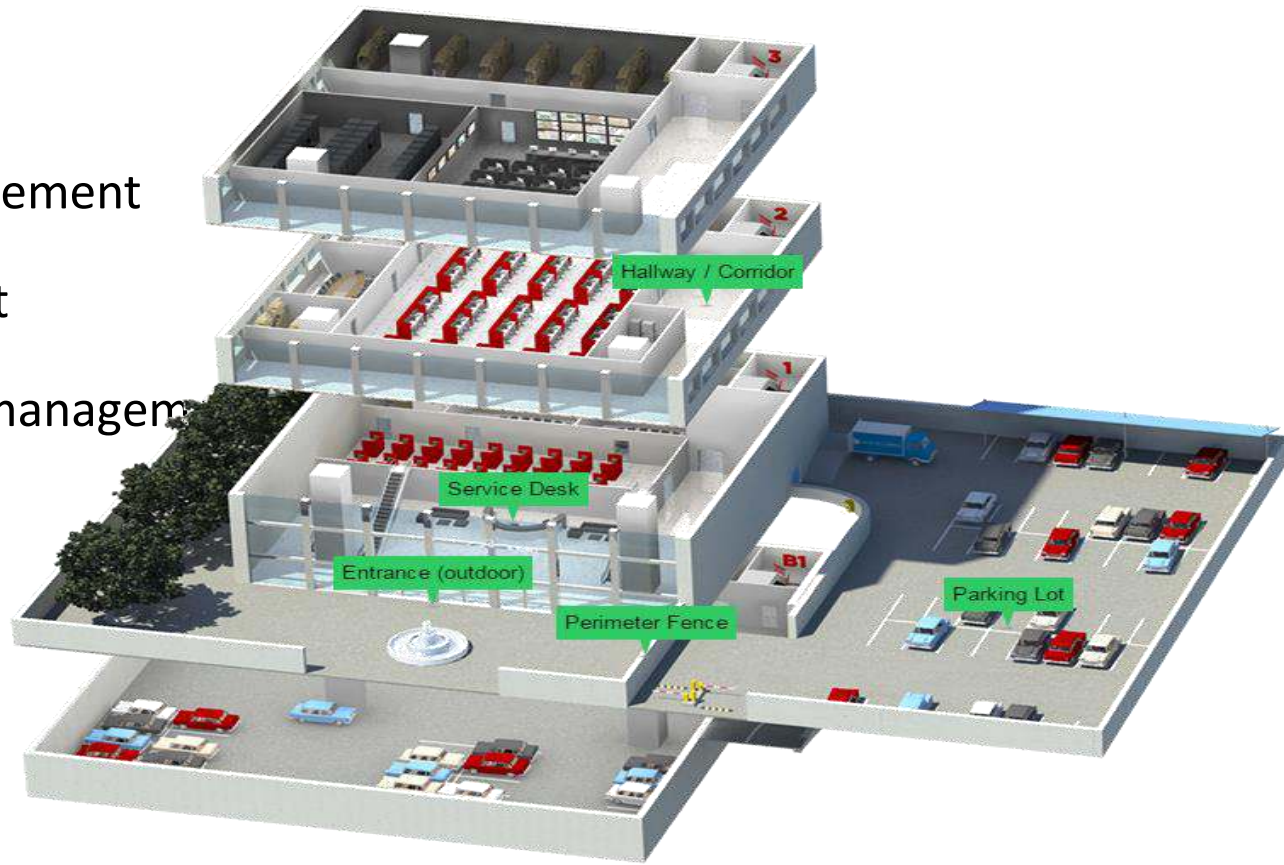
Application：People Count & POS

Scale：all stores

Purpose：Stores revenue in mall

Challenges?

