

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.

I. Retail



Retailer Challenges



Challenge on operation?

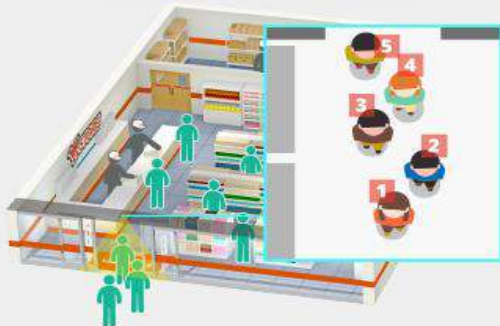
1. Streamline report in branches.
2. How to evaluate KPI from marketing activities?
3. Store layout –
product & brand locations
4. TA analysis
5. Visitor numbers & flows



Smart Retail



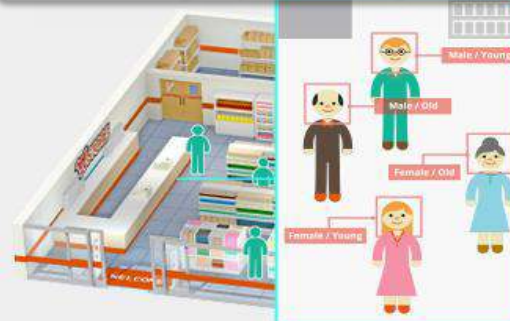
People count



Sales v.s. dummy data



Demographic analysis



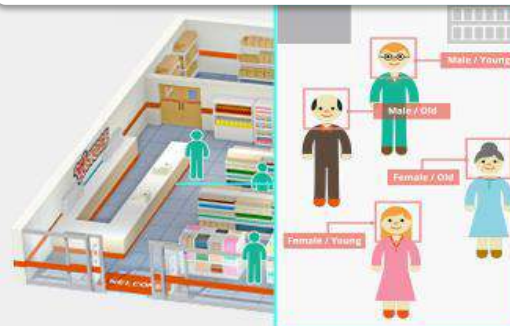
Layout efficiency



POS data analysis



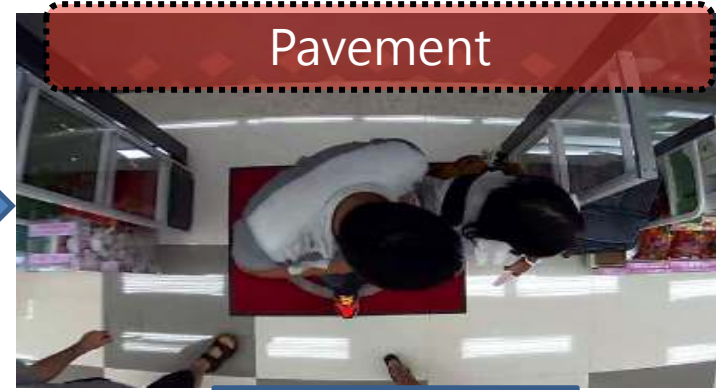
VIP recognition



Foot traffic – People Count



Pavement



Store Entrance

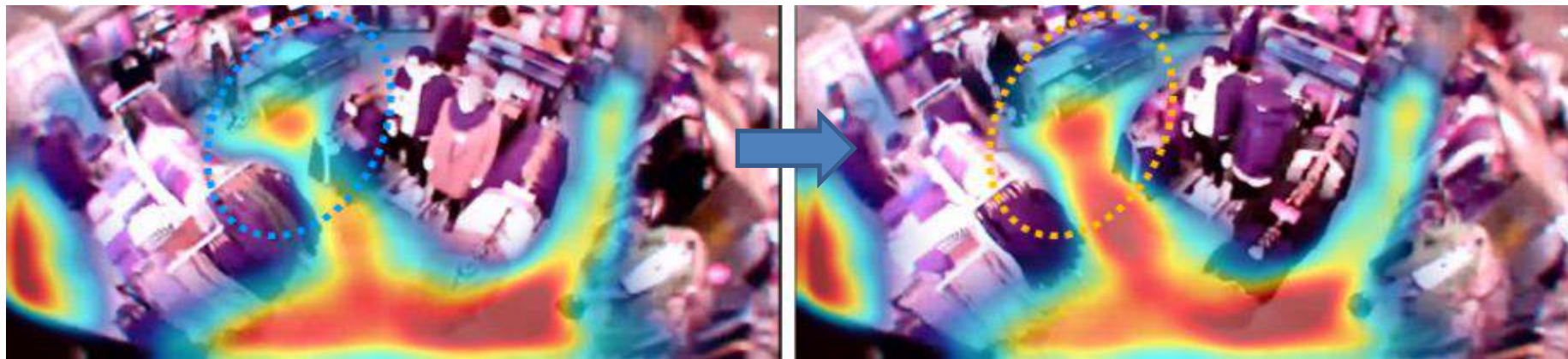


Store

- Target customer analysis before rollout.
- Understand target customers category in different time periods.



