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# Practice and Exploration of Empowering Yulin Street Park Community Construction with Digital Governance

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## Abstract

Chengdu is deeply studying and implementing Xi Jinping's ecological civilization thought and the important instructions of General Secretary Xi Jinping on the construction of park cities during his inspection in Chengdu, Sichuan, vigorously promoting the construction of park communities. Yulin Street is one of the most representative urban streets in Chengdu. Trying to build a park community in the Yulin area not only conforms to its actual situation and needs but also complies with Chengdu's current development policies. Digital governance can be regarded as an innovative and efficient community governance model. This paper introduces this concept into the practice of park community construction, focusing on the dimensions, practical paths, and value orientations of digital governance empowerment. Through empirical research such as interviews, this paper understands the current status of community governance in Yulin Street and explores the empowering role of digital governance in enhancing resident participation, optimizing community services, improving the community environment, and addressing economic and development issues. Furthermore, it proposes specific strategies to promote the construction of a park community in Yulin Street. This paper aims to provide new ideas and references for the transformation of traditional urban communities into park communities, to offer a more comprehensive understanding of the value of digital governance, and to provide strong support for building a livable, harmonious, and modern urban community.

**Keywords:** Digital Governance, Park Community, Yulin Area, Human-City-Environment-Industry



## 1 | Introduction

In February 2018, when inspecting the Tianfu New Area in Chengdu, Sichuan Province, General Secretary Xi Jinping explicitly proposed to "support Chengdu in building a city that fully embodies the new development philosophy," emphasizing the characteristics of a park city, considering ecological value, and further planning and constructing Chengdu well. Chengdu has thoroughly studied and implemented Xi Jinping's thought on ecological civilization and the important instructions given by General Secretary Xi Jinping during his inspection in Chengdu, Sichuan, regarding the construction of a park city. Under the background of building a demonstration zone for a park city that practices the new development philosophy, Chengdu proposed the construction of "future park communities" in 2021. To put it simply, building a park community involves creating a new type of urban functional unit and a community life community within an area of about 0.5 to 3 square kilometers, featuring balanced functional layout, distinct industrial characteristics, pleasant spatial scale, and harmonious coexistence between mountains, water, people, and the city.

As one of the most representative urban streets in Chengdu, the Yulin area has a history of nearly 40 years and covers an area of about 2.9 square kilometers. Its functional areas, industries, street spaces, and natural environment align with the foundational requirements for building a park community. With the continuous advancement of urbanization and the increasing diversification of residents' needs, the community construction in Yulin Street faces challenges and issues similar to those in other areas of Chengdu, such as issues related to community residents, street construction, community environment, economy, and industries. To address these issues, attempting to build a park community in the Yulin area aligns with both its actual conditions and needs and conforms to Chengdu's current development policies.

In the modern urban governance system, digital governance, with its efficient, convenient, and intelligent characteristics, is gradually becoming an important means to promote the modernization of the community governance system and governance capabilities. In the process of building a park community, incorporating digital governance can enhance the living standards of community residents, improve the spatial form and development planning of the community, renovate the natural environment of the community, and promote community economic and industrial development. Through this research (as shown in Figure 1), it is hoped to provide useful experience and reference for the construction of park communities in Yulin Street and other similar areas in Chengdu, and promote the broader application and deeper development of digital governance in urban community construction.

