## Research on Opportunities and Challenges Brought by the Construction of "Smart Community" to Property Management Industry

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Abstract: With the development of intelligent property, property management companies should change the traditional management mode, strive to improve their own level, and improve the management and service level of the whole property with high-tech and modern management concepts. We should be soberly aware that the property management industry is facing many development opportunities as well as severe challenges. Under the new situation, the property management system must be highly integrated, interactive and dynamic, and the property services are diversified and supported by high technologies such as Internet of Things, mobile Internet and cloud technology. Under the guidance of the concept of "smart community", the innovative development of property management service mode should be adapted to the needs of enterprises and various forms; Relying on brand enterprises to realize franchise chain; Rely on the platform of "smart community" to make property management more personalized.

#### 1. Introduction

Since the Ministry of Housing and Urban-Rural Development put forward the guidelines for the construction of "smart community" (for trial implementation) in 2014, the concept of "smart community" has been deeply rooted in people's hearts [1]. As the "unit" of "smart community", the construction of smart community in various places is in full swing, and all of them are exploring new models and new norms of smart community suitable for their own areas. "Smart community" is an important part of building a smart city, which is not only a new concept of construction and development, but also a modern lifestyle. Due to the constraints of construction cost and consumption level, the application and development of "smart community" in economically developed areas is faster, while for economically underdeveloped areas, this concept has not been widely applied [2].

Starting the construction of "smart community" is the residents' earnest expectation for the beautiful living environment and the construction of "smart community". By analyzing the opportunities and challenges brought by the construction of "smart community" to the property management industry, this paper draws lessons from the successful experience of the implementation of excellent "smart community", and provides reference for the innovative development of property management services in smart communities in the future.

### 2. Connotation of "intelligent community

At present, the definition of "smart community" pays more attention to the technical level, and the complete definition is still relatively rare. The meaning of "smart community" by Chinese scholars is mainly expounded from the aspects of information technology, Internet of Things and comprehensive services. Literature [3] thinks that "smart community" provides convenient and efficient management services based on information communication and radio frequency identification technology. Literature [4] puts forward that intelligent management and control of Internet of Things is not only a service of information technology, but also a humanized service focusing on refined management. Generally speaking, the academic circles hold that the purpose of "smart community" is to provide convenient, safe and comfortable life for the residents of the

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community. The prerequisite is that the new generation of information technology is similar to the integrated application of cloud computing, mobile Internet and Internet of Things, and is based on information and intelligent professional social management and service.

Smart community refers to the integration of community home, community property, community medical care, community service, e-commerce and network communication into an efficient information system, providing a safe, efficient, comfortable and convenient living environment for community residents, and realizing the computerization, networking and intelligence of life and service [5]. It is a new management community based on large-scale information intelligent processing. Smart community is a new concept of community management and a new model of social management innovation under the new situation. Smart community has five characteristics: intelligence perception, sustainability, collaboration and sharing, customized service and humanization.

As the most basic unit and module, "smart community" can be regarded as a microcosm of the development of smart city. Compared with ordinary communities, "smart community" has been improved in the following three aspects: First, "smart community" integrates intelligent buildings, smart homes, road network monitoring, intelligent hospitals and digital life; Second, the "smart community" brings the surrounding business, finance, medical care and education into the comprehensive information platform; Third, the "smart community" organically combines the conventional service items of the property with intelligent systems, including access control and monitoring systems, intelligent consumption, remote meter reading, automatic spraying and so on.

## 3. Opportunities and challenges faced by property management enterprises in the construction of "smart community"

## 3.1. Impact of property management enterprises in the construction of "smart community

#### (1)Threats from outside

The service mode is relatively simple and lacks core competitiveness. The "products" provided by property management enterprises are services, and the property services provided by most property companies in the market are more traditional greening, cleaning, guarding, maintenance, etc. The service mode is relatively simple and lacks innovation [6]. After ensuring the basic living property needs, we should pursue more living environment, safety and convenience. Obviously, traditional property services can no longer meet people's new requirements. Property management enterprises need to change their development ideas, innovate their business models, improve their service levels and enhance their core competitiveness.

Network competition among property management enterprises. Under the influence of network, property management companies have been impacted by the transfer of business. If which one acts faster and has more creativity, it can become an expert in intelligent management. If it stays stuck to its laurels and doesn't think about improvement, it is very likely to be eliminated.

Challenges brought by collectivization and intensive transformation of property management industry. Over the past 20 years, the domestic property management industry has blossomed with a hundred schools of thought contending, and various management service concepts and modes have played an important role under the environmental conditions at that time. It has been heard from time to time in the media and industry. If this theory is regarded as the service concept of enterprises, it can be used to guide individual enterprises. It is biased to position the property management industry as a "low-profit industry", which will affect the development of the industry. Moreover, there is no legal basis, which is also a challenge to the development of the property industry [7]. At present, the scale, collectivization and intensive development of the property management industry is beginning to take shape, and the situation is pressing and inspiring, which brings many challenges to the existing theories, development models and risk prevention and avoidance that guide the property management industry.

