



Innovation, Technology, Space

Eco-Smart City,

Proposal for Smart City Business Cooperation

—
2019 | Created by yapcompany

CONTENTS.

Intro to YAP

YAP Technology
Business Areas

Smart City Business

Use of Big Data
Smart City Business Areas
Service by Sector
Data Provision

APPENDIX

Beacon Devices
Applied Service Cases

Introducing YAP

YAP Technology
Business Areas

YAP Technology

YAP owns an exclusive technology commercialized for various service areas through modularization of in- and out-door location determination technology (Converged Location Detection Tech). Also, targeted marketing messages for customers on omni-channel are available through over 40,000 beacon infrastructure nationwide, with customer data collected and analyzed thoroughly

Converged Location Tech

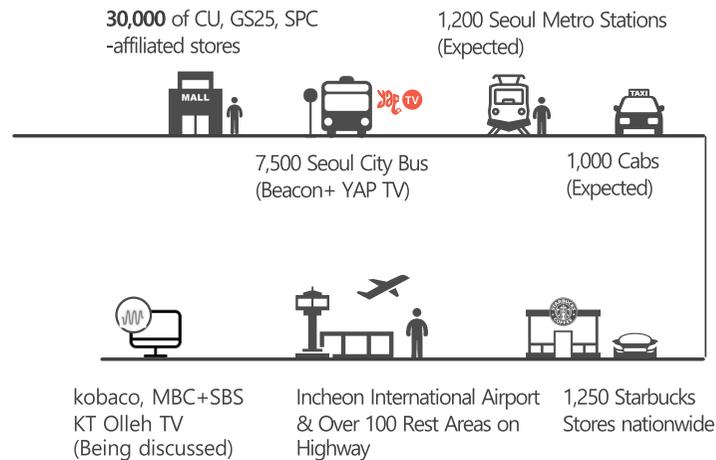


Modular Development

Modularization of in/outdoor determination tech
A converged location detection technology optimized for maximum conditions



Beacon Infra (Over 40,000 in Korea)



Off-line & Media
Customer Data
collections

Target Marketing

Omni-channel Marketing Platform



Business Areas of YAP

YAP is expanding its service to various areas, mainly focusing on major franchisers in Korea in diverse industries including F&B, retails, construction, manufacturing, electronics, and more. As for the public sector, YAP is discussing with Seoul City Bus, Seoul Transportation Department, and other public entities to build social safety net service

YAP 8 CORE SERVICES



ORDER Chatbot Order Service

Combination of chatbot and hybrid Beacon technology on a messenger enables a service that detects the arrival of a customer to a store so that a fresh cup of coffee may be prepared



WORK Clocking Service

Mobile employee management service
Customized for specific work environment



DOCENT Exhibition Guide

Customized contents for each zone delivered to visitors through precise indoor positioning technology



SAFETY Service

Safety service for preventing public transit accidents and safe return-home for kids



AI CHATBOT AI Bus Guide

Synched with bus beacon infra, active AI chatbot gives guidance on public transit use and location based contents



SHOP MKTG Shop Marketing

Optimized target contents provided through the exclusive technology that distinguishes target customers(in-store, stay, exit)



AD SOLUTION Media Mobile Ads

Ad model built with inaudible soundwaves embedded in TV commercials and programs to send out customized contents to mobile



AIRPORT Arrival/Departure Service

Customized contents for airport users during their route within the airport

Partners



Smart City Business

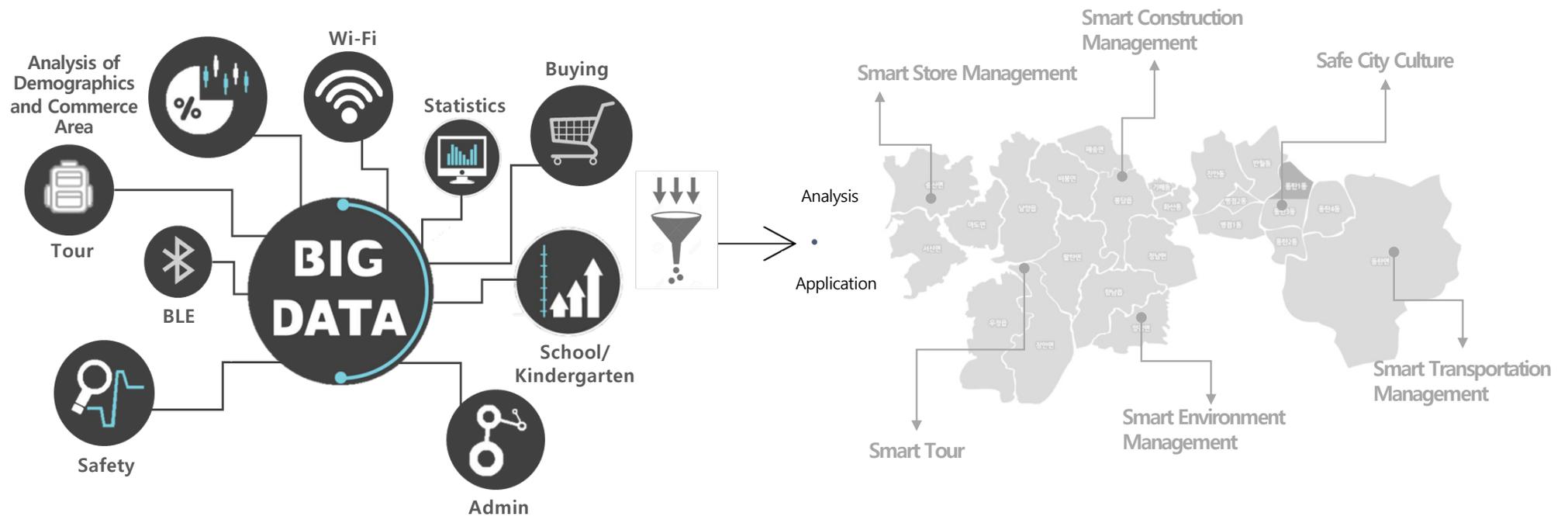
Big Data Use
Smart City
Business by Sectors