Heat Map & Dwell Time Analysis



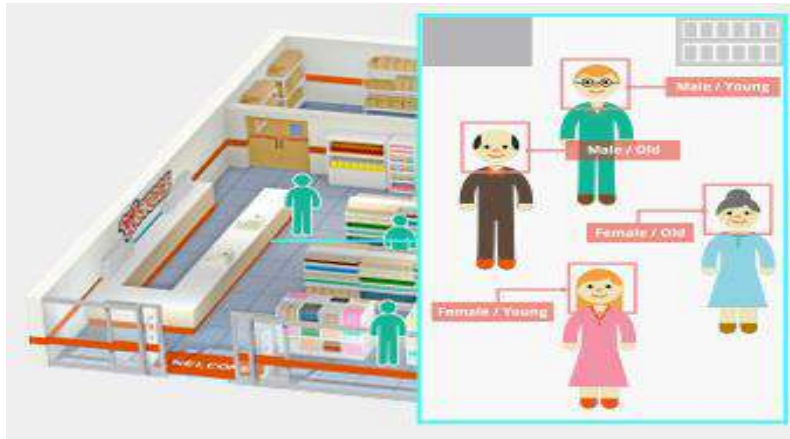
- Understand customers' preference & shopping route.
- Optimize layout efficiency.
- Effectively expose hot products & brands, revenue +50%

Visitor Demographic Analysis



➤ Gender & Age Detection

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



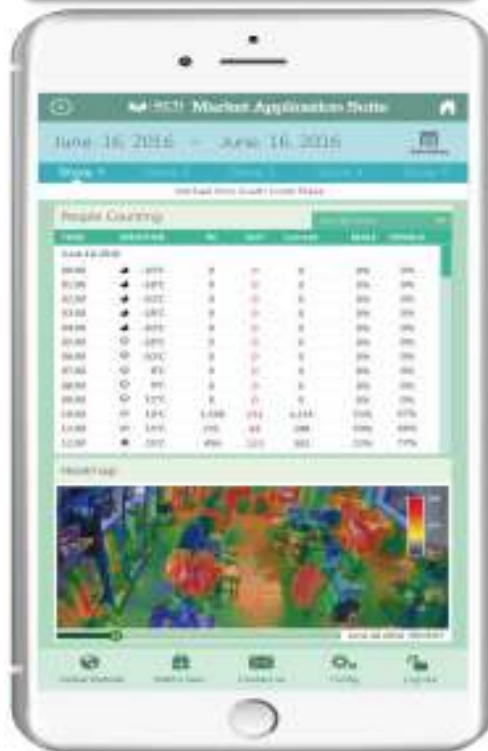
Smart Retail App



Gender Analysis



People Count



Heat Map



Smart Retail Application Suite





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



Manage VIP data:

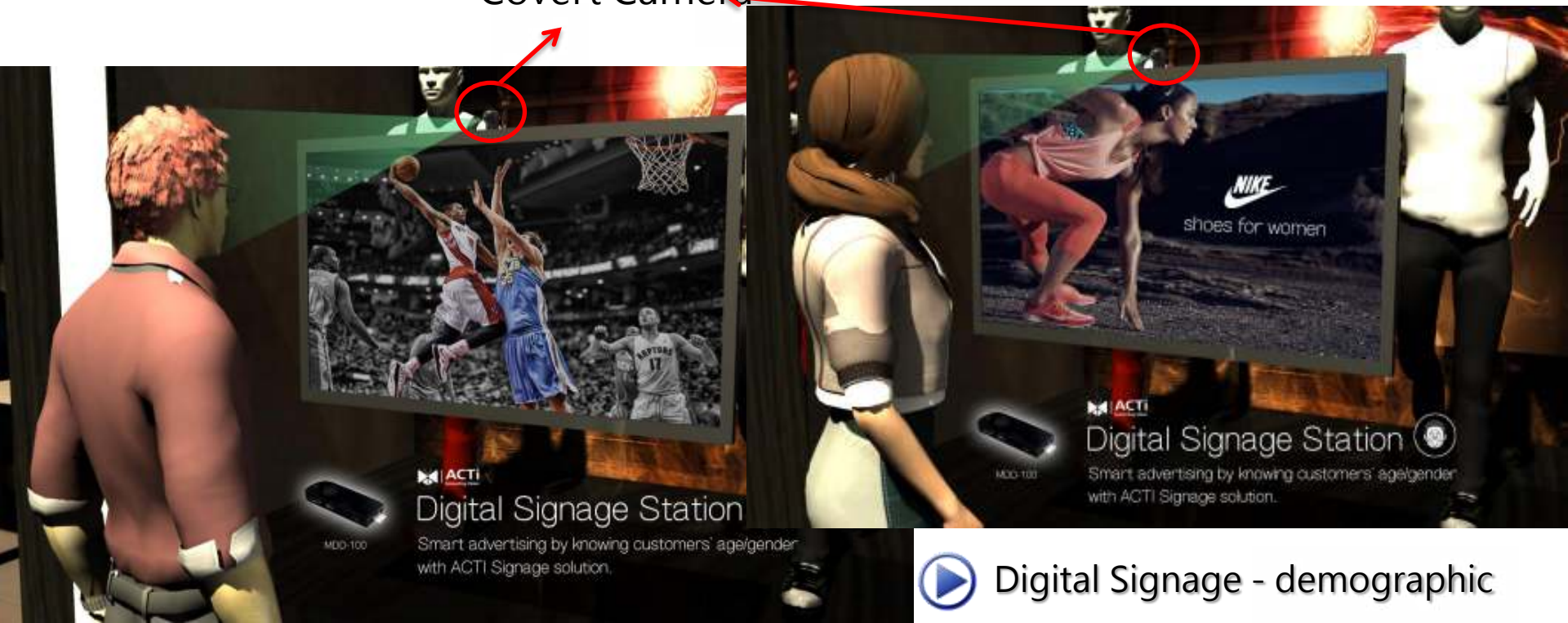
- ✓ Detect VIP upon entry.
- ✓ Attentive service.
- ✓ Increase customer service satisfaction.

