

Research on the Problems and Countermeasures of Improving the Digital Governance Capacity of Urban Communities--Taking Meiyuan Xincun Community as an Example

*Yu Qin

*College of Humanities Social Sciences, Nanjing University of Aeronautics and Astronautics, Nanjing 210016, China

Abstract: The idea of a digital China was introduced at the 19th Party Congress, after which all regions of the nation launched to vigorously promote digital management, particularly in areas where population conflicts are more prevalent. This was done in order to improve governance capacity through the use of digital technology, which has since become the main goal of the current modernization of China's overall governance system. The issues encountered are still rather noticeable as we work to improve the capability of digital governance. As an example of Meiyuan Xincun community's attention on its digital governance capability to increase the difficulties encountered by the analysis, and so put up the corresponding ideal remedies, this article is primarily for the urban community digital governance status quo analysis.

1. INTRODUCTION

1.1 Research background

Accelerating the realization of digital governance skills has become the cornerstone of modern government governance at a time when digital technology is still developing. The old social structure has undergone significant transformation in light of the ongoing advancement of information technology, and information and data have emerged as significant cultural forces. The degree of affinities between digital technology and people's lives continues to expand in the modern world due to the substantial usage of digital technology in sectors such as transportation, policy advocacy, construction, and other areas of government. Therefore, in order for big data technology to better serve society, we must maintain improving our own digital use of capacity in line with the present trend of digital growth of social government. Currently, digital systems of community government are being continually enhanced, a variety of public services are being expanded, and the governance system of "one network for all" is being extensively pushed. Digitization is also being gradually extended to the grass-roots level in cities. People have been fully aware of the benefits of digitization in community government over the past several years in especially thanks to the convergence of epidemic prevention and control and digitization, setting the groundwork for enhancing the entire capability of digital governance in metropolitan areas. However, there are still many issues with community governance in the area of digital building. Many community digital projects are

still in the planning stages and have not yet been put into practice. Therefore, under the present situation, it is important to conduct a thorough examination of urban communities' digital governance.

1.2 Research significance

The trend of community administration going digital has grown more and more clear with the rapid growth of Internet technology. Many academics are currently investigating how digital technology is utilized in local government. Strengthening the examination of this feature has good theoretical relevance because the present study direction is varied and the development time was relatively short. The analysis of Meiyuan Xincun's digital governance not only assists in better comprehending the issues that arise during the process of community digital governance and to improve overall governance effectiveness, but it also serves as a foundation for other urban communities' digital governance, which has positive practical implications.

2. RELEVANT CONCEPTS AND THEORETICAL FOUNDATIONS

2.1 Relevant concepts Urban community

The word "community" first appeared in China around 1933, when Chinese scholar Fei Xiaotong first translated the word "community" by American scholar Robert Ezra Park and defined it as "community" Chinese "community" refers to the basic organization and structure of society. Together with the community theory

Email: 769177525@qq.com

of Tnnies, a famous German scholar, it has a profound influence on early Chinese sociology and science Tnnies defines a community as "a collection of people occupying a more or less clearly defined area."^[1] "A community is not only a collection of people but also a collection of organizational systems."The term "Shequ" (community) was first translated by Fei Xiaotong, who described it as a sizable collective created by the coming together of several social groupings or organizations. Community was described by China's civil affairs department in 2000 as a social group created by locals.

This essay suggests that the term "urban community" also refers to the community developed inside the designated territory of the city, in addition to the description provided by the civil affairs department.

2.2 Digitization of community governance

The sensible utilization of big data technology, Internet of Things (IoT) technology, etc. in the context of the rapid advancement of information technology, and its integration into numerous situations involving people, things, things, and other community members is referred to as the digitalization of community governance. Research on the Concept of Digital Governance the related research on community digital governance in the West is earlier than that in China. Lombardi defines community digital governance as follows: "That is, it is a new social system that uses Internet technology to connect urban residents closely."^[2] Elinor Ostrom believes that "community digital governance can be attributed to a new governance concept, that is, we should abandon one-way public management with ourselves as the core, focus on multi-party needs, and make full use of social resources, especially information resources and information technology means to solve community public management problems."^[3]

The community government model formed with multi-participation, which could gather all community residents and managers into a specific virtual platform, provide them with a variety of services, mainly for the collection of community information, timely detection of community problems, and find solutions.