Smart City | Big Data Use

Smart City operation and data use

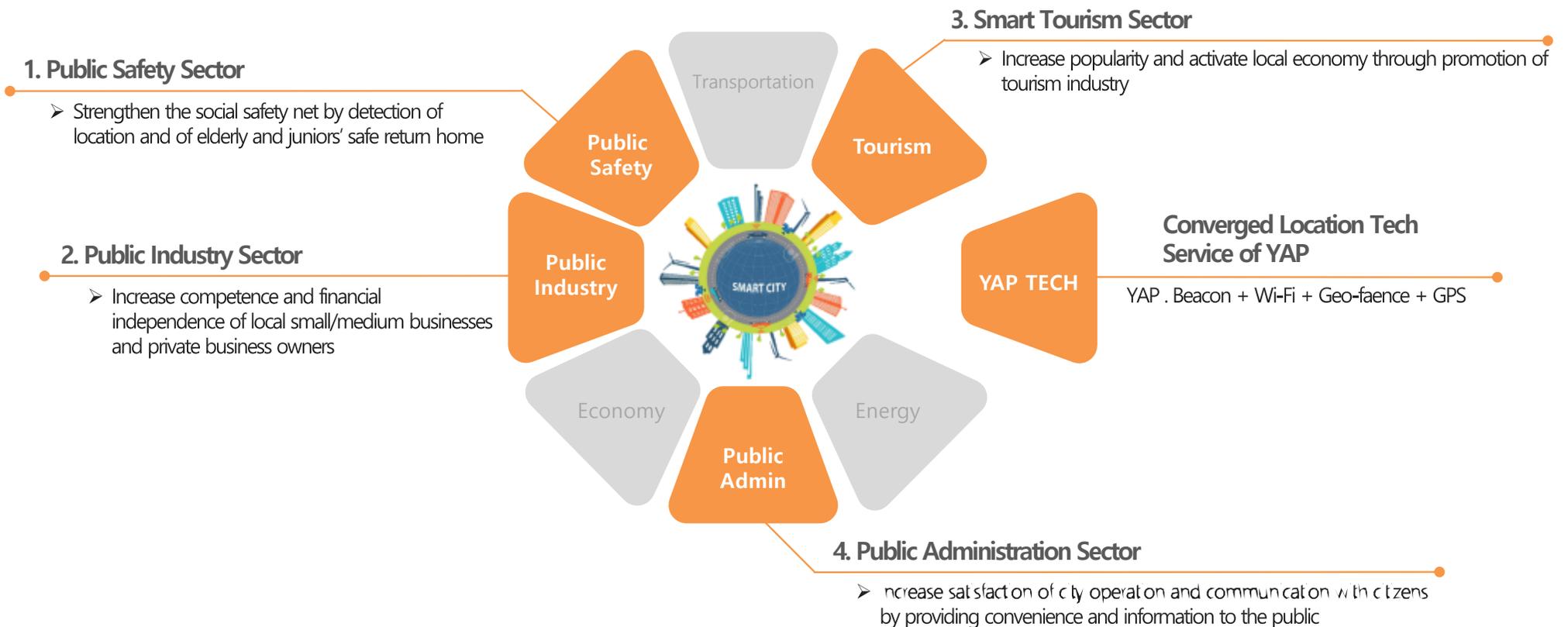
Preparing the foundation for execution of city planning by using **big data** from **smart city forming** and **service data analysis** services

