

Innovation Path and Practice Exploration of Community Governance under the Background of Intelligent Times

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Abstract: Under the background of the rapid development of intelligent technology, community governance is facing new opportunities and challenges, and it is of certain importance and urgency to study community governance in the intelligent era. This paper aims to explore the innovative path and practical strategy of community governance in the intelligent era. This paper summarizes the specific application of intelligent technology in community governance, including intelligent security monitoring and intelligent property management system, and analyzes how these technologies change the way of community governance. Then, the paper puts forward the innovative ideas and new models of community governance in the intelligent era-smart community construction, digital governance platform and so on. At the same time, it discusses how these new models promote the innovation of community governance. On this basis, this paper refines effective practical strategies and puts forward specific suggestions for community governance in the intelligent era. Intelligent technology can significantly improve the efficiency of community governance, enhance residents' participation and optimize resource allocation. The government, enterprises and all walks of life should work together to strengthen policy support, technological innovation and application, residents' training and education, and promote the modernization process of community governance.

1. Introduction

With the rapid development of information technology, cutting-edge technologies such as artificial intelligence and big data are rapidly reshaping the world pattern [1]. The rapid rise of these technologies has significantly improved the efficiency of information processing and dissemination, and has had a far-reaching impact on many levels of social structure [2]. The progress of information technology makes the acquisition, storage, transmission and processing of information extremely convenient, which provides a strong support for the rapid development of society [3]. The wide application of artificial intelligence has given machines the ability to simulate and perform human intelligence tasks, which has brought fundamental changes to various industries [4]. The rise of big data technology enables us to mine valuable information from massive data, which provides a more scientific and accurate basis for decision-making [5].

The arrival of the intelligent era has also brought new challenges to community governance. The complexity of information processing has soared, and the explosive growth of information has challenged the efficient processing and utilization of information [6]. Privacy protection is becoming more and more serious, and the collection and processing of personal data in the application of intelligent technology puts forward higher requirements for data security and privacy protection. The expansion of the digital divide is also a big challenge for community governance in the intelligent era [7]. The uneven development of technology leads to great differences in information acquisition and utilization ability between different regions and different groups. This further aggravates social inequality and differentiation. Nevertheless, the intelligent era has also brought unprecedented opportunities for community governance. The diversification of governance means has improved the flexibility and efficiency of community governance [8]. The improvement of residents' participation benefits from the convenient participation channels provided by intelligent technology, which makes residents more actively participate in community governance

[9]. The optimization of resource allocation is also an important opportunity for community governance in the intelligent era. Through big data analysis and artificial intelligence algorithms, people can more accurately grasp the demand and distribution of community resources and realize the optimal allocation and rational utilization of resources.

In the era of intelligence, community governance faces both challenges and opportunities. Exploring the innovative path and practical strategy of community governance under the background of intelligence has become an urgent problem to be solved. The purpose of this paper is to deeply discuss the impact and challenges of the intelligent era on community governance, analyze the application prospect and potential of intelligent technology in community governance, and put forward the innovative path and practical strategy of community governance under the background of intelligent era.

2. Application and influence of intelligent technology in community governance

The continuous progress of intelligent technology makes its application in community governance more and more common. Intelligent security monitoring is a typical example. By installing high-definition cameras, face recognition systems and other equipment, real-time security monitoring of the community is realized, and crimes and safety accidents are effectively prevented [10]. The intelligent property management system transforms the property management process into digital operation by means of information technology, which improves the efficiency and quality of property services. The introduction of functions such as online repair, online payment of property fees and intelligent parking management has greatly facilitated the daily life of residents. Community information service platform is also an important application of intelligent technology in community governance. It integrates many functions, such as community announcement, activity notification and residents' communication. It provides a convenient information acquisition and communication channel for residents.