2.3 Digital Governance Theory

The 1990s witnessed the emergence of digital governance theory as a result of the ongoing development of Internet technology, which combined governance theory with contemporary technology to create a brand-new governance theory with Dunleavy at its center.^[4] The basic idea of the digital governance theory is governance, which is primarily created by utilizing a range of information technologies to address societal issues and boost public engagement. The rearrangement of functions, the creation of an operating system that is more inclusive, and the realization of the logical use of digital technology are the three key concepts that make up the notion of digital governance. In general, the growth of contemporary information

technology is congruent with the philosophy of digital governance.^[5] From the standpoint of China's overall development, the current administration requires a management theory that can serve as a reference for the current social environment. It is obvious that a digital governance theory must examine the relationship between digital technology and theory governance in order to meet the demands of the present-day social development.^[6]

3. CURRENT STATUS OF THE CONSTRUCTION OF THE DIGITAL GOVERNANCE PLATFORM OF MEIYUAN XINCUN COMMUNITY

In an effort to improve their own digital governance capabilities, many local governments have taken steps to speed up the promotion of the development of digital governance platforms. The Meiyuan Xincun community has also actively undertaken a number of attempts in this regard.

3.1 General information of Meiyuan Xincun community

The Meiyuan Xincun community is found in the boundaries of Nanjing and is adjacent to the city's center in the eastern region of the city. Meiyuan Xincun Community contains a total area of 0.38 square kilometers, 8,654 people living there, with 3,296 families. Within the precincts, there are two institutions in total, along with 11 family compounds—a typical residential compound type community. The community now has 3 grid management party organizations, 4 party groups, and 180 party members.^[7]

3.2 Meiyuan Xincun Community Digital Governance Platform Basic Elements

Meiyuan Xincun community has launched the "Happy Cloud" community management system, which not only assists decision makers in better understanding the current living conditions of community residents, but also analyzes them by relying on big data analysis, and the entire platform elements include the following systems. This represents an important step in promoting digital governance.

3.2.1 Database

Due to the existence of additional management layers, the gathering of content to become complicated, and other features, the final data is quite diverse as a result of the implementation of digital governance. Through the development of a database, the MeiYuanXinCun community fully utilizes the big data analysis mode in order to realize information exchange and the creation of an efficient service system.^[8] As a crucial platform for community administration in Meiyuan Xincun, the "Happiness Cloud" has created a matching database that makes data collecting, organizing, and sharing possible.

3.2.2. Automated community office system

Currently, the “Happiness Cloud” community system has an automated office system that can intelligently input and process community work data. This system covers all facets of community governance, including health and medical care, party building management, governance, and disposal, adjusting the distance of community data inability in the past and ensuring that all lines of work are capable of completing rapid communication and disposal.^[9] Community employees now engaged in labor in the community frequently deal with numerous management, and the creation of this system enables management centralized.^[10]

3.2.3. Total Element Management System (TEMS)

The current “Happiness Cloud” system, which performs community planning from a holistic perspective and divides all of the community’s resources, including transportation, energy use, etc., into an Internet of Things platform, facilitates the collection of data on all aspects of the community and the integration of resources, assisting managers in understanding the overall situation of the community.^[11] The system will also automatically evaluate static data during the management process to comprehend the general characteristics of the present community inhabitants, including the number of residents, the population’s degree of education, and other factors. Additionally, the system itself is capable of quickly analyzing and comprehending the living environment index of the present community’s people as well as thoroughly assessing the degree of community governance.^[12] In order to increase the degree of resident self-government, this system is additionally set up for community inhabitants, who can utilize it to directly engage in community governance.

4. ANALYSIS OF PROBLEMS AND REASONS FACING DIGITAL GOVERNANCE ENHANCEMENT IN MEIYUAN XINCUN COMMUNITY

It is easy to see from the present Meiyuan Xincun community’s digital governance status analysis that the platform’s general quality has been steadily raised, the number of systems classified has grown, and the function has been significantly enhanced. However, in reality, the same encounter a variety of issues, mostly exhibited in various areas.

4.1 Problems Facing Digital Governance Capacity Enhancement in Meiyuan Xincun Community

4.1.1. Insufficient sharing and integration of data resources

In the present, Nanjing has established a specialized citizen information database, but different types of information on residents, such as medical information,

education information, etc., are still not in the database. Besides, there are many different types of data involved between different departments, so the problems with data sharing faced in promoting the digital governance of the community of Meiyuan Xincun are still significant.^[13] Many data sets remain to be shared, and the fragmented management of various sections within government departments still exists, which has a significant impact on data sharing because community governance involves a lot of data, the business compatibility of data from various departments is different, and there is also a desire to consider issues like confidentiality.