Establishing 'DATA' foundation through **big data** base and use



Smart City | Business Areas

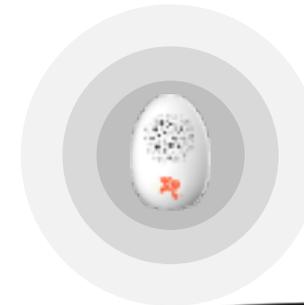
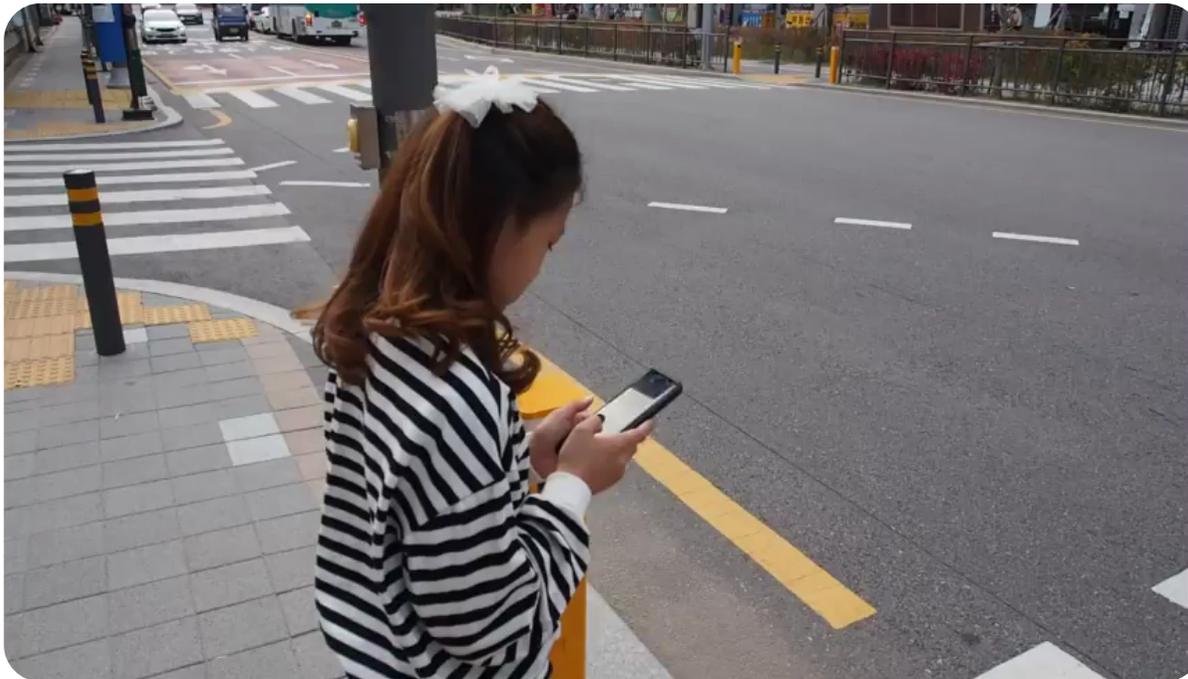
Preparing the foundation for **customizable smart administration** through setting up a system of **information analysis platform, 'BIG DATA'**, that scientifically **collects, manages, analyzes, and visualizes** big data from major city sectors including administration, industry, safety, and tourism



Public Safety Case – Smombie Prevention Service

Service for preventing accidents for pedestrians crossing the street

Safety service that recognizes pedestrians crossing the street by soft beacon and ultrasound to stop them from using smartphone



Phone Block



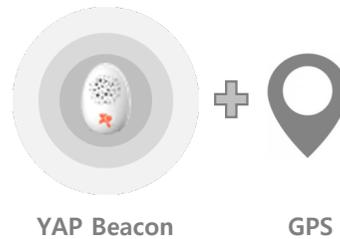
Emergency Calls

* SMOMBIE is the acronym for smartphone+zombie and describes people who are reckless to their environment because of smartphone use

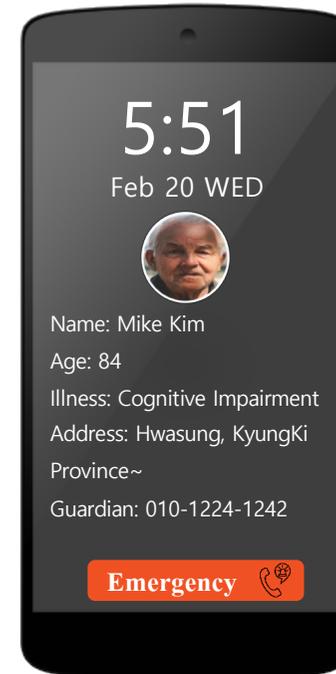
Public Safety Case – Safety Service for Children & Elderly

Real-time connected service for prevention of getting lost

Safety service to prevent danger in advance by real-time update on locations of children or elderly—notification is sent when leaving the selected range