1. Staff & vehicles management

2. Employee check-in/out

3. Visitors appointment managem

4. Visitors entry logs

Automatic License Plate Recognition (ALPR)
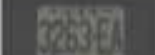
➢ **ALPR- efficiently manage carpark with black/white lists.**

(1) Integrate with access control

(2) Parking guidance

(3) Parking location record

ALPR

Smart access control

- Face recognition to access approval
- Alert upon entry of strangers
- Notice upon entry of registered visitors

Employee ID	A-1111
Name	Andy Lin
Chinese Name	林益丞
Email	Andy.Lin@acti.com
Extension	7085
Department	CI1103/MAS
Title	Senior Software Engineer
Check in time	2016.08.10 9:45:56 (Late to work)

LOG

Name		Time
Andy Lin	Entrance 1	2016.08.10 11:05:56
Kenny Sung	Entrance 2	2016.08.10 11:03:05
Kenny Sung	Entrance 5	2016.08.10 10: 06:05
Kenny Sung	Entrance 12	2016.08.10 09:03:50

Face recognition of employee

QR Code Backup

- Every employees gets one unique QR code.

- QR Code can be used for access approval.

- Take snapshots upon access via QR code, and push info to mobile devices of security guards.

- Easily issue temporary QR code to contractor or visitors.

- Future Application：QR Code to replace event sign-in

▶ QR Code backup

▶ Push notification upon visitors' entry

Meeting Resource Management System

- Personal & group attendance.
- Display of reservation & status of meeting room.
- Better attendance & meeting facility management.

	Color	
🟩	Internal meeting	
🟥	Interview	
🟦	Meeting with supplier or client	
⬜	Available	

Floor 樓層	7F	良好
Seat 座位數	12F	良好
Projector 投影機	Yes	良好
Whiteboard 白板	Yes	良好
Video Conference 視訊設備	Yes	保修中

Forbidden line & area

➢ **Use intelligent video analysis to define forbidden area**

(1) Avoid strangers intrusion.

(2) Protect lives & premises.

Top cosmetic brand – Taipei HQ

Application：Access control – face recognition、

Attendance Management (HR)、CRM

Challenges?
1. How to improve QC?
2. Improve stock management
3. Maximize load/offload efficiency
4. Facility maintenance

Factory QC

> **On assembly lines, create multiple stops, and attach with snapshots or real-time videos => Guarantee QC and efficiency of production.**

- Manage assembly line efficiency.

- Prioritize assembly order.

- Display camera view of critical area along with work guideline or safety instructions.

ECD-1000 + factory SOP

Monitor delivery

> **Locate vehicles on Google map, display it on dashboard with weather info. An alert will be triggered when it is abnormal.**

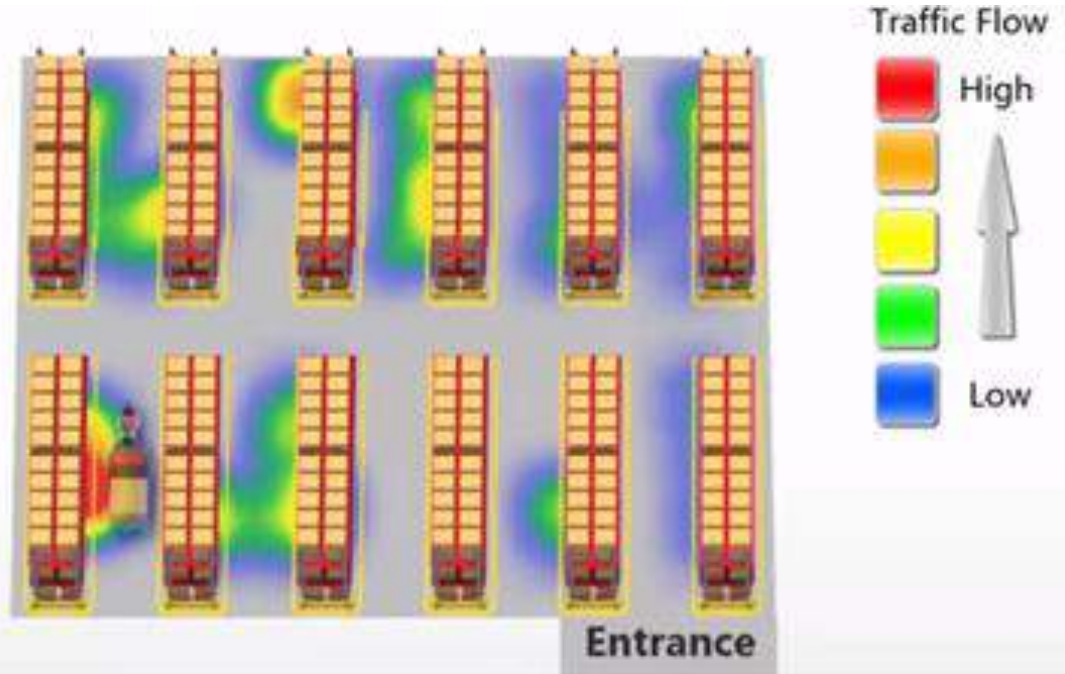- Track real-time delivery status
- Monitor the quality of delivery