Digital Signage Push



- Sportswear store push advertisement based on gender of audiences.

Covert Camera

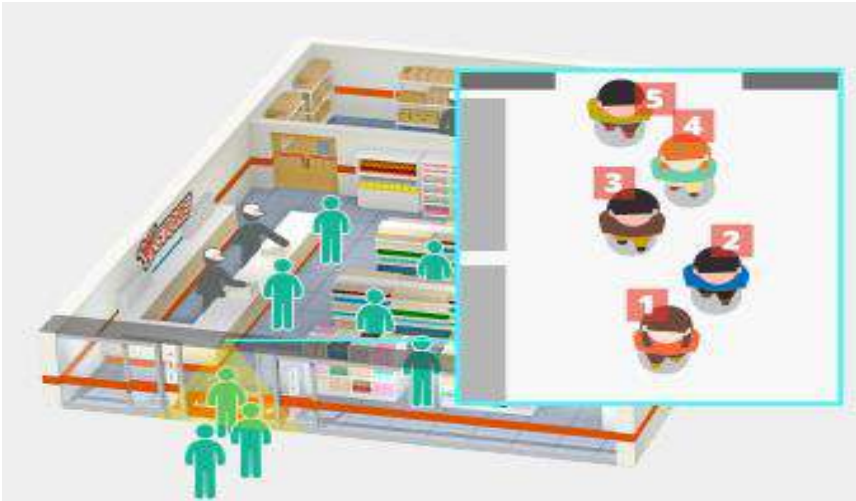


Digital Signage - demographic

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



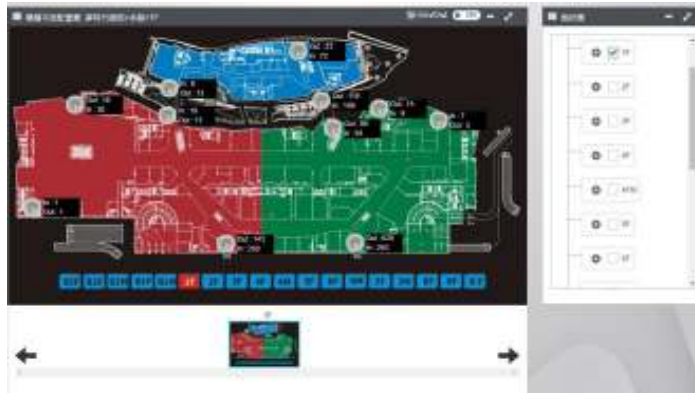
HOLD ON!