Lock Screen



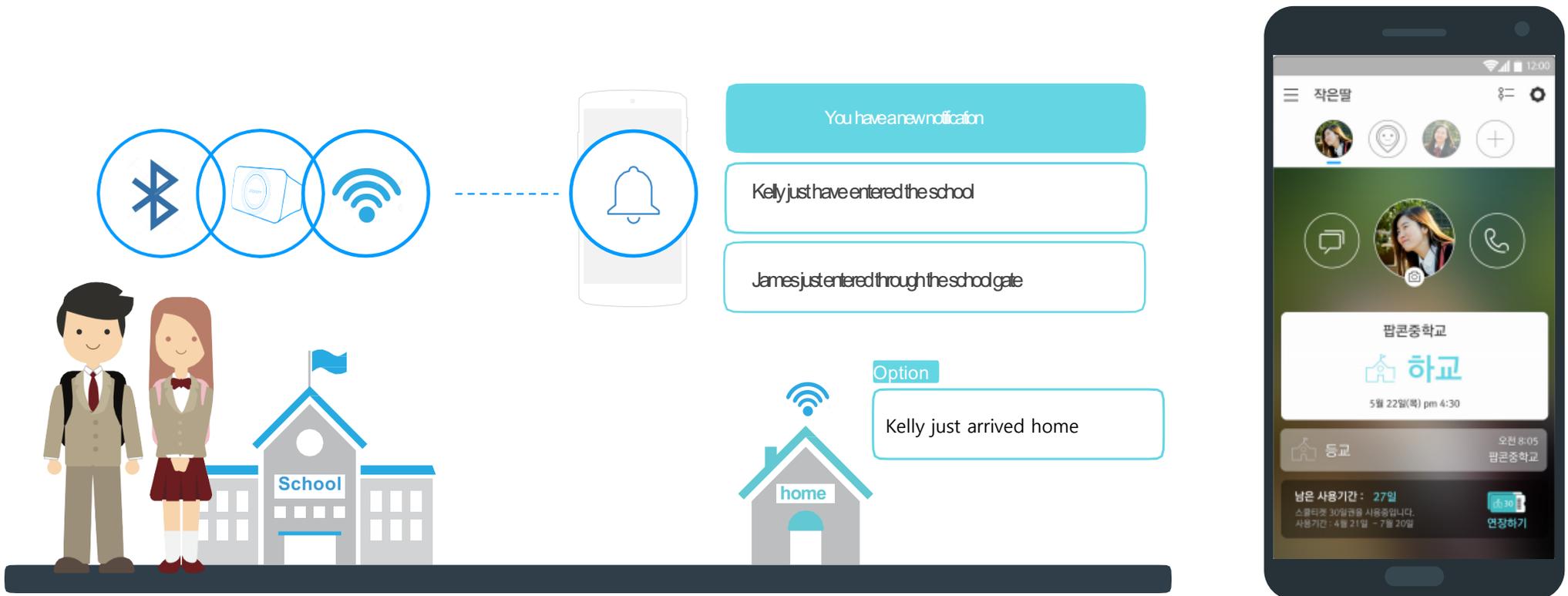
Notifications



Public Safety Case – Safe Return-Home Service for Kids

Smart service to ensure children's safe return-home

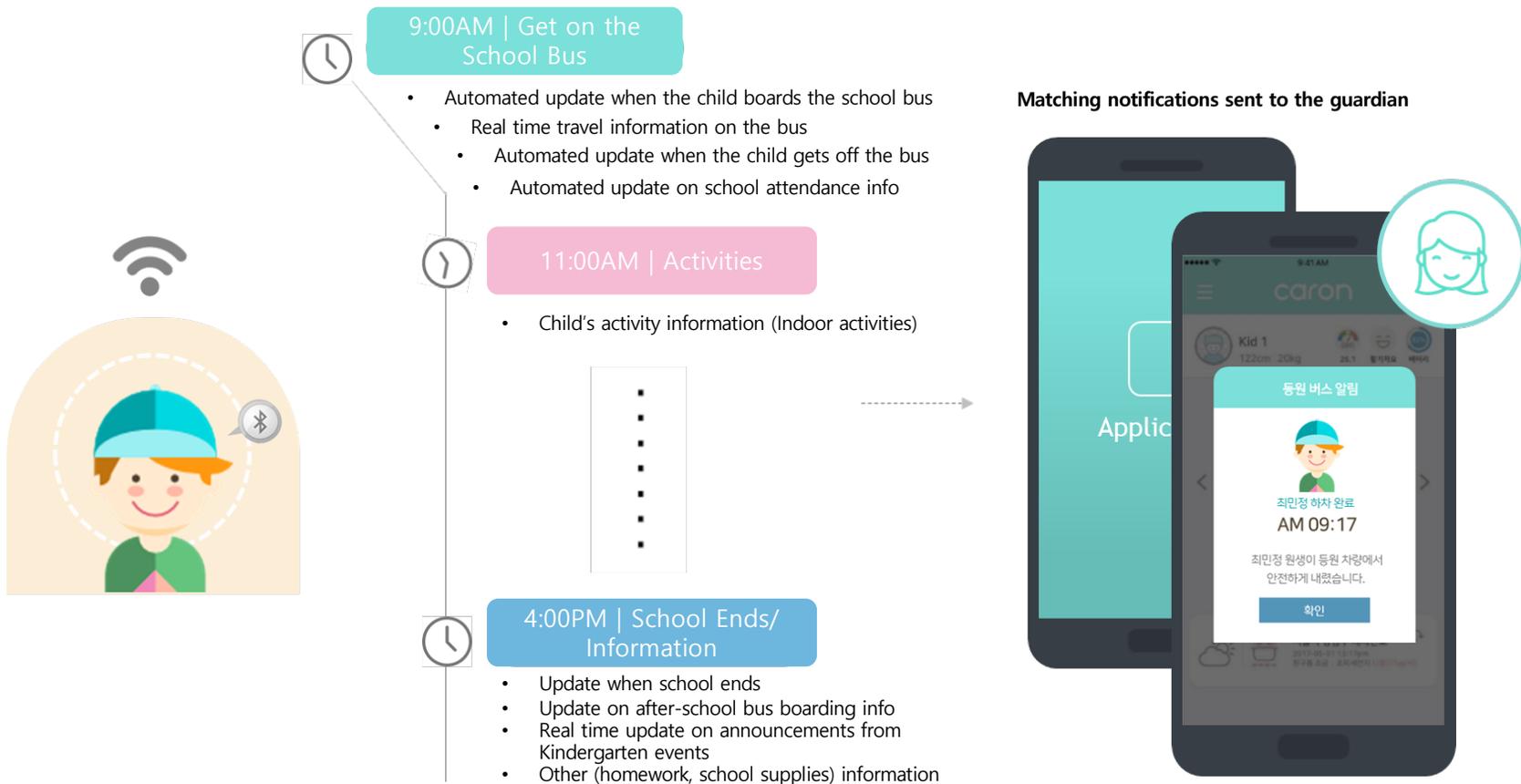
Real-time information service for parents to look over children via Yap beacons and Safe Return Home APP installed on children's' smart phone



