Countermeasures to Promote Urban Community Residents' Participation in Big Data Governance --Taking Suzhou as an Example

Bin Chen

Suzhou Vocational Health College, Suzhou, Jiangsu, China

Keywords: Big Data Governance, Urban Community Governance, Community Residents

Abstract: in an information society, big data governance is an effective way to conduct community governance. This paper takes the investigation of Suzhou urban residents' participation in big data governance as an example. The study finds the current problems of community governance with big data, analyzes the influencing factors of implementing big data governance, and points out countermeasures to enhance the participation of urban community residents in big data governance in order to provide reference for improving the modernization of urban governance capabilities.

1. Introduction

Decisions on Adhering to and Perfecting the Socialist System with Chinese Characteristics, Promoting the Modernization of the National Governance System and the Governance Ability Adopted by the Fourth Plenary Session of the 19th Cpc Central Committee Pointed out That It is Necessary to Strengthen and Innovate Social Governance, Improve the Social Governance System, and Build a Social Governance Community That Everyone Has Responsibility and Enjoys. Community Governance is an Important Part of Social Governance, and Its Effect Directly Affects the Living and Working Conditions of the People and Stability and Order of the Society. in the Information Age, Community Governance with Big Data is a Good Way to Achieve Effective Governance.

2. Survey Procedures and Data Sources of Suzhou Urban Community Residents' Participation in Big Data Governance

In March 2019, Residents of Suzhou Urban Communities Underwent a Phased Random Sampling Survey. This Survey Designed a Web-Based Questionnaire Based on Wenjuanxing (a Platform Providing Functions Equivalent to Amazon Mechanical Turk). a Total of 1441 Questionnaires Were Collected. 39 Invalid Questionnaires with Short Answers and Similar Options Were Excluded. There Were 1402 Valid Questionnaires. the Effective Rate Was 97.29%. among the Respondents, 471 Were Male (33.6%) and 931 Were Female (66.4%); the Average Age Was 30.32±11.93; Education Level: 49 (3.5%) Were with Junior High School Education or Below, 73 (5.2%) Were with High School Education, 795 (56.7%)Were with Junior College Education, 325 (23.2%) Were with Bachelor Degree, 160 Were with Master Education or Above (11.4 %); Region: 377 (26.9%) Were in Gusu District; 78 (19.4%) in Industrial Park, 119 (29.6%) in Wuzhong District; 28 (6.9%) in Xiangcheng and Wujiang District; Community Types: 303 (21.6%) Were in Resettlement Housing Communities, 757 (54%) Were in Ordinary Commercial Housing Communities, 262 (18.7%) Were in Mid-Range Commercial Housing Communities, and 80 (5.7%) Were in in High-End Villa Housing Communities. in General, the Samples Are Representative.

3. Basic Status of Urban Community Residents' Participation in Community Big Data Governance

3.1 Residents' Satisfaction with Community Governance

The satisfaction of community governance reflects the overall and comprehensive attitude of residents to the governance of various aspects of the community, and is an important reflection of

the effectiveness of urban community governance. The survey results show that 7.2% of people expressed dissatisfaction or very dissatisfaction with community governance, 42.8% said that it was average, and 50% expressed satisfaction or very satisfaction with community governance. It indicates that residents are still quite satisfied with the overall state of community governance. The proportion of dissatisfied people is relatively small.

3.2 Investigation of Residents' Willingness and Reasons for Participating in Community Governance

The survey results show that 74.1% of people expressed their willingness to participate in community governance while 25.9% of them expressed their unwillingness to participate in community governance. Reasons for unwillingness to participate in community governance. Among them, 23.1% said they were not interested in participating in governance, 34.4% said they were busy at work, 16.5% said they didn't know how they could participate, and 13.8% said they did not have appropriate channels, 12.1% of the people said that their opinions were not taken seriously.

3.3 Residents' Information and Support of Big Data Community Governance

The survey results show that 22.1% said that the community has implemented community governance based on big data, 20.9% said that it has not implemented yet, and 57% said that they didn't know. It shows that the implementation of big data community governance is not very optimistic. At least the residents of Suzhou communities have not had clear and accurate information and perception of big data governance.

3.4 Residents' Perception of the Role of Community Big Data Governance

This survey of residents' perception of the role of big data governance has been investigated from the following six aspects: Provide a more scientific basis for decision-making in community governance; Improve the governance level of community officers; Promote the development of democratic autonomy; Provide personalized services for community residents; Enhance the pertinence of community services, respond and deal with community risk events quickly; Improve the management ability of emergency response and make the governance convenient and efficient. The survey results show that more than half of people believe that big data governance can allow more residents to participate in community governance, which is conducive to promoting the development of democratic autonomy. However, the role of big data in emergency management has not been widely recognized by residents.
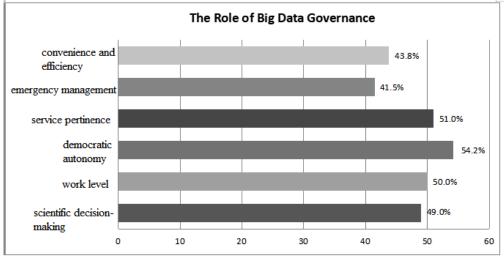