➢ **Study heat map in warehouse to design efficient layout & route.**

- Adjust placement of goods to achieve the most efficient path.

- Improve employee working process.

Improve logistics efficiency

Maximize load/offload efficiency

> Create multiple stops in the procedure and attach with snapshots or real-time videos => Monitor cargos positions

- Monitor multiple warehous

- Track cargos.

- Increase load/offload efficiency, shorten waiting time.

Vehicles access control

> **Collect license plate number and build database with snapshots or real-time video for cross –matching, and record the entry/exit log.**

- Fleet management.
- Prevent entry of unknown vehicles.
- Track vehicles positions.
- Alert on overnight parking.

Automatic Car Plate Recognition

Factory Operation Management
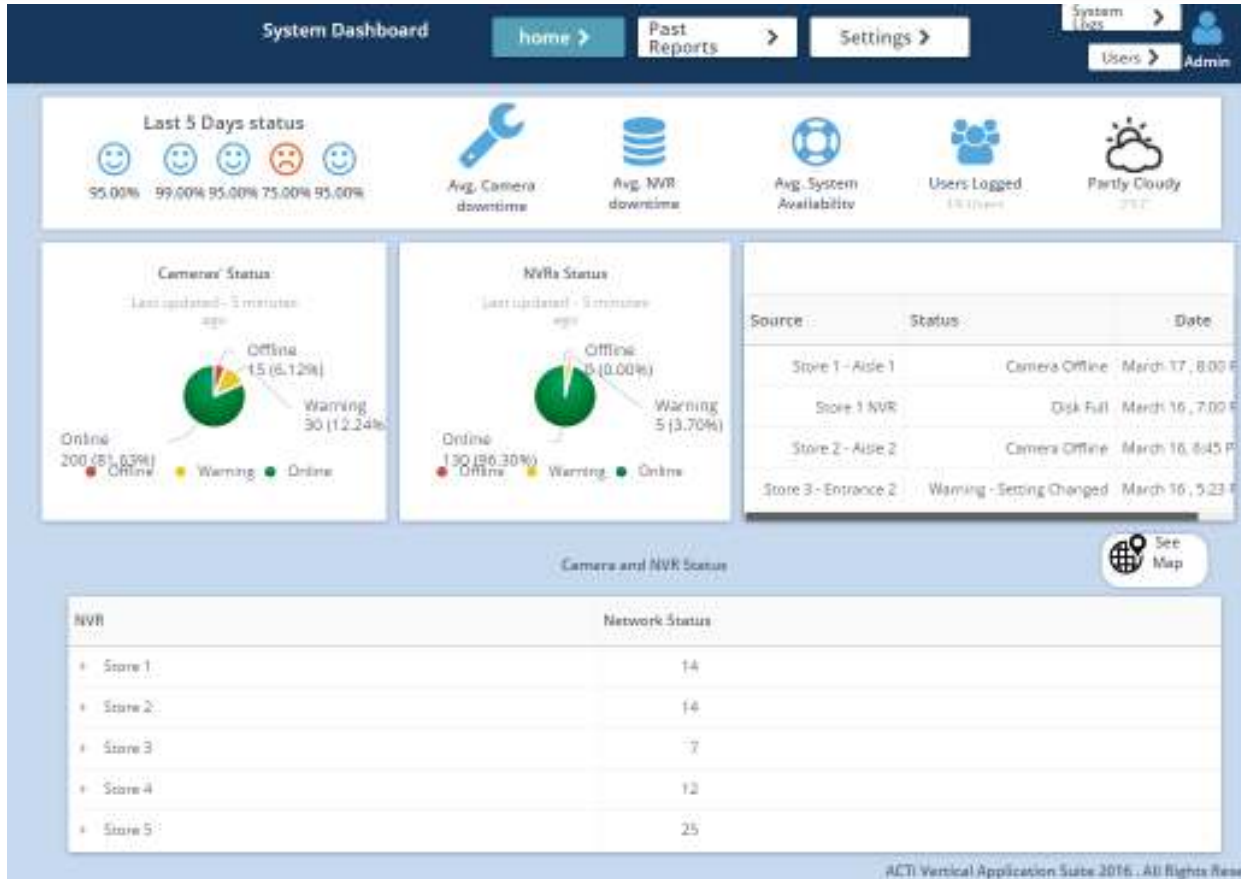
- ➢ **Customizable dashboard.**
- ➢ **Can do central management.**