Public Safety Case – Safe Return Home Service for Kindergarteners

Smart safe return-home service for children

Basic service for recently rising issue of "safety" and other "value added services" are also available for activities for kindergarteners



Public Industry Case – YAP Order Service

YAP Chatbot Order Service

Mobile order service made with high convenience and efficiency to recognize entering customers to a store with hybrid beacons and chatbot

YAP Order to Vitalize Small Businesses



01 Order



02 Product Selection



03 Payment



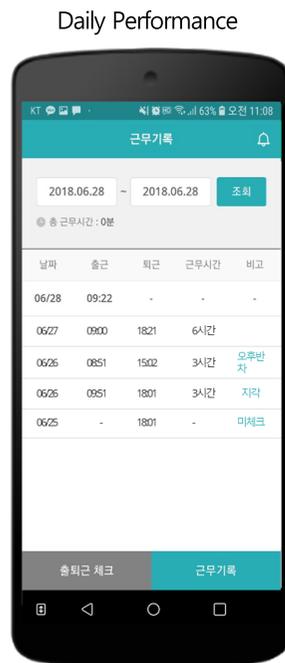
04 Product Pick-up



Public Service Case – YAP Work Service

Clock in/out performance management service

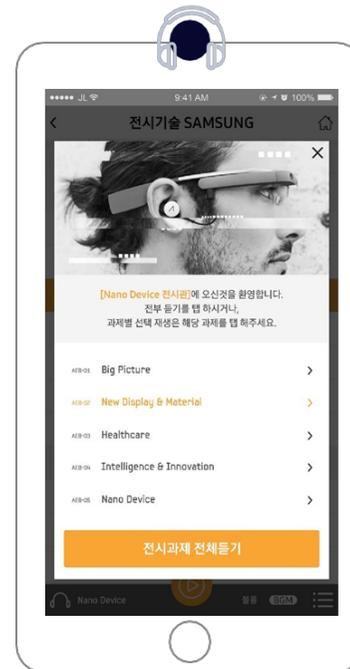
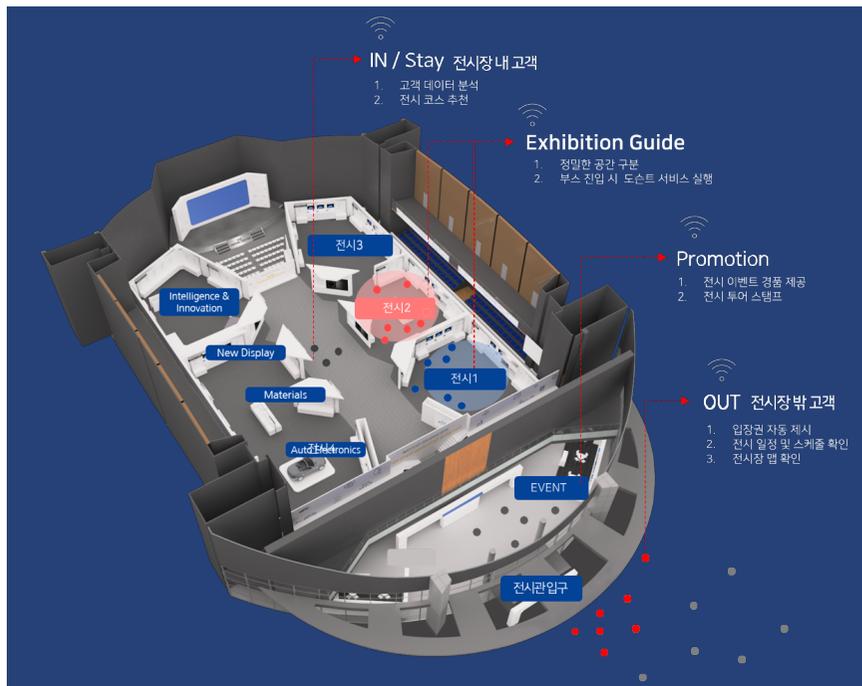
Smart employee management tool for local small and medium businesses and organizations to aid for accelerated SMB commerce



Smart Tourism Case – Mobile Docent

Mobile Docent service

Automatic delivery of information for necessary contents according to each situation at differentiated zones within out/inside of an exhibition place