Fig.1 The Perception of the Role of Big Data Governance

3.5 Residents' Participation Methods of Big Data Governance and Willingness to Provide Data

The survey focuses on how residents are willing to participate in big data governance and how they want to participate in community governance, whether they are willing to provide personal information, and whether they are willing to bear the cost of upgrading. The survey results show that 86.1% of people wanted to participate in community governance through social media platforms such as QQ groups, WeChat groups, WeChat official accounts, and residential network platforms or applications specially designed by the community. Only 11.4% of people hoped to participate in governance through traditional methods such as community bulletin boards. When the residents were asked if they were willing to provide family and personal information to the data management center, 52% of the people said they were unwilling to provide data, mainly because of concerns about data security. For the question "Are you willing to bear part of the cost on the construction or upgrade of big data hardware equipment?", 35.3% of them said "Yes", 29.6% of them said "No", and 35.1% of them said "I'm not sure".

4. Analysis of Reasons Affecting Urban Residents' Participation in Community Big Data Governance

4.1 Urban Residents' Weak Awareness of Subject and Participation

The constraint of traditional thinking. Community administration is the most common urban community management method in China. Most people are accustomed to traditional regulatory thinking. Some even think that community governance is only a matter for community managers, and they do not need to participate. The survey shows that more than a quarter of people still lack the willingness to participate.

The participation awareness is weak. Through questionnaire surveys and interviews, it shows that many residents lack sufficient enthusiasm and interest in community affairs. Even in matters that involve their own vital interests, although they show concern for the development of the situation, they have insufficient actions. They always want to depend on others. Residents lack sufficient trust in the community. They do not believe that their needs can be met by participating in community governance, and their sense of identity and belonging to the community is relatively low.

4.2 Residents Have Concerns about Data Security

Data security issues have become a stumbling block in advancing data governance. Data information is a powerful support for providing personalized and refined services to residents. Data information is the privacy of residents, and the most worrying issue for residents is information security. The survey results show that more than half of the residents were reluctant to provide family and personal data information to the community. 75.8% of them were worried about data being resold, their lives being harassed, or personal property losses due to data security risks.

4.3 Long-Term Management Mechanism for Big Data Community Governance Has Not Yet Been Formed

Lack of top-level design. The grid governance lacks unified design and planning. There are also some problems in the quantity, quality, scope and sharing of data. As a result, information dispersion and information transmission channel are blocked, which also easily leads to redundant construction and blind construction divorced from reality.

The participation mechanism of multiple governance subjects has not yet been formed. Subdistrict offices, community residents, neighborhood committees and property management companies are all diverse subjects of community governance, but the status of each subject is unclear, and the responsibilities are unclear. When encountering problems, it is inevitable to blame each other and ultimately affect community governance. Government departments still occupy a leading position in the handling of many social affairs, and it is difficult to adapt to the general

environment of social development and to meet the growing needs of residents to improve people's livelihood. Some non-governmental organizations have a limited role in serving the people, leading to the result that the participation mechanism of multiple governance subjects has not yet been formed.

4.4 Lack of Appropriate Engagement Channels and Terminal Platforms

According to the survey, among the main problems in urban community governance, the "non-participation channel" is the one that accounts for the largest proportion. Many communities in Suzhou still use traditional community bulletin boards as their main information publishing platform and lack modern channels of participation. The survey found that 86.1% of residents hope to participate in community governance through social media platforms such as the QQ group, WeChat group and WeChat official account of the community and community network platform or application specially designed by the community, which reflects the importance and urgency of the establishment of appropriate channels and information platforms for participation.

5. Countermeasures to Promote Urban Residents to Participate in Community Big Data Governance

5.1 Increasing the Awareness of Urban residents' Community Participation and Identity

Increasing the awareness of participation. Residents' enthusiasm for participation and awareness of participation have greatly affected the governance efficiency and quality of the community. Government departments should actively guide and help residents to establish the awareness of participation. On one hand, it is necessary to let residents understand their rights and notice that they are the protagonists of community governance. On the other hand, by establishing corresponding platforms, they can help residents to participate in community affairs management and carry out community activities, so as to enhance residents' awareness and interest in participation.

Strengthening the awareness of belonging and identity. The government should build a public space within the community, give play to the convenience, real-time, and interaction of emerging technologies, cultivate residents' community awareness and affection for the community. The government should also strengthen the trust, and gradually cultivate residents' belonging and identity of the community.