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

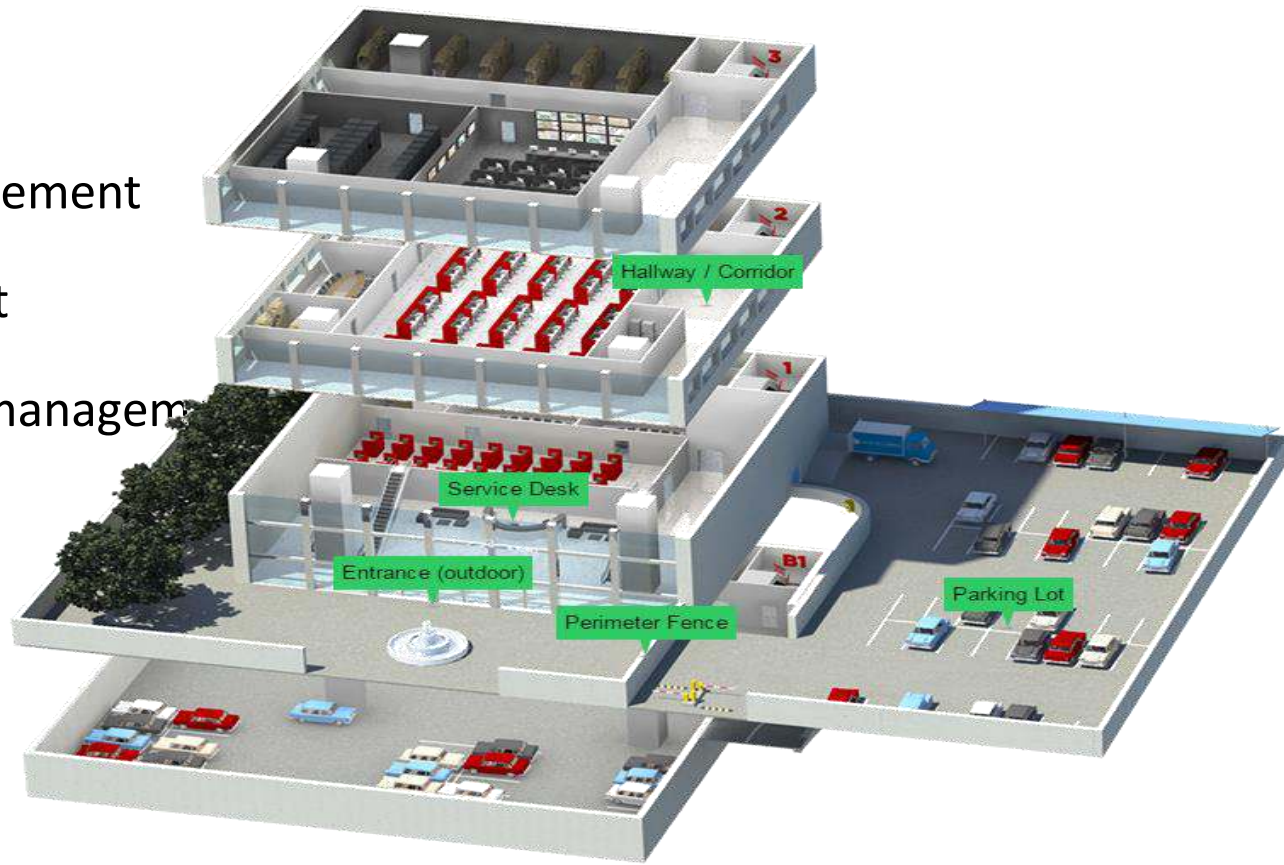
Purpose : Stores revenue in mall

II. Commercial Building



Challenges?

1. Staff & vehicles management
2. Employee check-in/out
3. Visitors appointment management
4. Visitors entry logs



Automatic License Plate Recognition (ALPR)








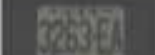
- **ALPR- efficiently manage carpark with black/white lists.**

Choose your Station

Refresh 5 sec. Refresh 10 sec. Live Time: 2016/10/23 16:5:21

Top 100 Top 50 Top 30

Black List Notice ! 3D8757
 Time : 2016/10/23 04:02:12 PM
 Local Time : 2016/10/23 08:02:12 AM

License Plate	Image	Black List	Action
3D8757		3D8757	Add to White list
2611J2		2611J2	Add to White list
967PG		Not	Add to Black list Add to White list
3720PB		Not	Add to Black list Add to White list
4KY9B15		Not	Add to Black list Add to White list
3263EA		Not	Add to Black list Add to White list

Black List Notice ! 2611J2
 Time : 2016/10/23 04:05:05 PM
 Local Time : 2016/10/23 08:05:05 AM



- (1) Integrate with access control
- (2) Parking guidance
- (3) Parking location record

Face Recognition – Access Control



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



[illegible]

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

	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.



Case Study



Top cosmetic brand – Taipei HQ

Application : Access control – face recognition 、
Attendance Management (HR) 、 CRM



III. Factory/ Logistics



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.

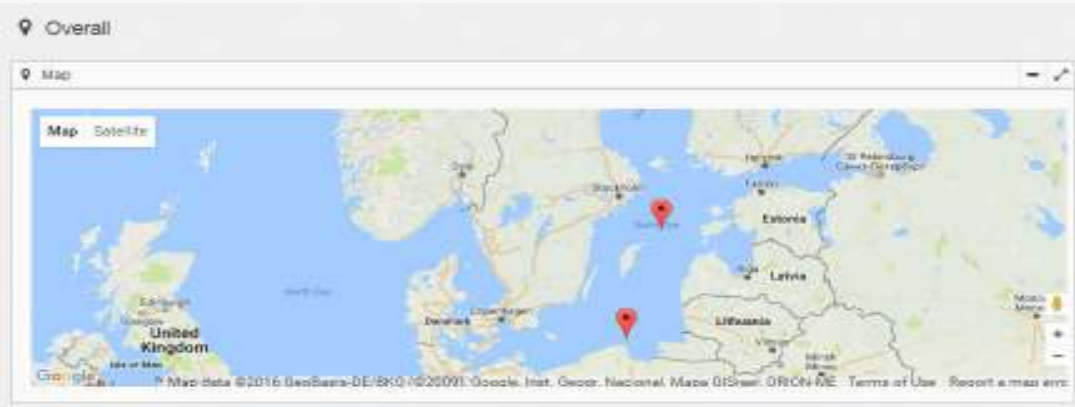
- Manage assembly line efficiency.
- Prioritize assembly order.
- Display camera view of critical area along with work guideline or safety instructions.