Exhibition Mobile Service

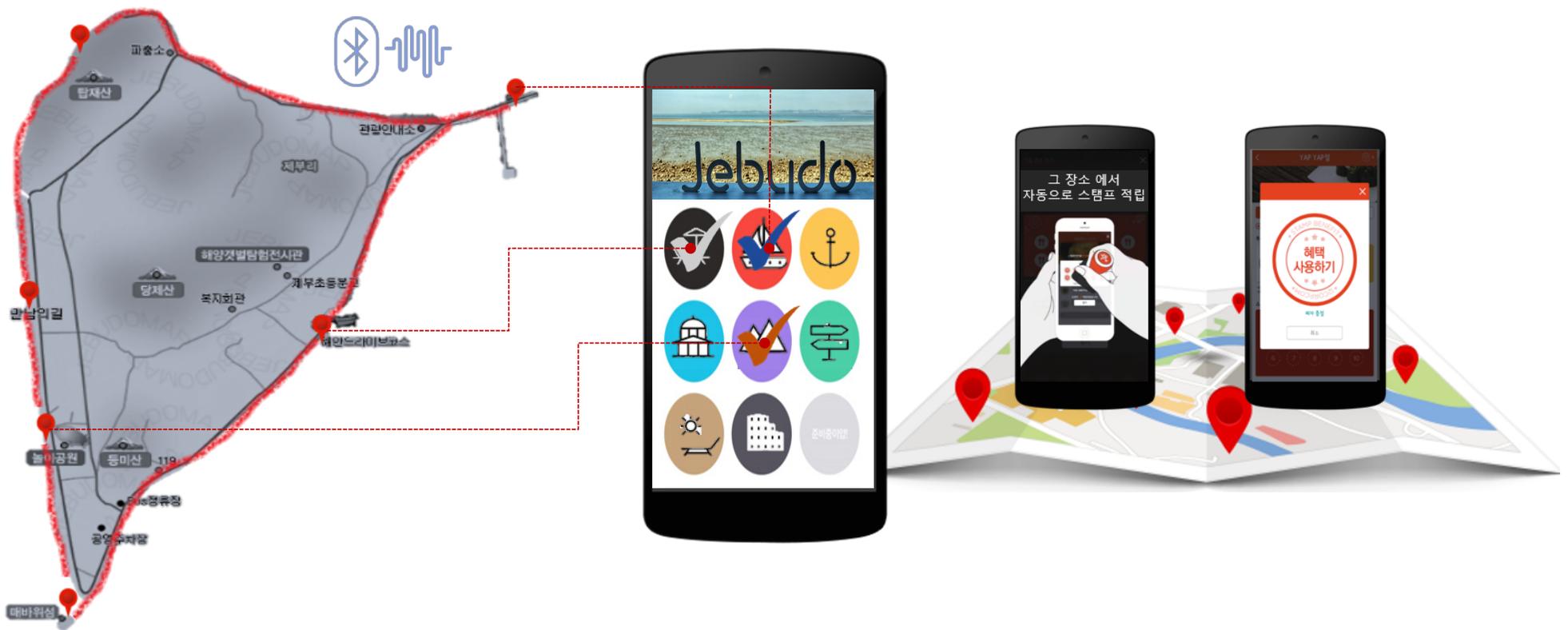


- Exhibition tickets issued on mobile
- Exhibition calendar/speaker info
- Docent audio guide(TTS)
- Exhibited technology route guide/ recommendation
- Contents viewer/ downloads of exhibited contents
- Exhibition tour stamp
- Participate in exhibition promotions
- Mobile surveys
- Multiple language supported (En/Jp/Cn/Kr)

Smart Tourism Case – Mobile Stamp

Mobile stamp tour

Vitalize tourist places and quality of tour services by establishment of mobile stamp tour and encouragement of visit to tourist places systematically



Public Administration Case – Commerce Area Analysis

City planning through analyzing each local commerce area

Planned city operation under regional strategy and thoroughly analyzed commerce trends within the regions of YAP beacon infrastructure, using YAP's converged location technology and wireless signals



Traffic Trend by days of week and time of day

- Data collection on traffic and hour of stay for each day of week and time of day through YAP's converged location technology enabled in corners of the city
- Systematic city planning through collected data