The introduction of intelligent technology has significantly changed the mode of community governance. Automatic and intelligent processing methods make many tasks that used to rely on manual work can now be completed automatically by the system. For example, the intelligent security system can automatically identify abnormal behaviors and trigger alarms, while the intelligent property management system can automatically handle matters such as payment of fees, which greatly saves human resources and time. Intelligent technology has enhanced the quality of life of residents. Residents can keep abreast of community dynamics, participate in community activities and interact with neighbors through the community information service platform, which enhances the cohesion and sense of belonging of the community. In addition, intelligent technology has also brought more convenient and efficient property services for residents, such as online repair and reservation services. All these have improved residents' satisfaction.

However, the application of intelligent technology in community governance is not smooth sailing, and it will also encounter a series of problems to be solved urgently. These problems need to be paid attention to and solved in the process of promoting the application of intelligent technology. The problems faced by intelligent technology in the application of community governance are shown in Table 1:

Table 1: Issues Faced in the Application of Intelligent Technology in Community Governance

Seq. No.	Issue Category	Specific Issues
1	Data Security and Privacy Protection	Risk of Data Leakage
2	Technology Maturity and Reliability	Insufficient Stability of Some Intelligent Systems
3	Resident Acceptance and Adaptability	Some Residents are Resistant to Intelligent Technology
4	Cost and Return on Investment	High Initial Investment Cost for Intelligent Transformation
5	Technology Maintenance and Update	Intelligent Systems Require Continuous Technical Support and Maintenance
6	Laws, Regulations, and Policy Support	Inadequate Relevant Laws and Regulations, Insufficient Policy Support
7	Talent Reserve and Cultivation	Lack of Professional Intelligent Technology Talents
8	Technical Standards and Compatibility	Poor Compatibility Between Different Systems and Devices

3. Exploration on the innovative path of community governance in the intelligent era

3.1. A new model of community governance in the intelligent era

In order to meet the development requirements of the new era, we must put forward and practice a series of innovative ideas. Taking residents' needs as the guide is the core concept of community governance in the intelligent era. The ultimate goal of community governance is to serve residents and meet their diversified needs. Therefore, the application of all intelligent technologies and the innovation of governance models should focus on this core. As an important means of intelligent community governance, the value of data-driven decision-making lies in revealing the deep-seated laws and potential problems of community operation through the analysis and mining of big data, and providing accurate data support for governance decision-making. This decision-making model based on data makes community governance more scientific and efficient. With the help of cutting-edge technologies such as artificial intelligence and Internet of Things, community service and management are gradually becoming automated and intelligent. This has greatly improved service efficiency and service quality.

Under the guidance of this series of intelligent ideas, the community governance model has been continuously innovated, and many new governance models have emerged. The construction of smart community is an important part of it. It creates a safe, convenient and efficient living environment by integrating various intelligent technologies (smart security, smart property, smart home, etc.). Digital governance platform uses information technology to transform all aspects of community governance into digital operations, and realizes real-time information sharing and collaborative work. The intelligent grid management system divides the community into multiple grids, and provides intelligent equipment and professional managers for each grid, thus realizing the refinement of community management and humanization of services.

3.2. The new model promotes the innovation of community governance

These new models have played a positive role in promoting the innovation of community governance. Through the application of intelligent technology, many tasks that originally needed manual processing can now be completed automatically by the system. This greatly saves manpower and time, and significantly improves the efficiency of governance. Digital governance platform and intelligent grid management system provide more channels and ways for residents to participate in community governance, so that residents can actively participate in community construction. This shows that the implementation of the new model has enhanced residents' participation. Through big data analysis and intelligent decision-making, we can more accurately understand the demand and distribution of community resources and realize the optimal allocation and rational utilization of resources. In order to realize these new modes, this paper thinks that the specific measures in the following figure must be taken. (Figure 1)