The screenshot displays the 'Market Application Suite' interface. It features a 'Camera List & Filter' panel with checkboxes for 'Line Crossing - DEAD', 'Enter Area - DEAD', and 'Line Crossing - Art'. Below these are input fields for 'Start Date & Time' (2016/10/17 00:00) and 'End Date & Time' (2016/10/18 00:00). An 'Action' panel on the right includes buttons for 'Auto status', 'Refresh 5 sec', 'Refresh 10 sec', 'Refresh 30 sec', and 'Refresh 60 sec', along with a 'Stop Refresh' button and a 'Query Time' display (2016/10/17 10:33:11). Below these panels is a 'Data List' table with columns for No., Camera, Event Time, Display, Snapshot, and Action.

No.	Camera	Event Time	Display	Snapshot	Action
1	Enter Area - DEAD	2016/10/17 10:28:26.863 AM			Live Play Back
2	Enter Area - DEAD	2016/10/17 10:27:30.343 AM			Live Play Back
3	Enter Area - DEAD	2016/10/17 10:26:16.173 AM			Live Play Back



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

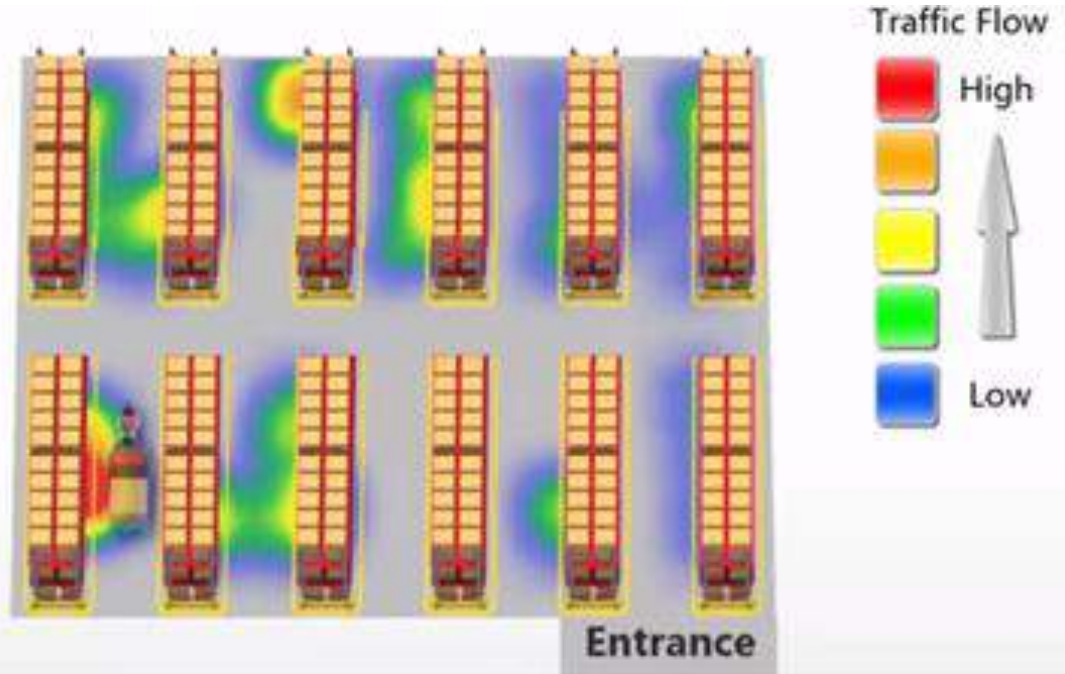
Table			
Ship No.	GPS Location	Weather	Temperature Monitor
 Ship1	58.359658,20.027809 Edit	 8 °C / 46 °F	
 Ship2	55.030813,-18.409189 Edit	 3 °C / 45 °F	
 Ship3	39.979395,2.462184 Edit	 14 °C / 57 °F	
 Ship4	20.212357,-91.738318 Edit	 23 °C / 73 °F	

Warehouse – Heat map analysis



➤ 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 warehouses
- Track cargos.
- Increase load/offload efficiency, shorten waiting time.


