

Research on Urban Community Renewal and Governance Innovation in the Big Data Era

Xi Zhou

School of Architecture and Urban Planning, Huazhong University of Science and Technology, Wuhan, 430074, PR China

**Corresponding author. Email: 1771277142@qq.com*

ABSTRACT

A community is a social unit of the social structure in the most basic level. High or low governance capacity directly reveals the development degree of the national governance system and governance capacity modernization. The urban community governance in our country recently has made many achievements, but it is hard for the traditional urban community governance means to satisfy the value demands of Chinese modernization development with the era revolution of our industrialization, urbanization, and new normal economic development and gradual enhancement on community residents' self-governance consciousness and service requirements. Therefore, it is difficult to effectively deal with new situations and solve new problems for urban communities. Combining the big data technology with urban community governance develops a positive role on making innovations on the urban community governance system, enhancing individualized services for community residents, improving the urban community emergency management capacity, and promoting the urban community management mode reform. However, there are some obstacles for big data acquisition, analysis and application in the urban community governance field, resulting in constraining realization of the urban community governance innovation. Therefore, we must make efforts to sound our laws and regulations of protecting personal data privacy, enhance the input strength of urban community infrastructures in underdeveloped areas, cultivate versatile talents, and concern people who lack information data.

Keywords: *the Big Data Era, urban communities, renewal, governance, innovation*

1. INTRODUCTION

China is experiencing the transformation from the traditional society to the modern society. Particularly, with the disintegration of the Chinese unit system, the transformation of governmental functions, and establishment of the modern enterprise system, the role of China's original versatile political system and overall society on implementing social integration is gradually weakening. As the products of the modern society, urban communities are the results of the traditional integral social differentiation and disassembly, so they should fully embody modern features in modernization. However, born out of China's "unit system", urban communities still follow the inflexible up-bottom management mode of the planned economic era as a whole. Communities have the weak consciousness of democratic autonomy and community governance malpractice is increasingly significant. The Third Plenary Session of the 18th Central Committee of the Chinese Communist Party clearly proposed to facilitate modernization of the national governance system and governance capacity, while big data is a technical path to make innovations on modernizing national governance capacity. Harvard Business Review shows that "big data in essence is a

management revolution. It is more than a technical revolution and also implies a social revolution." Hence, using big data in China's urban community governance provides a new idea for making innovations on China's urban community governance paths and promoting the urban community governance mode transformation [1].

2. THE INNOVATION MEANS OF URBAN COMMUNITY GOVERNANCE IN THE BIG DATA ERA

2.1. Construct the Informationized Urban Community Governance Platform

Urban community governance in the Big Data era should construct the informationized platform and use the urban community governance platform with the higher informatization degree for operation. The big data technology can be better integrated and applied in urban community governance, so that urban community governance efficiency can be effectively enhanced. For example Balizhuang Community, Chaoyang District, Beijing creates an informationized community governance

platform. Relevant information data of permanent resident population and floating population in this community can realize renewal every Monday. Moreover, public security cameras in main roads also collect specific data about stream of people. Urban community administrators can integrate and analyze the data to effectively identify emphasis of community governance aspect. In this way, directivity of community governance is clearer. In some urban communities with the larger scale, contents and affairs involved by community governance are extremely diversified and tedious. Under the circumstance, it is very important to construct the informationalized governance platform and implement more rational community governance on the platform. This also can provide effective medium for using the big data technology in urban community governance.

2.2. Provide Individualized Community Services Based on the Big Data Analysis

If urban community governance emphasizes on more community services, especially for individualized community services, it is relatively feasible to use big data analysis to provide individualized community services. This is also an effective choice for urban community governance innovation in the Big Data Era. To be specific, urban community governance subjects can make use of the internet to communicate and exchange with community residents and collect some advice and suggestion relating to community governance and community services. Based on it, by adjusting the community service supply forms, more diversified and customized community services can be supplied in community governance to satisfy demands of community residents [2]. Based on the big data analysis, individualized community services have the strong characteristics of universality, which can effectively reduce obstruction of community governance innovation means in practical implementation and enhance the practical effectiveness of urban community governance innovation.