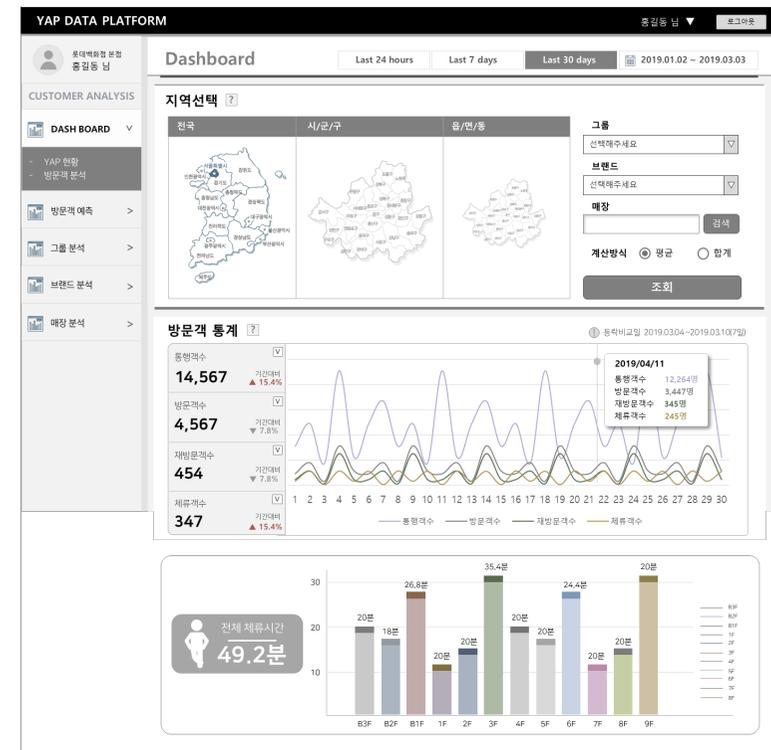
Rate of store visitors among the traffic

- Effective marketing consulting based on visiting data for specific commerce area/stores
- Specified data organized by age, gender, preference, and more



Rate of foreign visitors among the traffic

- Data for foreign visitors' rate
- Vitalizing data based tourism industry for foreigners



Public Administration Case – Regional Information

Real time delivery of city policies and information

Total administrative system equipped with real time communication with the public and delivery of important information (hazards, policies, public announcements, and other) by region, time of day, and day of week



Information by Region

- Real time notification on local information and updates on hazardous situation
- Notification on local benefits and regional policies



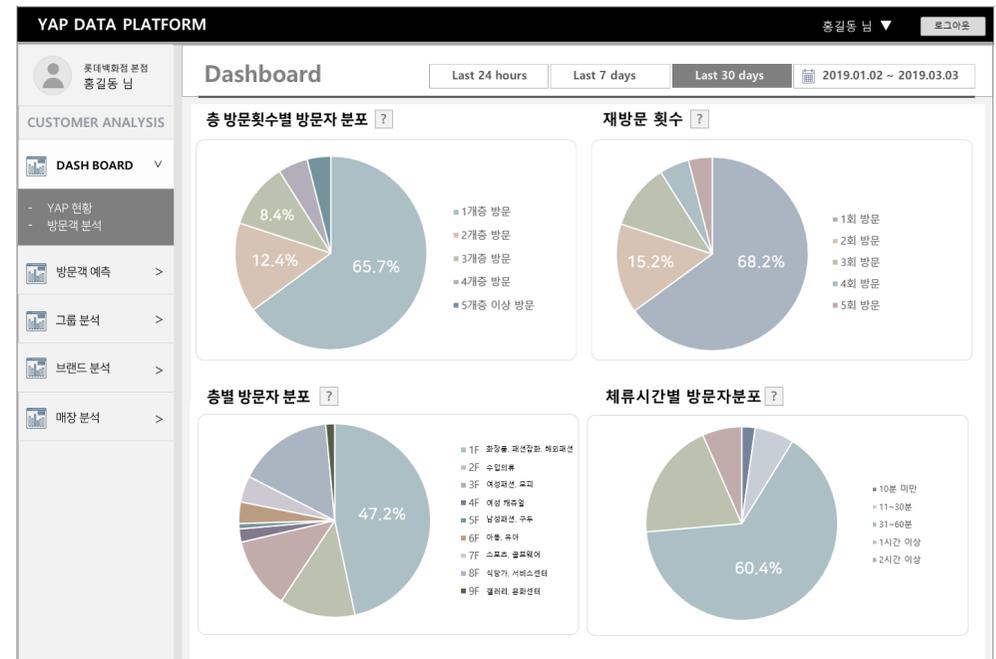
Policies/Info for Jurisdictions

- Real time update on local events
- Notification for events and contests
- Reserved notifications on public announcements and major policies



Living Information and Communication

- Real time update on job board
- Registration and notification on inconvenience found at sites (danger, etc)
- Real estate information and other living information



6. Data Provision/Analysis

Big data analyzed into information

A modularized platform that is flexible and expandable enables optimized data analyzed in multiple perspectives and information is provided

Regional Data

전국 | 시/군/구 | 읍/면/동 | 전체선택

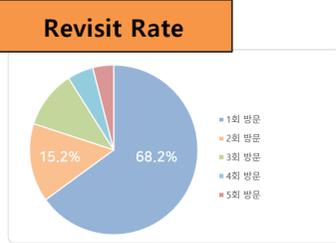
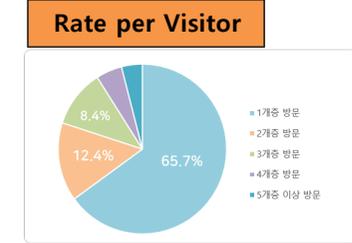
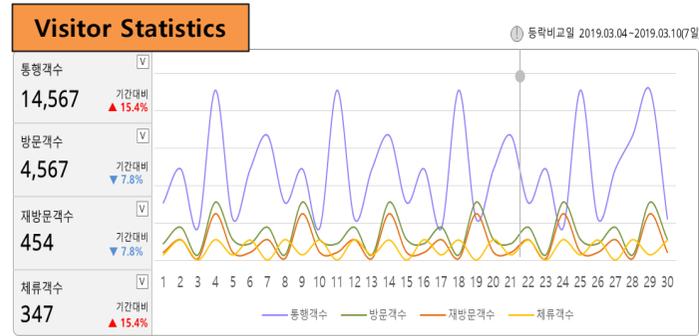
그룹: 전체