4.1.2. Low level of informatization of community managers

The key to achieving the improvement of the community’s capacity for digital governance is to make sure that the managers themselves are well-versed in information technology and have the ability to operate a range of systems with ease. However, from the perspective of the Meiyuan Xincun Community staff at this time, the current “Happiness Cloud” system involves numerous service systems and the entire platform offers a wide range of services, which undoubtedly raises the bar for the management team. The requirement of locals to engage and pay attention is becoming more and more evident in the present environment of growing popularity of digital information, in order to create connectedness and create the ideal digital ecosystem. A smooth implementation of the work of digital governance is undoubtedly affected by the community managers’ level of information technology, but at the moment many of them have low levels of education, especially given the presence of staff who are considerably older. As a result, the work cannot be done effectively.

4.1.3. The lack of motivation for residents to participate

The general engagement of residents is still minimal even though the Meiyuan Xincun community is accelerating the development of digital government and relying on the “Happiness Cloud” method to construct a digital governance system. According to the reality of the Meiyuan Xincun community, young people are most likely to be able to engage in community digital governance since they have generally learned advanced governance principles and are also better at using information technology systems. However, young people themselves are not very interested in community government, and because they are preoccupied with their daily tasks, they are rarely willing to engage in it during their leisure time.^[14] Although older people are more concerned with community governance, they are unable to fully engage in it because of their low technological capacity and cultural level, which prevents them from employing digital tools. As a result, neither the younger members of the community nor the older members can fully participate in it.

4.1.4. Low investment in system operation and maintenance

There are currently limited chances for social capital to participate in local digital governance due to the predominant role played by government investment. Because of this, the government can only invest a very small amount of money in Meiyuan Xincun's community digital governance. This makes it difficult to manage the platform's operation and maintenance going forward, and the performance issues with the information system update are particularly noticeable. According to the actual state of digital governance in Meiyuan Xincun, the community office equipment is outdated and the aging phenomena of much hardware is more pronounced, which makes it difficult to operate and administer the platform for community services.^[15] The "Happiness Cloud" digital platform's development has undergone several updates as part of the community digital governance process, however many of its contents have been left blank and unable to fulfill their intended functions.

4.2. Reasons for the Problem of Digital Governance Capacity Improvement in Meiyuan Xincun Community

4.2.1. Influence of traditional management thinking

Some departments still adhere to old management principles in the present climate of fast social change and are unable to keep up with the changes. The administration of community affairs is significantly impacted by issues including the lack of information technology knowledge, the inadequate grasp of digital governance by some government community management professionals, and the incomplete data sharing. Numerous government agencies, including the departments of civil affairs, public security, and business and industry, are active in the present community digital governance process. To integrate this digital information together demands the participation of several departments. Undoubtedly, the phenomena of information silos still persists under traditional management thinking, and there aren't any structures in place to encourage collaboration across different departments, which has an effect on how digital governance develops.

4.2.2. Insufficient attention to the talent pool

The government has just recently advanced the idea of urban community digital governance; actualization of this effort has only been going on for a short while. Due to the influence of conventional thinking, the Meiyuan Xincun community street leaders for digital community governance model currently use outdated traditional methods to solve problems and are therefore only at a low stage of digital development. Particularly, it has not been able to effectively reserve talent in accordance with the actual situation of community digital governance in a

timely manner, which has resulted in the fact that grass-roots staff are typically older and less educated, and do not have a sufficient understanding of digital governance, affecting the development of digital governance work.

4.2.3. Lack of effective government facilitation

Only after establishing more comprehensive incentives to encourage residents to participate in community digital governance and gradually form habits can we believe to achieve good governance outcomes. Good publicity alone won't be enough to get residents to actively participate in community digital governance. From a practical standpoint, however, it is evident that the residents of the current Meiyuan Xincun community lack the motivation to take part. Although the government has made much noise about the "happiness cloud" system, it has not taken a number of initiatives to capture the residents' interest. It is therefore clear that it will be challenging to motivate the residents in this situation to take part in community digitization.

4.2.4. Low level of market-oriented development

As community digital governance continues to advance, significant financial assistance is required for the operational inputs. However, based on the community's general position at this point, Meiyuan Xincun has not been able to successfully complete the self-financing of money and at the same time, there are no businesses and organizations ready to communicate.^[16] Additionally, the pace at which the digital information system is updated makes it challenging for the numerous departments now engaged in the digital governance process to keep up with the actual demands of development. The whole digital governance system is now built mostly with financial backing, which results in a low level of market-oriented development and makes it difficult for outside funds to join, which slows down overall growth.

5. ANALYSIS OF COUNTERMEASURES TO ENHANCE THE DIGITAL GOVERNANCE CAPACITY OF URBAN COMMUNITIES

To achieve the improvement of the overall governance capacity in the current context of urban communities' rising levels of digital development, it is necessary to pay attention to the fundamental requirements of digital governance while relying on a number of measures to do so.