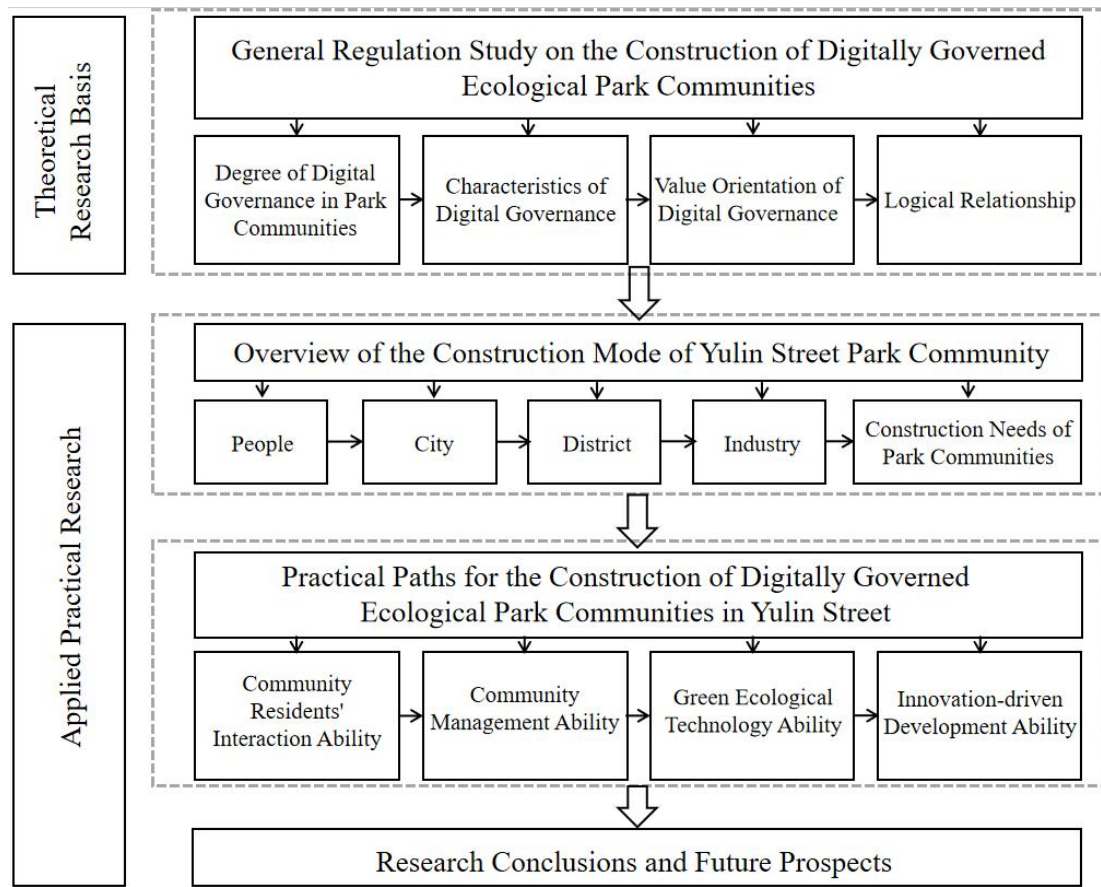


Figure 1: Research Framework

## 2| Literature review

### 2.1| Domestic and foreign research on digital governance

Through literature review, it is found that early experts and scholars studying digital governance mostly come from developed countries, with a focus on the application analysis of information technology means. The phenomenon of "emphasizing application while neglecting theory" is prominent in existing research, and the perspectives of concern are limited, usually associated with technical governance means such as e-government and e-governance, with obvious technology orientation. Later research emphasizes theoretical comparison, mostly summarizing and reflecting on the theory and practice of digital governance, as well as attempting to construct a theoretical system of digital governance. For example, American scholar Michael E. Milakovich believes that the meaning of digital governance can be understood from both broad and narrow perspectives: in a broad sense, digital governance refers to the form of social operation and organization supported by electronic technology, including comprehensive governance of economic and social resources; in a narrow sense, digital governance refers to the interaction between government and economic society, as well as the use of electronic technology in

government internal operations to facilitate government administration and enhance the level of democracy.

The earliest research results on the concept of digital governance in China appeared in 2004. Xu Xiaolin and Zhou Lixin published "The System Construction of Digital Governance in Good Governance of Urban Governments" in the journal *Management World* in 2004, proposing that digital governance is a concept that emerged after e-commerce and e-government, also known as e-governance, and is a new governance model in the digital age. The book mentions that "digital governance is the result of the new technological revolution, not just a few government websites or service network supply channels, information dissemination digitalization channels, it will change the interaction between government, civil society and economic and social governance entities represented by enterprises, change the traditional social value chain, and have a profound impact on the modernization of urban governance." Li Tao and Li Ruishen et al. comprehensively reviewed and defined the concept, connotation, and extension of digital governance based on relevant research at home and abroad in 2022: first, digital governance aims to optimize governance systems and governance capabilities; second, digital governance follows the "one core and multiple" model of national governance; third, digital governance covers a wide range of aspects, including economy, society, technology, etc. Wen Jun and Ao Shufeng proposed that from governance to digital governance, community digitalization construction promotes the comprehensive transformation of community governance forms. From the perspective of community digital governance construction actions, it presents as "digital front", "community intelligent governance", and "digital community" in terms of object dimension, subject dimension, and situational dimension. However, due to uncertainties in object technology, subject capabilities, and situational changes, community digital governance faces multiple risks and challenges.