- Monitor facility status with video live view.

- Analyze facility downtime frequency for maintenance cost evaluation.

International Alexander

Logistics company @Romania

Application :
  ALPR, White/Black list, Trucks working log

Purpose :
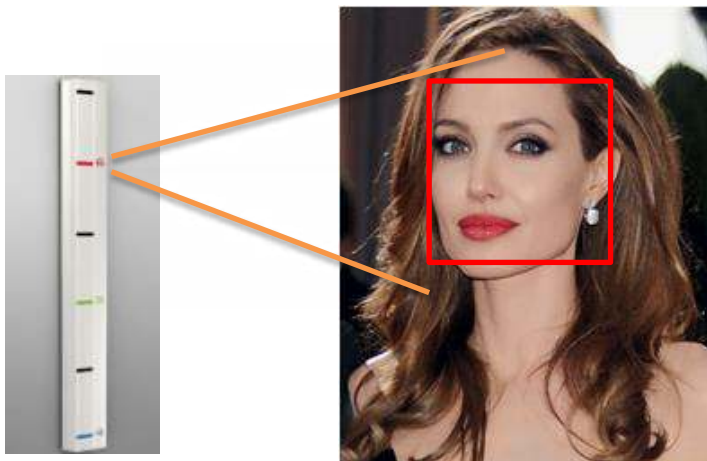 Monitor & track trucks, maximize logistics efficiency

Challenges?

1. How to enhance security?

2. How to differentiate customer service?

3. How to increase customer satisfaction?

4. How to handle customer complaint?

VIP recognition

Angelina Jolie
Age: 50
Investment: Stock Market (TW)
Consultant: Brad Pitt

- Alert upon VIP arrival.
- Reminder to offer customized advise to VIP.
- Increase customer satisfaction.

VIP recognition

Ensure Service Quality

- Video & audio surveillance at counters.
- Ensure service quality.
- Provide effective evidence for conflict.
- Audio detection for fight alert.

Audio detection

➢ **Use video analytics to enhance security.**

•Alert upon abnormal loitering.

•Record entry/exit in forbidden area.