Customer's demand for intelligent management. With the popularization of intelligent systems and the improvement of people's living standards, people's requirements for living, working and

doing business environment are correspondingly improved. Intelligent property and management have naturally become the choice of modern people, and traditional management methods have become outdated.

(2)Problems within property management enterprises

Self-management is not in place. The significance of the existence of property management enterprises lies in ensuring the normal use of the property and providing various services to create a good, comfortable, convenient and safe living and working environment for the owners. The core product provided by property companies is "service", and the level of service determines its competitive position in the market. At present, China's property enterprises have many problems in their own management, such as unreasonable design of internal organizational structure, inadequate coordination of functions of various departments, failure to formulate a management service system that meets the requirements of owners according to local conditions, insufficient internal staff training and lack of experience, etc., which will affect the service level and quality of property enterprises, and further affect their core competitiveness and market position [8].

The quality of personnel is low. At present, there are not many real certified property managers in China. Most of the employees are college graduates or below. The proportion of employees with bachelor degree or above is relatively small. Although they have some work experience, their service level and professional skills are insufficient. At the same time, most employees lack professional skills training, which makes the quality of employees in the whole industry generally low.

### 3.2. Development opportunities faced by property management industry

China has continuously regulated the real estate industry and maintained a good momentum of development, which has brought development opportunities for the property management industry. It can be seen from the 11th Five-Year Development Plan of the country, provinces and cities that the real estate industry is the pillar industry of national economic development, with the increasing number of property projects, especially the coverage of high-end property projects, administrative offices and public institutions, which brings new opportunities for the development of the property management industry [9]. With the establishment of the legal environment of the property management industry by the state, such as separation of construction and management, owner autonomy, marketization of property management, etc., it has laid a good foundation for the property management industry to gradually show its due face.

Intelligent management can improve the professional image of management enterprises. Traditional property management generally gives the impression to the outside world that it is a service industry with low professionalism, which is related to its wide service range and few specific technical processes that customers can see. However, intelligent management needs high technical support and cooperation, and management enterprises can shape their professional image.

Development opportunities brought by the vast domestic and international property market. Foreign brand property companies have entered China to provide property management services and consulting services, while domestic property management companies have also stepped out of the country and participated in the international property management market competition. Market economy knows no national boundaries, and service quality and brand effect are the key factors. This has created a good development platform for domestic property management enterprises that have grown up in the tide of market economy, promoted the reorganization and integration of domestic property management industry, and laid a good foundation for realizing the collectivization and intensive management of domestic property management industry.

## 4. New ideas for innovative development of property management under the construction environment of "smart community"

We can fully understand the uniqueness and success of smart community by understanding the integrated system platform of property management. The specific composition of the whole platform is shown in Figure 1.

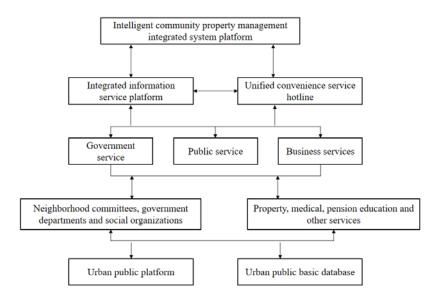


Figure 1 Intelligent community property management integrated system platform

From the composition of the system platform of the smart community, the whole platform integrates basic functions such as government service, public service and commercial service, and accurately and effectively realizes different types of basic services such as construction, public security, housing management, family planning, employment, community policing, mediation and correction, floating population, housekeeping, old-age care and shopping through the comprehensive information platform. This not only reflects the extended service function and intelligent management, but also solves and handles the residents' needs of clothing, food, housing, transportation, health, music and maintenance, which fully improves the residents' happiness index and the satisfaction of convenient and safe experience.

## 4.1. Improve service quality and form brand advantage

For the current phenomenon that the comprehensive quality of employees in the industry is generally low, enterprises should establish their own training system and learning environment, enhance the quality of employees, attract excellent property management talents, improve service quality and form brand advantages, and then carry out property enterprise alliance, optimize and integrate e-commerce service platform, attract and encourage small and medium-sized property enterprises to carry out franchise chain, and gradually promote the integration of basic property services and innovative business services to realize brand chain operation.

#### 4.2. Due to the enterprise system, the forms are diverse

Property management must participate in the construction of "smart community" according to the enterprise system. According to their own conditions, the form of participation is decided. Small-sized property companies mainly provide offline basic services and rely on some online platforms. Integrate owners' resources, build a community property service platform, and attract merchants to join, so as to avoid the risk of excessive investment of enterprises. Optimize and integrate e-commerce service platform, attract and encourage small and medium-sized property enterprises to franchise chain, thereby reducing the cost of building "smart community", gradually promoting the integration of basic property services and innovative business services, and realizing brand chain operation.