## 2.2 | Relevant research on park communities at home and abroad

The park community is a microcosm of the park city, and it can indirectly reflect the basic situation of the development of the park city. Community parks are places for people to live outdoors, and they are also another living room and backyard in the living environment. Based on the definition of the concept of "park city", it is clear that its core is people-centered, with the construction of a "city in the park" model as the main focus, supplemented by the necessary construction of the market for the park city, expanding the green space in the community, and building a park community that satisfies the people. Li Shuang, Li Boyan, Liu Weiwei, Fu Mengdi, Ren Yueheng, and Zhu Yanpeng (2021) believe that the construction of a national park city should help community residents obtain more economic benefits, promote community development, and at the same time make community residents aware of the importance of protecting the ecology and let them enjoy the "ecological dividend".

Park communities play an important role in urban construction and are places for people to engage in outdoor activities. Reasonable planning and development of communities can create distinctive future park communities, allowing residents to enjoy high-quality green public services in the community. Zhou Yiyang, Yang Xiao, Li Guo, Xue Shuang, and Tan Jingbo (2019) believe that the essence of community planning is to focus on people's various needs and optimize the community environment based on these needs, with a focus on solving problems related to spatial scale, living environment, and community economic development. He Qixiao, Tan Shaohua, Shen Jize, and Sun Yawen (2022) believe that using community parks as a carrier to enhance the well-being of neighbors is a spatial path that can enhance the sense of gain, happiness, and security of community residents, and fully leverage the social benefits of community park green spaces. Yang Yang (2023) interpreted the connotation of Chengdu's future park communities, taking the planning of the Wenmai Lane and Xingxian Street Future Park Communities in Qionglai City as examples, and elaborated on their understanding and planning practices from the perspectives of construction principles, construction paths, spatial forms, lifestyles, and social forms, exploring the construction model of future park communities in the process of urban renewal. It can be seen that as sub-units of the "park city" concept, it is necessary to create beautiful, comfortable, convenient, innovative, diverse, comprehensive, and multi-level park communities under the guidance of ecological civilization in the new development concept of the park city.

### 2.3 | Research Review

By reviewing the existing major research outcomes, the following conclusions can be generally drawn:

Digital governance, as a new governance model, provides new ideas and technological means for the construction of park communities. It not only helps to enhance the intelligence and refinement of community management but also promotes democratic participation, collaborative governance, optimizes resource allocation, and facilitates cooperation between the government, enterprises, and social organizations. Digital governance and park community construction share congruent values, both embodying the people-centered development philosophy and ecological environmental protection. From the existing literature, research on digital governance has achieved fruitful results, but there are still some deficiencies. For instance, there is no unified understanding of the conceptual definition and theoretical framework of digital governance in existing studies. The solutions to the challenges and problems faced by digital governance still need further exploration and improvement. Lastly, there is a lack of in-depth case studies on the specific application and practice of digital governance in government management, especially at the community subunit level, which is also one of the main research directions of this paper.

As a microcosm of a park city, a park community is centered on people and emphasizes green,

ecological, harmonious, and sustainable development. The construction of park communities is significant for meeting people's demands for a better life, improving their quality of life, and enhancing community cohesion. In recent years, research on park communities in China has developed rapidly, with extensive coverage of planning and design, construction models, ecological environmental protection, and other aspects. Although certain research outcomes have been achieved, many challenges remain in specific practice and promotion, with different issues existing in the aspects of people, city, environment, and industry. How to achieve balanced economic, social, and environmental benefits in community units and realize the future park community model of Chengdu is the value orientation of this paper.

This paper aims to provide beneficial ideas and suggestions for the construction of park communities in Yulin Street by combining the theory and practice of digital governance. Although the application of digital governance in park community construction still requires further exploration and development, this paper offers a new perspective and valuable exploration for research in this field. Through empirical research and case analysis in the Yulin area, it is expected to provide more practical experience for the integration of digital governance and park community construction.

In summary, there is still room for further exploration and development in the practical case studies of digital governance and park community construction. Meanwhile, with the continuous development of information technology and the acceleration of urbanization, digital governance and park community construction will receive increasing attention and importance. The construction of park communities in Yulin Street is a practice of Xi Jinping's thought on ecological civilization and an important measure to promote the harmonious coexistence of ecological civilization construction and economic and social development.