Mega Bank – Taiwan
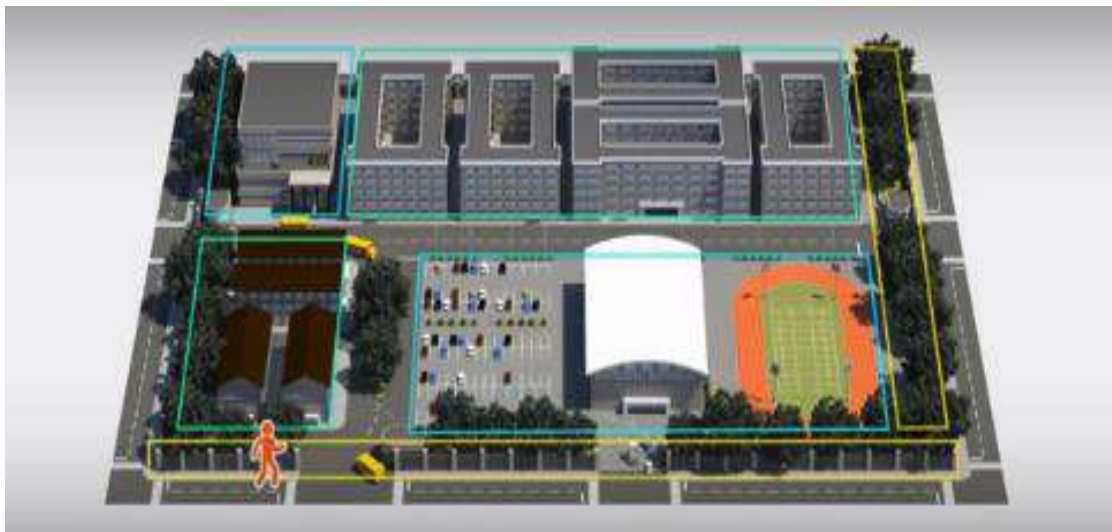
Application :
   Loitering detection

Location :
   ATM

Purpose :
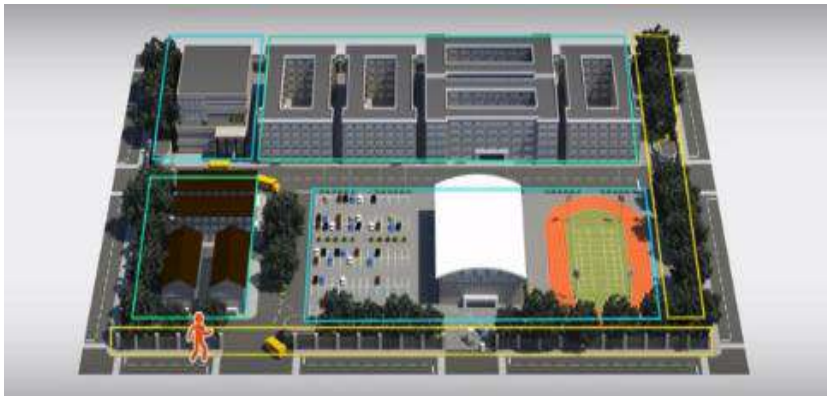   Detect abnormal loitering.

Challenges?
1. How to promote school events?
2. How to enhance campus security?
3. Improve reputation

Enhance Campus Security

> ➤ Enlarge surveillance area under limited human resources, enable proactive response to events.

- Set virtual fence and forbidden area to enhance security in critical areas.
- Video analytics – Line Crossing can reduce false alert.
- Security guards can receive real-time notification on mobile devices.
- Use mobile as surveillance camera to prevent blind corner.