## 4.3. Form a complete "smart community" network construction

In order to meet the application and construction needs of "smart community", the cooperation among architectural design, community property and network operators will be an inevitable development trend. The construction concept of "smart community" will be planned and implemented at the initial design stage of construction projects, and the building structure and network information line settings with different functional requirements will be comprehensively

evaluated to realize an integrated and systematic construction mode.

After the completion of the construction project, the function of "smart community" can be effectively applied, which can not only bring convenience to people's lives in the community, but also realize the win-win construction application mode of construction enterprises, property enterprises and communication network enterprises. At the same time, the cooperation among the three parties can help promote the establishment of unified and standardized construction and application standards of "smart community", and help promote its wider application and expansion.

# 4.4. Build a bridge between government, property, business and owners with community cloud platform

With the accelerating urbanization process, the huge commercial prospects of smart communities began to appear, and enterprises from all camps began to lay out smart communities with great fanfare. In this environment, the smart community cloud platform has gradually become the main theme.

Provide community management, equipment management, parking space management, property fee collection and intelligent equipment management for the property through the smart community cloud platform; Through the smart community APP, community residents can realize convenient functions such as online calling property, opening face, opening APP, courier collection, reporting and repairing, and community housekeeping; To support various operations such as community commercial marketing, it helps community property to promote the construction of a safe, warm and honest smart community by improving the level of informationization and intelligence, and to realize a one-stop solution for the needs of community residents, and finally realize the goal of sustainable development by the government, property, merchants and owners, and to achieve win-win development and comprehensive optimization of resources.

## 4.5. Smart Community Management Mode Based on "Red Property"

Property service is the work that has the closest contact with the people, the most direct service, the closest distance and the deepest feelings. Urban community residents are the first to look for property when they encounter difficulties in family life. The quality of intelligent community service directly affects the people's happiness and satisfaction. Closely linking the party building work with property services means actively standing in the position most needed by the people. With the deepening of reform and opening up, the unit gradually declined, the old resident community system was replaced by the new community system, and the community became the basic unit of urban grass-roots governance. "Red property" is a beneficial exploration to actively serve the people. It is the key and core of grassroots social governance to lead the party building and optimize property services in smart communities. "Red property" is to adhere to the spirit of General Secretary Xi Jinping's series of important speeches and the new ideas, new ideas and new strategies of governing the country, thoroughly implement the spirit of the 13th Party Congress, take the implementation of the "Red Engine Project" as the guide, and promote the modernization of grassroots social governance system and governance capacity as the goal. Under the feedback of volunteers and resident representatives, the property company installed monitoring, built carports and children's parks for the community. "Red Property" focuses on turning community property into the party's task force, striving to build smart community service community into an important platform for party organizations to contact and serve the masses, promoting property management team to become an important force for grassroots party organizations, and bringing community property service posts into an important channel for training grassroots party organizations and leading cadres.

#### 4.6. Integration of Public Art and Smart Community

Since the emergence of western modernist art, keeping a distance from society has become the norm of most art production. Although this distance is conducive to maintaining the independent aesthetic character and critical nature of art, works that are purely and purposeless will become ugly after being operated by professional institutions and markets. The development of cities often

ignores the traces left by historical changes, while the involvement of public art in urban construction has changed people's views on the past and the future and witnessed the renewal of society together. Artists are still keen to highlight their personal style as their creative goal, and people still look up to artworks with an educational attitude. Art participates in smart community activities, allowing residents to participate in experiencing art in a relaxed and happy way, while reflecting on the changes of the surrounding environment. Advocating people's investment in community construction through art can promote people's new understanding of the community. Artists and intelligent community management work together to expand the possibilities of public art.

#### **5. Conclusions**

"Smart Community" caters to people's high-quality and diversified living needs in modern society, and introduces the concept of automation and intelligence into the process of community construction and management. Traditional property service enterprises are improving the satisfaction and trust of owners by continuously providing quality services to owners, carefully studying different modes and technical characteristics of "smart community" construction, formulating their own action plans, and building an information-based operation platform to truly achieve sustainable development. However, the construction of "smart community" still has a long way to go, and now the exploration is just the beginning. In addition, the mature application of the core technology of "smart community", the Internet of Things, also needs a certain time and hardware foundation. Intelligent management can enhance the professional image of management enterprises. Enterprises should establish their own training system and learning environment, attract excellent property management talents, improve service quality, optimize and integrate e-commerce service platform, gradually promote the integration of basic property services and innovative business services, and realize brand chain operation.

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