5.1 Clarify the boundaries of digital governance authority, responsibility and data sharing

The effective division of rights and responsibilities for digital governance and the realization of data sharing are the keys to enhancing the current capacity for digital governance, and should be improved from the following perspectives in the context of the current level of digital

governance of urban communities that is continuing to improve.

Firstly, a top-down leading management mechanism must be established in order to fully coordinate the operation and management of the community digital governance system. This will speed up the process of promoting the optimization of the community governance system. Through the assignment of duties, the government and community agencies should continue to enhance the pertinent systems while offering direction for the creation of community digital infrastructure. Of course, in the process of establishing clear governance powers and responsibilities, pay attention to the relationship between the powers and responsibilities of government departments and grassroots community departments, a clear delineation of responsibilities at the same time, to clarify the scope of specific competencies, to ensure that the process of community governance is able to gather all types of information in a timely and effective manner, and to be able to solve all problems. Additionally, each unit should realize the unified management of the crucial equipment in the server room as part of the process of achieving the digital governance of the community. Additionally, each unit should offer specialized technical support for operation and management at the grassroots level by the higher-level government.

Second, strengthen the system for sharing data. To fully realize the benefits of community digital governance, data barriers must be removed, which calls for each unit to speed up the promotion of data sharing and the business sector to establish a unified data standard, ensuring that different departments can achieve data interoperability and laying the groundwork for the effective operation of community governance.^[17] Currently, government agencies must work together to create a flawless data-sharing system in order to actualize data sharing. They must also work closely with technology vendors to successfully migrate and share data. In order to improve community governance ability, this method must also tightly maintain confidentiality, provide effective information security protection, and optimize the value of the data.

5.2 Efforts to enhance the informatization level of community workers

Urban community employees at this stage tend to be older and less proficient in digital information technology, therefore efforts should be made to raise their level of information technology so that they can meet the demands of the present development stage. Since digital technology is so widely used, there are now stricter criteria for community workers. In this regard, government departments should prioritize professional business training for urban community workers through the construction of a flawless business training process, allowing community workers to carry out systematic training to assist employees in quickly mastering the digital system. Additionally, by gaining the ability to

standardize technology use, the function of digital governance may be better understood.

Reducing the transactional work of community workers is the second step. To ensure that their level of information technology improves, it is necessary to give them enough time for training. In addition, it is important to pay attention to the introduction of talent and provide excellent logistical support so that staff members have more opportunities to express themselves and have space to do so.

5.3 Focus on innovations in incentive methods for digital governance

In addition to providing the required education and publicity for them, it is necessary to adopt effective incentives to guide the residents to gradually use the digital system and form positive habits in order to encourage more residents to actively participate in digital governance and try to use the system on their own initiative. The ability of community members to use the digital system must first be improved through consistent education and publicity efforts. Because the digital governance system is frequently more complex, the promotion process should pay attention to the publicity and demonstration of the work so that community members can be trained promptly. Second, the system can be used to create a more powerful incentive system to increase people's enthusiasm for participating in community digital governance. Examples include creating a comment system on the platform for the digital system to encourage people to express their opinions, selecting one commenter per day for outstanding participation, and creating a point system with exchangeable points.

5.4 Continuous strengthening of digital governance infrastructure

The government can invite some private institutions to participate in the development of the community digital governance system by way of discounts, guarantees, and encouragement banks to provide access to services for businesses by way of these methods. In the current context of market-oriented development, it is necessary to invest additional funds on a sustained basis to ensure the digitization of community governance. Second, the government should continue to strengthen the replacement of community basic network hardware facilities, look into the state of community digital informatization hardware facilities, perform the necessary configuration management tasks, increase the number of people responsible for network operation and maintenance, and create a special management fund to support the advancement of big data technology, software systems, and other investment-related research and development.

6. CONCLUSION

In the framework of the modern era, the introduction of digital technology for community governance marks a fundamental shift. As a result, many places have begun to speed up the promotion of digital governance of urban communities, achieving governance innovation. Of course, implementing digital governance also involves a number of challenges. Through employing Meiyuan Xincun community governance to analyze the situation, it was discovered that the current administration was struggling to promote the digital development of community governance. These challenges included insufficient data resource sharing and integration, a low level of staff informatization, and a lack of funding for community management initiatives. As a result, in light of the current issues, it should also define the rights and obligations of digital governance and data sharing boundaries, work to raise the level of community workers' information literacy, pay attention to the development of innovative digital governance incentives, and continue to strengthen the development of digital governance infrastructure in order to improve the community's capacity for digital governance.

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