### 3 | Problems faced by Yulin Street

Yulin Street is located in the southern part of the central area of Wuhou District, Chengdu, Sichuan Province, on the west side of the third and fourth sections of Renmin South Road. It faces Jinjiang Hotel across the river in the north, connects to the jurisdiction of Wuhou District South Railway Station Street in the south, is adjacent to the jurisdiction of Jiangxi Street and the jurisdiction of Fangcaodi Street in the high-tech zone in the west, and is connected to the jurisdiction of Tiaoshanta Street in Wuhou District in the east (as shown in Figure 2). This place covers an area of 2.9 square kilometers, with 28,876 permanent residents and a total population of 129,000.



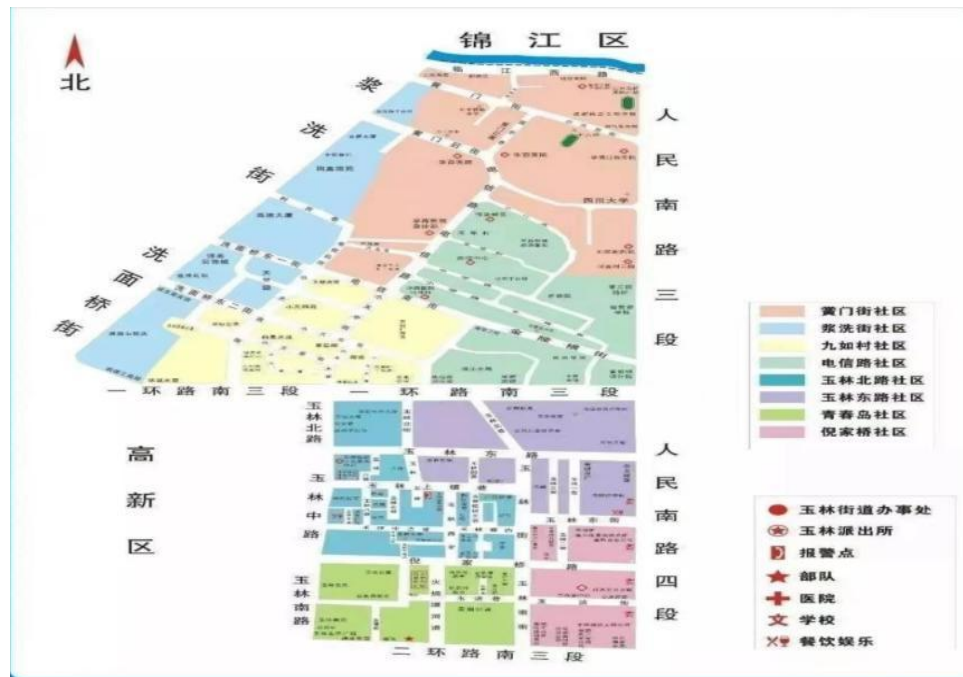


Figure 2: Map of Yulin Street

(Source: Baidu)

From a historical perspective, the formation of Yulin Street began in the 1980s, when most enterprises and institutions such as the Sugar and Wine Company and Chengdu Radio Factory built their headquarters and staff quarters here, leading to the mushrooming of residential buildings and the continuous development of schools, hospitals, kindergartens, and commercial districts. This has made Yulin Street one of the most vibrant neighborhoods in Chengdu with a rich street life.

In terms of administrative division, Yulin Sub-district has jurisdiction over multiple communities, including Yulin North Road Community, Yulin East Road Community, Nijiaqiao Community, Jiuru Village Community, Dianxin Road Community, Hongmen Street Community, Zongnan Community, Zongbei Community, Xinnan Road Community, Nan Hong Village Community and Tiaosangta Community.

This article selects Yulin North Road Community, Yulin East Road Community, and Nijiaqiao Community in Yulin Street based on sampling survey methods, and conducts on-site interviews with residents in these three districts. In order to comprehensively and multilayeredly understand the current situation, problems, and measures of the Yulin area, two residents from each of the Yulin North Road and Yulin East Road communities were selected as interview subjects based on different age groups and occupations. Due to the confidentiality of personal information, six residents including worker A, teacher B, and businessman C were interviewed anonymously.



Finally, we went to the competent department of Nijiaqiao Community to interview two relevant staff members and obtained the required data and information as shown in Table 1.