Tainan Jian-Xing Junior High School

Application :
virtual fencing, push notification on mobile devices

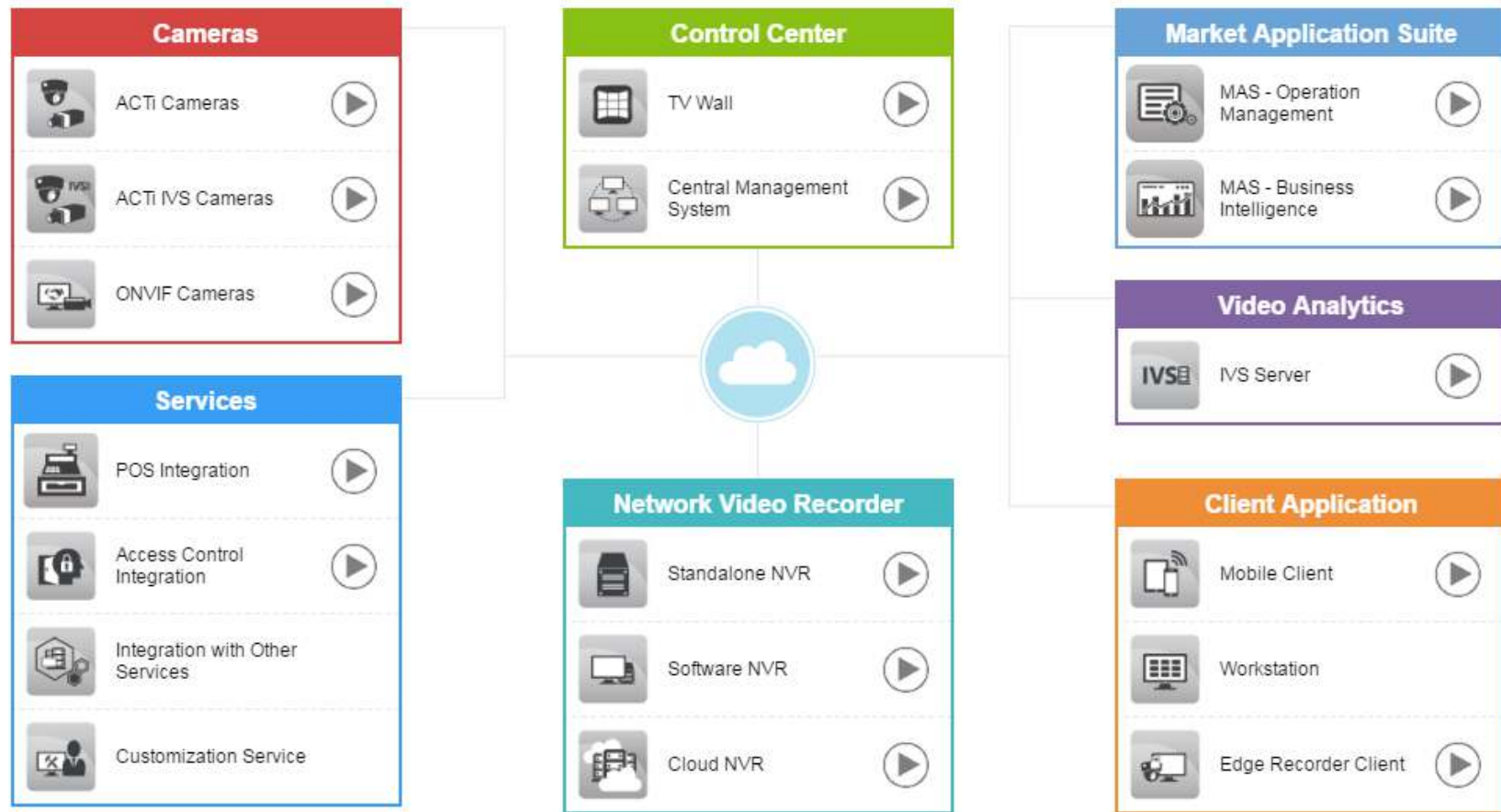Location :
Perimeter

Purpose :
Intelligent security & real-time notification

Solution Diagram

Global Reference

Visit ACTi

ACTi Corp.
www.acti.com

ACTi Data Commerce
www.datacommerce.com