Logistics Application Suite ACTi Market Application Suite

Live > Reports > Goods Assurance > Warehouse Optimization > Incidents > Fleet Management >


Time	Location	Event Type	Current Stat...	Act...
03/16/2016 16:49	New York - 1F	Loitering Alarm	Active	↑ ↓
03/16/2016 17:45	New York - 2F	Missing Object Alarm	Active	↑ ↓
03/16/2016 17:00	Seattle	Loitering Alarm	Acknowledged	Edit
03/16/2016 16:57	D.C. - Cargo	Forbidden Area Alarm	Acknowledged	Edit
03/16/2016 16:47	L.A. - Main Building	Loitering Alarm	Acknowledged	Edit
03/16/2016 16:44	Texas	Forbidden Area Alarm	Acknowledged	Edit




Full Screen >



Full Screen >



Full Screen >



Full Screen >

Event Information

Time: 03/16/2016 16:49
 Location: New York - 1F
 Event Type: Loitering Alarm
 Current Status: Active

[See Live View >](#)
[Re-Play >](#)
[Leave a Comment >](#)

↑
↑

ACTi Market Application Suite © 2016 All Right Reserved.

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.

MAXPRO

Choose your Station: Station Size

Set up the Local date: 2015-11-24

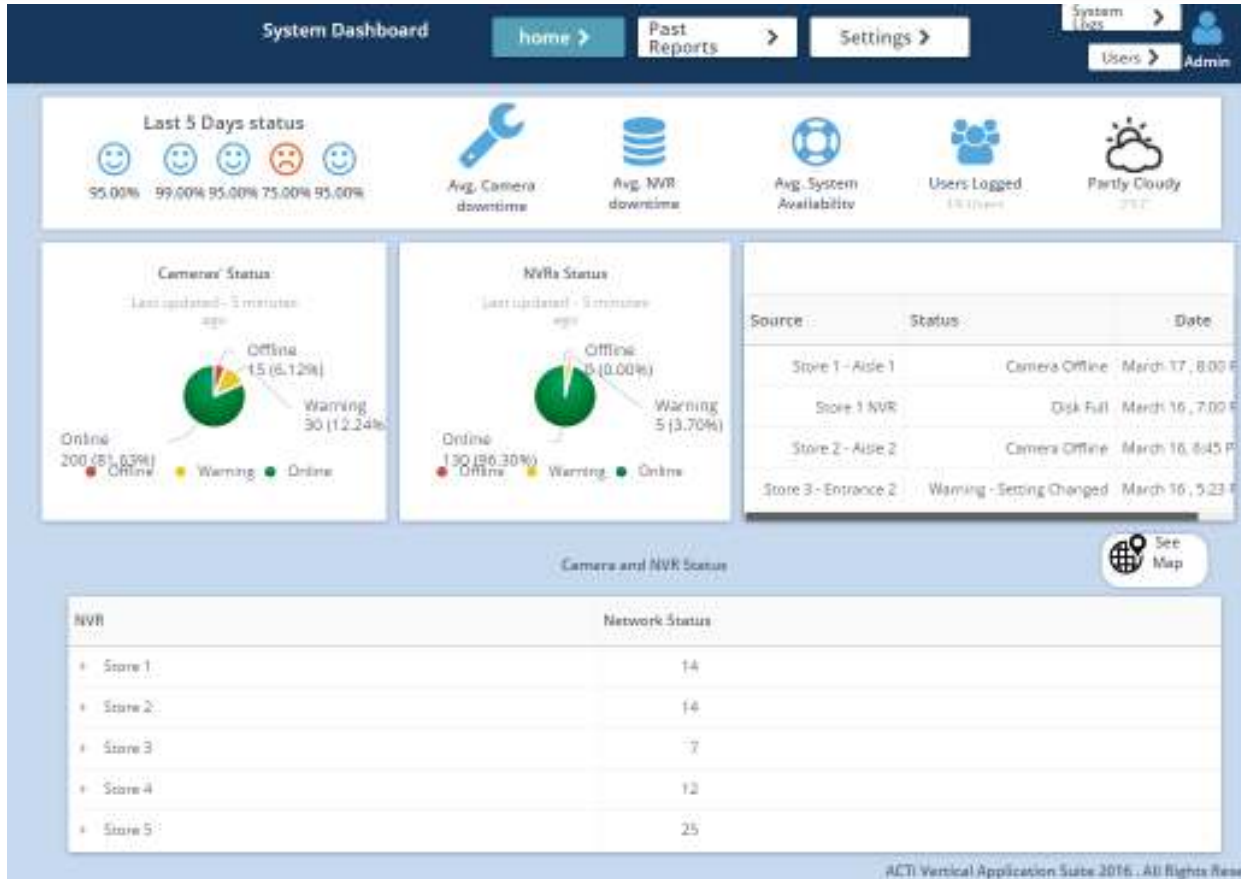
Service Efficiency

Station	License Plate	Image	Block list	Action		
2015/11/24 12:02:43 PM	VED11A	Eden Site	SP56ZRG	SP56ZRG	Not	Add to Black list Add to White list
2015/11/24 12:00:03 PM	VED11A	Eden Site	FA15RYM	FA15RYM	Not	Add to Black list Add to White list
2015/11/24 11:59:59 AM	VED11A	Eden Site	SE53DXV	SE53DXV	Not	Add to Black list Add to White list
2015/11/24 11:59:59 AM	VED11A	Eden Site	DG63ONJ	DG63ONJ	Not	Add to Black list Add to White list



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.