3. IMPROVEMENT OF COMMUNITY GOVERNANCE ON THE TRADITIONAL COMMUNITY GOVERNANCE UNDER THE BIG DATA ERA

Increasing maturity of the information technology gradually shows up the Big Data Era. It provides a fresh perspective for us to see the world, while providing technical impacts for our life. By aiming at existing problems in the traditional community governance, some solutions are proposed for community governance under the Big Data Era.

3.1. Implement the Community Gridding Management

Community gridding management regards gridding as the management means and territory size and population as the reference standard to divide communities into several unit grids, to collect data information, to establish the community service information base, and to link public services with gridding management information. By dealing with member information registered in each grid, delicacy management of information can be realized. The precondition of using the big data technology is the real and reliable data information. For this reason, on the basis of thorough and comprehensive investigation, specific grids are constructed to divide fundamental data materials of population archives and population structure maps to do electronic login and networking for community resident services. Moreover, it is necessary to establish community management systems of Party construction, civil administration, labor services, and social security and develop a digital platform that community service personal actively ask resident demands and solve their problems, so that residents will enhance their satisfaction for community life. In this way, the goal of providing standard and convenient services for residents in modern communities can be basically achieved. The essence of networking management is that traditional governmental management and new-type residents' self-governance realize interconversion [3]. It is the diversified governance pattern to mutually integrate informationalized urban community governance with community services. Gridding management is the development trend for China's grass-root social governance, showing the development requirements and trends of China's grass-root public governance in the Big Data Era.

3.2. Establish the Public Service System of Communities

Community services should comprehensively satisfy basic demands of community residents and form the service-oriented communities with standardized management, transparent and high-efficient operation. It is essential to reinforce public service system construction of communities, give all public service affairs to communities for agent management, and provide fast and considerable support for public community services in the system. In practical applications, big data acts as the main framework of community management informationization, while collecting all kinds of convenient information is the branch of the framework [4]. In the information era with the extensive internet use, we can use the mutual combination of the internet technology, big data technology, and cloud computing to constitute in the core technology of the entire Big Data Era and also develop the mainstream technology of future social development. To introduce big data in urban community governance, it is necessary to use features of big data technology (i.e. high

speed and low cost) to serve for community governance. Community services utilize a virtual network platform to do service exchange and communication for community residents. Such a community governance mode breaks through the limit between the sector and space in the traditional community management mode and realizes the fine-grained governance mode of communities. In this way, each resident in communities will be served, so as to finally enhance the urban governance level and improve the urban service quality and life satisfaction of urban residents. To construct the reasonable community governance system, it is essential to guarantee democratic autonomy of community affairs, normalize community service management, fully cover community services, and realize community service systemization and refinement. Mutual associations between community service sectors can further enhance service capacity under the urban community gridding management. Grass-root community services directly face the masses who live in communities. Gridding management enables the public service system of communities develop a greater role and provides more convenient and diversified community services for community people. Construction of the reasonable community service system is to materialize the fundamental purport of serving the people wholeheartedly in daily life of urban residents. This satisfies the increasingly substantial cultural demands of community residents and even tries to make community people enjoy the social life environment equally, thus community residents can get more benefits.