5.2 Optimizing the Big Data Community Governance Mechanism

Establish the concept of top-level design of social governance. Administrators must recognize that "big data governance" is an inevitable development of the times and an innovation of the community governance model, so as to establish the concept of "management" to "governance" and "service". Therefore, big data should be valued strategically. Big data should be seen as priority either from the formulation of governance policies, the governance system, and the setting of executive departments or from the supervision, evaluation and assessment during the implementation of big data technology

Implementing the multi-governance strategy with a clear subject. The subject of big data community governance is characterized by diversity and diversification. It is necessary to clarify the relationship between the government, communities, social organizations, social capital, residents and other subjects, perform their duties, co-govern and co-manage, and form a linkage mechanism between social forces and the government. Therefore, a new community governance model can be construct that takes the government and the community as the lead, social organizations as the main body, residents as the protagonists, social work as the main force, and social capital as the auxiliary, and unites other social forces.

Building a decision-making mechanism based on big data governance. First, giving full play to the analysis advantages of big data to collect, process and analyze data, and explore the internal relationship of things, so as to provide support for effective decision-making of community affairs.

Second, using big data tools to listen and investigate residents' ideas. Finally, guided by big data technology and driven by data, the decision-making organization structure can be reconstructed in a scientific and democratic way. Taking the needs of the public as the core, with the opinions and suggestions of the people, the demonstration should be specific and the decision-making should be scientific, in order to reflect he democratization and openness of decision-making.

5.3 Strengthening the Protection of Resident Information Security in the Construction of Big Data

Strengthening the security of data processing system. The big data processing needs to pay more attention to the construction of a big data security system, scientifically formulate development strategies, and actively respond to the risks that big data applications may bring to community governance. It also needs to establish and improve relevant technical and management requirements for data security protection, and build a big data security protection network for urban communities from three aspects: equipment, market, and service.

Strengthening the legalization of data security. Governance departments should actively speed up the legislative work on data security, and provide clear legal regulations on the protection and accountability mechanisms for data opening, and the methods of handling and punishment after data leakage, to ensure the security of information use. At the same time, the government should accelerate the establishment and improvement of the data security management system, including network security, equipment use security, and emergency response programs, to reduce the occurrence of data breaches and ensure government data security.

Strengthen supervision of important data. Relevant departments need to increase the security protection of the data of various community departments and relevant residents of the community. The government should effectively protect the privacy of residents in the published data, establish a core database, and take appropriate protection measures for important information such as community affairs, medical care, and individuals to increase the public's trust on the government. At the same time, it is necessary to make the public know that the data will be safe.

5.4 Strengthening the Carrier Construction of Big Data Community Governance

Establishing a unified community information public service platform. The platform should cover data related to social security, medical care, health, cultural education, employment, public security and other fields related to residents' life. The platform information should be as comprehensive as possible and the data should be refined, so as to build a "participation-focused, all-round and diversified" community service system, and effectively protect the rights and interests of community residents, so that the information sharing platform can provide more convenient life.

Strengthening the construction of terminal platforms. It is indispensable to develop various technical tools including weibo, WeChat platform, community applications, etc. In the specific design and development process, some aspects should be paid attention: First, the platform should fully reflect the needs of the residents of the community. It should set up corresponding functional modules on the basis of sufficient research and collection of residents' demands; Second, the terminal platform should be rich in functions and prominent in serviceability; Third, the detailed design of the terminal platform must be practical, operable, and user-friendly, and it must be able to fit the habits of different people.

6. Conclusion

In an information society, big data governance is an effective way to conduct community governance. It can provide reference for improving the modernization of urban governance capabilities. To enhance the participation of urban community residents in big data governance, the residents, the mechanism and the relevant department should all do more effort to perfect the governance system.

References

[1] Tianxiang Chen, Ting Yang. Governance of Urban Communities: The Lost Role and Its Causes--Taking H City as an Example [J]. Journal of Renmin University of China, 2011 (03): 135-143.

[2] Wenmu Hu. Co-governance of Communities from the Perspective of Cooperatism--Taking Ningbo City as an Example [J]. Social Sciences Review, 2012(10):29-32

[3] Rui Huang, Jun Wen. Out of the Myth of the Community: The Dilemma of the Current Community Construction in China [J]. Social Science, 2013 (02): 64-69.

[4] Youxing Lang, Junliang Ge. Making Grassroots Governance Effective: Community-based Governance [J]. Zhejiang Social Sciences, 2014 (7): 63-69.

[5] Guoqing Li, Yi Li. The Dilemma and Solutions of the Construction of Smart Community in China [J]. Journal of Guangzhou University (Social Science Edition), 2015 (14): 71.

[6] Jiao Chen. Research on the Innovation Model of Urban Community Management in the Big Data Environment [D].

[7] Yadong Geng. Challenges and Countermeasures of Government Governance in Big Data Era [J]. Academic Journal of Zhongzhou, 2017 (2).

[8] Zonggen Zou. Exploring the Path of Fine Governance in Urban Communities [J]. China Institutional Reform and Management, 2016 (12).

[9] Lingling Liu, Bing Shi, Mengjuan Li. Exploration on the Transformation of Governance Structure and Governance Mechanism in Urban Communities [J]. Urban Studies, 2016, v.23; No.174 (02): 149-151.

[10] Weidong Chen, Ai Chen. Cultivation of Residents' Subjectivity: The Direction and Path of Community Governance [J]. Socialism Studies, 2017 (04): 93-100.