Case Study



International Alexander 
24 h automotive



International Alexander
Logistics company @Romania

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

Purpose :
Monitor & track trucks,
maximize logistics efficiency

IV. Banking

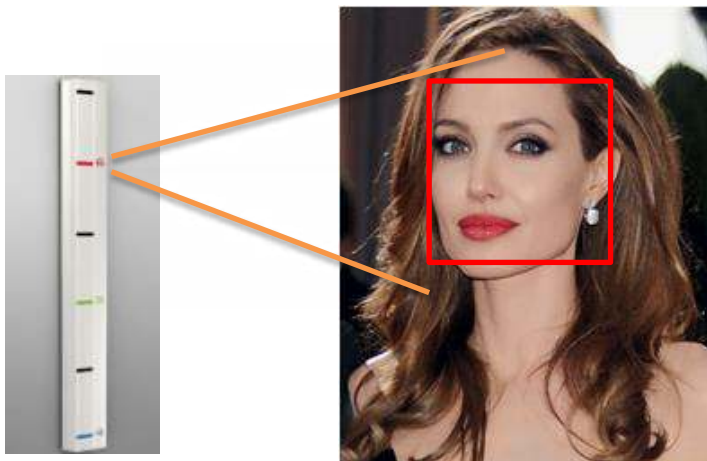


Challenges?

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.



Ensure Service Quality



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



Audio detection



Enhance Security



➤ Use video analytics to enhance security.

- Alert upon abnormal loitering.
- Record entry/exit in forbidden area.





兆豐國際商業銀行

Mega International Commercial Bank

Mega Bank – Taiwan

Application :

Loitering detection

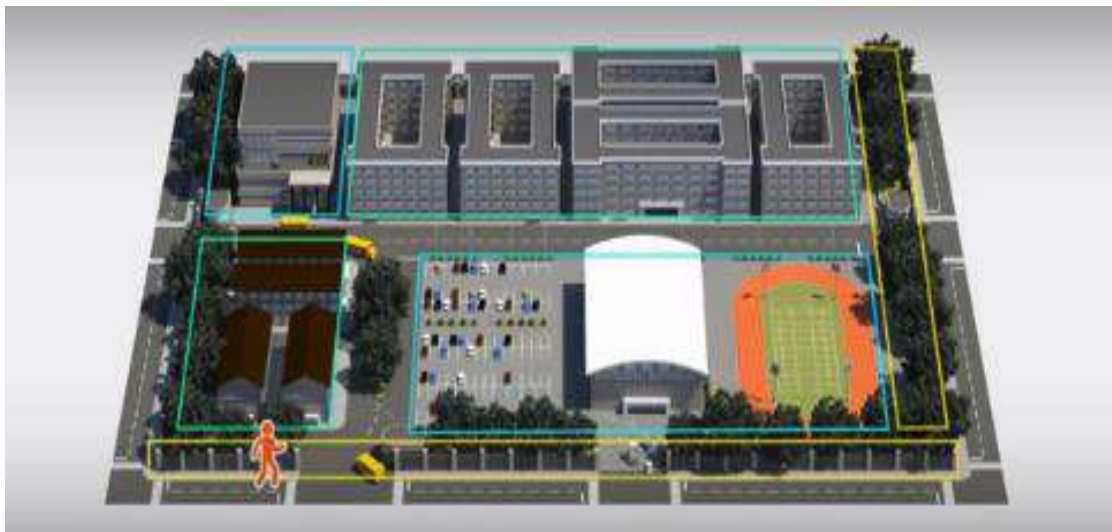
Location :

ATM

Purpose :

Detect abnormal loitering.

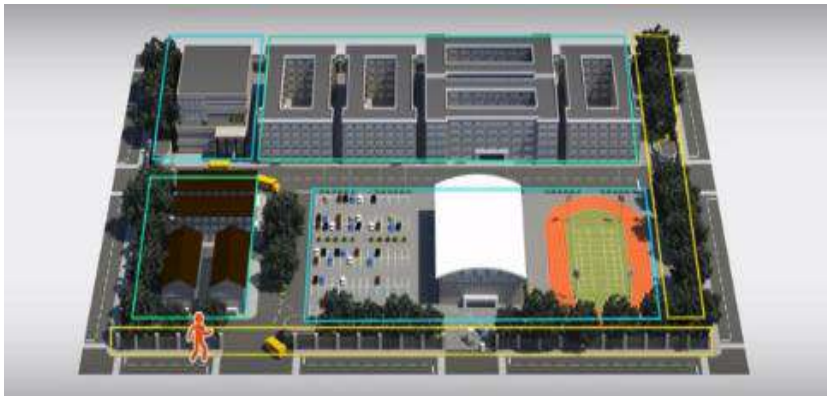




Challenges?

