Smart Home & Community Management System

The Smart home & community management system is a residential life support technology that includes real-time household power usage monitoring, visitor vehicle registration, electronic voting, and overall apartment complex operation and management.

Smart home & community management can improve quality of life and convenience at home, enhance security, and increase management efficiency in areas such as energy usage.



▲ A resident is checking maintenance fees through a mobile bill using the app.

Issues to Tackle

- Using distributed service channels such as parking registration, mobile bills, and community services related to apartment complex use.
- Demanding enhanced transparency and efficiency in management fees due to unclear costs and unreasonable fee burdens in small apartment complexes.

Expected Benefits 🗹

- Enhancing residential convenience for apartment residents through access security and power usage monitoring.
- Reducing resident complaints through digitalization of apartment complex management tasks.

Key Services

- Checking maintenance fee details and comparing monthly usage of electricity, water, and gas, viewing detailed items, and making payments.
- Managing apartment access security including visitor vehicle registration and automatic main entrance access.
- · Linking services such as monitoring real-time electricity, water, gas usage, and fees.
- · Providing integrated community services including apartment notices, community facility reservations, and electronic signatures/voting.
- · Supporting smart work systems by digitalizing management office tasks such as document handling, automatic resident management, and electronic approval.

🔅 Use Cases

- Smart village, a Busan national pilot city, enables residents to control home appliances using the 'SmartThings' app and provides convenient living support by integrating various information including lighting/blind and heating/cooling control, visitor check during absence, unmanned delivery management, and notice checking.
- Each apartment complex provides services in conjunction with smart apartment integrated management apps developed by private companies, with the representative Apartner app being used by 1.45 million households in 1,600 apartment complexes nationwide (as of May 2022).

Key Components

Configuration Smart Home & Community Management System Visitor vehicle reservation Parking spot verification Electronic voting Announcements Management fee inquiry Sharing of lifestyle information, etc. Imagement fee inquiry TV Induction Vacuum cleaner Refrigerator Air monitor Washer Curtain Ai speaker Lighting Gas Heating Standby power Ventilation control Elevator call Unmanned delivery Remote meter reading

Technology

1. Integrating parking control system

• Managing visitor parking through apartment complex parking management including scheduling visits and assigning time slots per household, controlling illegal parking, processing maintenance fees, and monitoring vehicle entry/exit data.

2. One pass security system

• Providing a secure and convenient access system where a verified resident can automatically trigger door opening and elevator calling by standing in front of the building's main entrance.

3. Community function

• Providing resident convenience features such as reservation management for community facilities and electronic voting systems in apartment complexes.

4. Management office smart work system

• Digitalizing management tasks including document sending/ receiving, resident directory management, electronic maintenance fee bill verification, and an electronic approval system.

(Linked service) Smart remote metering technology

• The smart remote metering system monitors and transmits energy usage data through digital meters, providing alarms and warnings for emergency situations such as electrical leakage and water leakage through real-time monitoring.



(Linked service) Monitoring water pipe leakage within buildings

• Analyzing abnormal usage from water supply metering data acquired through IoT remote metering terminals and digital water meters to provide leak diagnosis and user notification services.



Technology Companies

AEGIS ENTERPRISE www.apti.co.kr

SAMSUMG SDS www.samsungsds.com www.aptner.com
TOICOS
www.toicos.com

APTNER

GAMM TECH www.gaamtech.co.kr

VISION INFORMATION TECHNOLOGY www.vinfotech.co.kr HIGHTEC EPC www.hitecepc.com