3.3. Apply the Co-Governance Mode of Diversified Participation and Negotiation

The core purpose of the big data technology is to offer convenient services to the human society by virtue of collecting, analyzing and dealing with data information. During the process of using the big data technology to realize negotiation and co-governance, it is necessary to reasonably identify the negotiating subjects and contents. This not only should guarantee positive participation of community residents and social groups, but also should ensure the ordered negotiating forms and processes. Community residents remain the previous way of solving problems, also use the negotiating results obtained by the new co-governance mode, and gradually establish the operational mechanism from establishment, adoption, implementation to feedback, so as to ensure the actual effect gotten by joint consultation. To perfect the system of diversified participation and negotiating co-governance in communities, it is essential to strongly develop community management and service functions, make innovations on the diversified participation mechanism, focus on the capacity of cultivating public community services and providing public welfare services for society, and promote benign development of community governance for social organizations and relevant institutions that are interested in community governance to

attend community governance. Community residents should combine with the big data technology as encountering difficulties and use data analysis processing advantages to timely solve residents' problems in their life and work. It is necessary to sound the community co-governance system of diversified negotiation, provide convenience for community residents to govern communities together, expand channels for various subjects to negotiate community problems, expand the way of negotiating community governance problems, sound the data platform required by negotiation, standardize the negotiating procedure standards, use the negotiating achievements, safeguard the way of combining accustomed way for grass-root community people with the big data method to solve problems, and maximize the advantages of the big data technology.

4. RESEARCH EXPECTATION AND PROSPECT

As a new thing in the informationized social development, the big data technology is widely used by all walks of life and arouses an unprecedented research climax at home and abroad. With the arrival of the informationized era, the big data technology not only brings new opportunities and challenges to the scientific and technical workers of information networks, but also gives huge enhancement on life quality of many people. The digital community will guide an unprecedented technical revolution, cause a great impact on various aspects of people in basic necessities of life, and also strengthen people's dependency on digital technologies in their life. In modern urban community governance, we should strongly use convenience of the big data technology to realize self-governance and self-service of urban community residents. In urban community governance, we should pay much attention to using big data thinking and community networks for management, focus on the fundamental construction of data communities, perfect the community system of diversified participation and negotiating co-governance, deepen the role of big data on urban community governance, and realize self-governance of urban community residents.

The difficulty of community services lies in collecting, reporting and checking grid information, timely and rapidly sorting out useful data information, and utilizing data to deal with existing hidden dangers and emergencies in communities. All of these should be supplied by community services. We should cultivate the community governance thinking in the Big Data Era, reinforce fundamental community construction in the data era, promote safe use and deep combination of the big data technology in community governance, and further perfect the community system with diversified participation and negotiating co-governance. The goal of modern community governance under the Big Data Era is to construct urban communities into intelligent digital life communities with convenient life for residents. In other words, it is necessary to drive the digital urban

communities to develop a sound and safe development track in the future. Then, it is essential to gather scattered digital communities together, synthesize a great intelligent community governance system, collect the system formed by mini-data into a big data system, and really enjoy convenience brought by the Big Data Era. The goal is to build the complicated and specific system engineering, which needs joint participation and mutual collaboration of individuals, communities and governments and also needs constant reformation of the digital information technology.

5. CONCLUSION

Urban community governance subjects should form the complete cognition on the application value of the big data technology and positively attempt to make innovations by focusing on big data in the community governance aspect. It is worth noting that it is both difficult to select the urban community governance innovation means and synchronously enhance innovation and effectiveness of urban community governance. Under the Big Data Era, it is not easy to achieve the expected goal of urban community governance innovation. Under the circumstance, to combine with applications of the big data technology and normalize urban community governance innovation is also a basic choice.

REFERENCES

- [1] Li Jianye, The Urban Community Governance Innovation Means under the Big Data Era [J], Chinese Logistics and Purchasing, 2019(23): 43
- [2] Zhu Lin, Wan Yuanying, and Dai Xiaowen, Research on Urban Community Innovation under the Big Data Era[J], Changbai Journal, 2017(06): 118-124
- [3] Lv Pan, the Impacts of the Big Data Era on Urban Community Governance [J], Comparative Research of Cultural Innovation, 2017, 1(03): 57-59
- [4] Zhao Rvzhou and Yue Fenglan, New Exploration of Urban Community Governance in the Big Data Era Practice Exploration and Enlightenment of Chengdu Chenghua District [J], Chengdu School of Administration, 2015(3): 173-175