브랜드: 전체

매장: [검색]

계산방식: 평균 (선택) | 합계 (선택)

조회



Visit Rate

15.7% (기간대비 ▼7.8%)

Revisit Rate

7.5% (기간대비 ▲15.4%)

% Stay

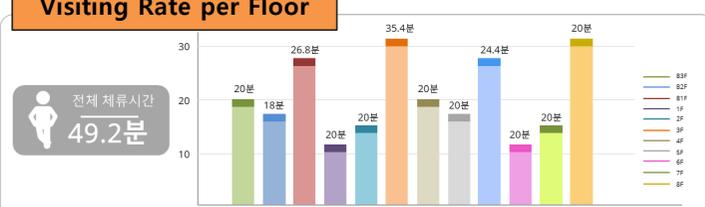
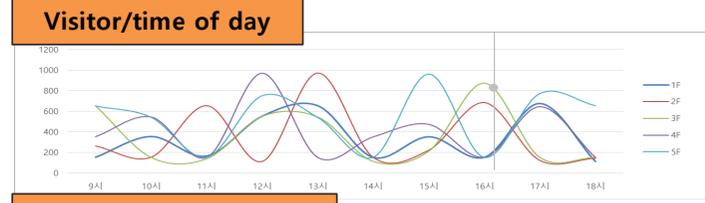
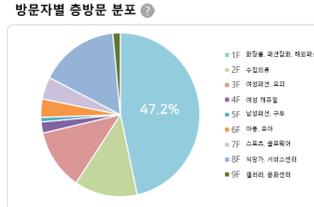
14.7% (기간대비 ▲15.4%)

순위	매장명	방문율 (%)
1	IF 명동점	8.4%
2	IF 명동중앙점	6.0%
3	IF 명동3호점	4.8%

순위	매장명	재방문율 (%)
1	IF 명동점	86.7%
2	IF 서판교점	85.3%
3	IF 일산 후곡점	81.1%

순위	매장명	체류율 (%)
1	IF 명동점	86.7%
2	IF 서판교점	85.3%
3	IF 일산 후곡점	81.1%

순위	매장명	시간(분/초)
1	IF 명동점	13분 41초
2	IF 서면 로데오점	8분 5초
3	IF 공병공간점	7분 47초



APPENDIX

Beacon Devices
Applied service cases

Reference – YAP Beacon

- Device Stability

5BD4-RC42-9539-B93E

방송통신기자재등의 적합등록 필증 <i>Registration of Broadcasting and Communication Equipments</i>	
상호 또는 성명 <i>Trade Name or Registrant</i>	아이팝콘 주식회사
기자재 명칭 <i>Equipment Name</i>	일체형 고주파 AP
기본모델명 <i>Basic Model Number</i>	PCG002
파생모델명 <i>Series Model Number</i>	
등록번호 <i>Registration No.</i>	MSIP-RMM-up2-PCG002
제조자/제조(조립)국가 <i>Manufacturer/Country of Origin</i>	아이팝콘 주식회사 / 한국
등록연월일 <i>Date of Registration</i>	2014-07-07
기타 <i>Others</i>	
위 기자재는 「전파법」 제58조의2 제3항에 따라 등록되었음을 증명합니다. It is verified that foregoing equipment has been registered under the Clause 3, Article 58-2 of Radio Waves Act.	
2014년(Year) 07월(Month) 07일(Date)  국립전파연구원장 Director General of National Radio Research Agency	
* 적합등록 방송통신기자재는 반드시 "적합성평가표시"를 부착하여 유통하여야 합니다. 위반시 과태료 처분 및 등록이 취소될 수 있습니다.	



- Specifications



- Power Connectors



- Designed Power : 17~40V
 - Power Consumption : 0.2A consumed per 24V input
 - Heat and Noise: heats under 50 degree
- Size : 48(W) * 69(H) * 23(D)

Reference – Commercialized Service Cases



Samsung Galaxy S9 release promotion



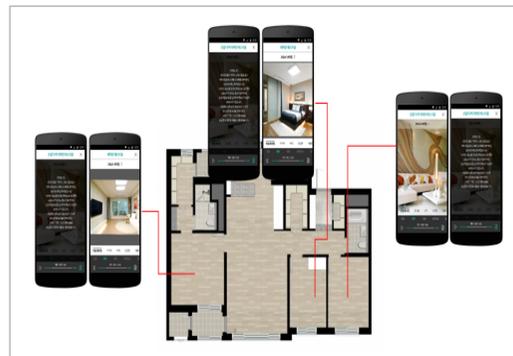
'Siren Order Service' empowered by YAP beacon



'Location based auto-guide service' at Incheon Airport



Convenience store beacon service at CU



Samsung Raemian Docent service



Coupon pop ups and membership auto-run service at exhibitions and festivals



THANK YOU