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.

Case Study



Tainan Jian-Xing Junior High School

Application :

virtual fencing, push notification on mobile devices

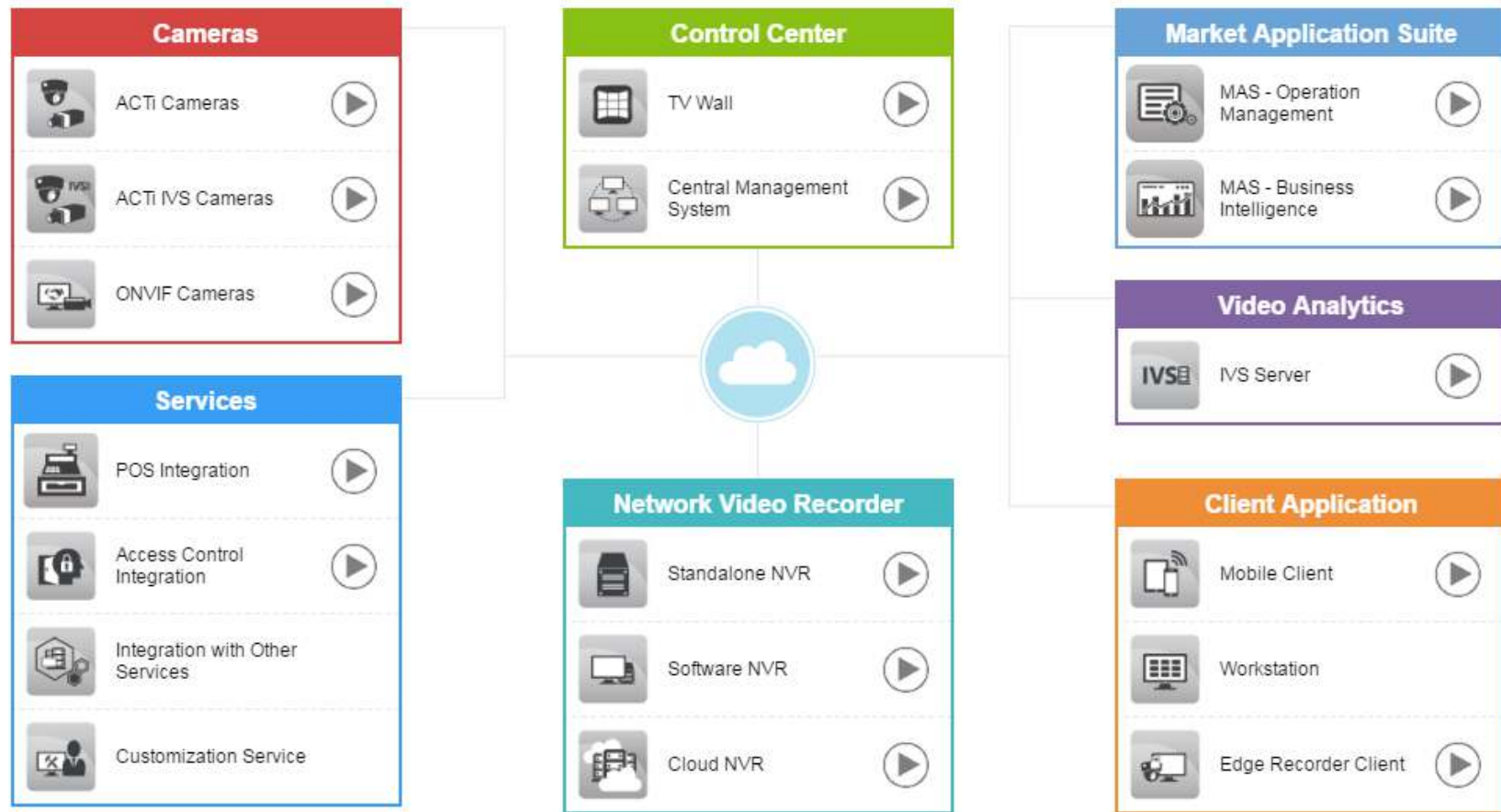
Location :

Perimeter

Purpose :

Intelligent security & real-time notification

Solution Diagram



Global Reference



Reference

Discover ACTi solutions that successfully fulfill different requirements in various markets with world famous brand.



[View all ACTi Successful Project Reference](#)



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ACTi Data Commerce

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