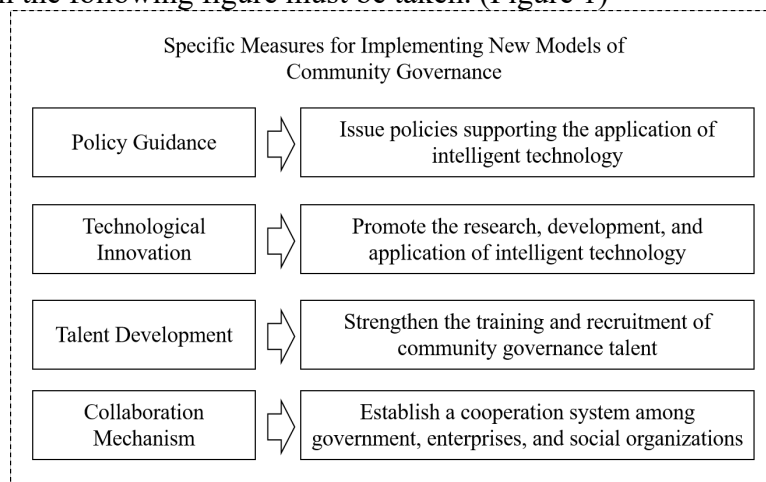


Figure 1 Specific Measures for Implementing New Models of Community Governance

4. Practical strategies and suggestions of community governance in the intelligent era

(1) Practical strategies

The application of intelligent technology in the field of community governance has accumulated rich practical experience. Based on these experiences, a series of effective practical strategies have been refined.

First of all, the integration and fusion of technology is the key. The demand of community governance is complex and changeable, and it is difficult for a single technology to cope with it. Therefore, it is necessary to integrate a variety of intelligent technologies and form a comprehensive solution. For example, intelligent security and intelligent property management are integrated to achieve seamless connection between security and management. Secondly, data sharing and synergy can not be ignored. The core of intelligent technology lies in data, and the sharing and cooperation of data is the key to improve governance efficiency. The government should establish a unified data platform, realize data sharing among departments and systems, and promote information circulation and collaborative work. Thirdly, it is indispensable to attach importance to residents' needs and participation. The application of intelligent technology should be guided by the needs of residents and encourage residents to actively participate in the governance process. By setting up residents' feedback mechanism and carrying out residents' training activities, residents' cognition and acceptance of intelligent technology will be enhanced and their participation will be improved.

(2) Specific suggestions for community governance in the intelligent era

Facing the new challenges and opportunities in the intelligent era, this paper puts forward the following concrete suggestions to promote the further development of community governance.

The government needs to introduce more policies to support the application of intelligent technology in community governance, provide preferential treatment such as funds and taxes, and encourage enterprises and social organizations to participate in the construction of smart communities. Continue to promote the research and development and innovation of intelligent technology, enhance the practicality and reliability of technology, strengthen the application and promotion of technology, and introduce more intelligent technologies into community governance. In view of the residents' insufficient knowledge of intelligent technology, relevant departments should carry out various training and education activities to improve residents' technical literacy and application ability.

The importance of community governance in the intelligent era is obvious. It directly affects residents' quality of life, happiness and social stability and development. The government should attach great importance to the research and practice in this field and encourage more scholars and practitioners to pay attention to and participate in it. Through unremitting exploration and innovation, it is expected to build a more intelligent, harmonious and livable community environment and provide better and efficient services for residents.

5. Conclusions

The arrival of the intelligent era has brought epoch-making changes and opportunities for community governance. From the discussion of the article, we can clearly observe the extensive application of intelligent technology in community governance and its far-reaching effects. These technologies have improved governance efficiency. They also increased residents' participation, optimized resource allocation and laid a solid foundation for the modernization of community governance.

In terms of practical strategies and suggestions, the importance of policy support, technological innovation and application, and residents' training and education is highlighted. The government needs to continuously strengthen policy support to create favorable conditions for the application of intelligent technology in community governance. At the same time, the government needs to promote technological innovation and improve the practicality and reliability of technology to meet the diverse needs of community governance. In addition, strengthening residents' training and

education and improving residents' technical literacy and application ability are also the key to promote the development of community governance in the intelligent era.

In the future, community governance in the intelligent era will show broader development potential. The continuous progress of technology and the expansion of application scenarios will make community governance more intelligent, efficient and convenient. We should also be soberly aware that community governance still faces many challenges and problems in the intelligent era, such as data security, privacy protection, technical compatibility and so on. Relevant personnel should actively embrace intelligent technology, strengthen research and practice, promote the modernization process of community governance, and contribute to building a more harmonious, livable and intelligent community environment.

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