**Table 1: Profile of the interviewee**

Interviewee (Code)	Age	Occupation	Area	Interview Date
Community Staff 1			Nijiaqiao Community	2023.10.16
Community Staff 2			Nijiaqiao Community	2023.10.16
A	34	Worker	Yulin North Road	2023.10.16
B	50	Businessman	Yulin North Road	2023.10.16
C	41	Driver	Yulin East Road	2023.10.16
D	62	Retiree	Yulin East Road	2023.10.16

The research in this article adopts the form of interviews, based on empirical research and referring to existing literature, aiming to investigate the current situation of community construction and discover the following problems in Yulin area:

### 3.1 | Community Residents' Issues

With the rapid advancement of urbanization, the community structure of Yulin District has undergone significant changes. Under the traditional model, community residents generally knew each other well and built a close social network. However, with the continuous influx of migrants and the increasingly fast pace of life, community cohesion has shown a gradual weakening trend.

At present, many residents prefer to interact within their families or limited small groups, while showing a clear sense of alienation and lack of interaction with other members of the community. This decline in community cohesion is not only evident at the level of daily social interaction, but also deeply reflected in residents' participation in community public affairs.

Residents in Yulin District are accustomed to actively participating in various community activities and affairs, such as neighborhood mutual assistance and environmental improvement, to jointly maintain the harmony and development of the community. However, nowadays, a large number of residents show indifference towards community affairs and even have no idea about their neighbors' identities. This situation further exacerbates the dissolution of community cohesion and poses a severe challenge to the long-term stable development of the community.(In

the interview, retiree D said: "In the past, our neighbors had a close relationship, mutual care, and strong cohesion. Every holiday or weekend, people would spontaneously organize themselves to hold various cultural performances, parent-child activities, etc. in the community square, and the participation rate was very high. But now, such activities are rarely seen, and even if they are held, the number of participants has greatly decreased. For example, in the past, our community would regularly organize residents' meetings to discuss and solve some problems in the community, but now the participation rate of these meetings is also getting lower and lower. According to my knowledge, the participation rate of community activities has decreased by about 60% in the past ten years, and the voting rate of residents on community affairs has also decreased by about 40%." (Interview ID: 2023061016)

The Yulin neighborhood is facing the urgent task of reshaping community cohesion and stimulating residents' enthusiasm for participation. This requires community managers and researchers to deeply analyze the motivations for community structural change and explore effective community governance models to promote community harmony and development.

## 3.2 | Construction problems of Yulin Street

### 3.2.1 | Aging infrastructure

The main infrastructure of Yulin District was mostly built decades ago, but with long-term use and the passage of time, these infrastructures have shown significant signs of aging. In the field of water supply, some old water pipes have caused adverse effects on water quality due to corrosion problems, and frequent leakage accidents have occurred, which not only exacerbates the non-technical loss of water resources, but also poses a threat to the stability of water supply.

At the same time, the drainage system is also facing severe challenges. In some areas, due to historical reasons, the design standards of drainage pipelines are low, making it difficult to cope with heavy rainfall events under extreme weather conditions, which can easily lead to water accumulation, seriously affecting the daily passage of residents and tourists and the smoothness of regional traffic (as shown in Figure 3).



Figure 3: Drainage River in Some Areas of Yulin Street

Problems in power supply should not be neglected as well. Some electrical wires and cables have been in use for too long, resulting in safety hazards such as aging insulation layers and insufficient line capacity. This not only reduces the stability of power supply in the neighborhood but also poses a potential threat to public safety (as shown in Figure 4).



Figure 4: Electrical Circuits in Yulin Street Community

In addition, the maintenance of the above-mentioned infrastructure is also inadequate. Due to the lack of maintenance funds and technical capabilities, many facilities cannot be repaired in a timely and effective manner after malfunctioning, which further exacerbates their functional

### 3.2.2| Insufficient public service facilities

Due to historical planning and urban development, the construction of park green space in Yulin District is relatively lagging behind, resulting in a lack of sufficient quantity and quality of public green space within the district (as shown in Figure 5). This lack of park green space resources not only affects the overall ecological environment quality of the district, but also has a serious negative impact on the quality of residents' living. Residents cannot enjoy fresh air, pleasant environment and convenient leisure facilities at their doorstep, which undoubtedly reduces their quality of life and sense of happiness. The lack of park green space resources within the district has become an important factor restricting its ecological environment and improvement of living quality.



Figure 5: Park green space of Nijiaqiao Party-Masses Service Center

In the field of cultural services, the number and variety of cultural facilities in the neighborhood are insufficient, such as the lack of cultural venues such as libraries and museums, which are replaced by various commercial streets and restaurants. This cannot meet the growing cultural life needs of the public and restricts the improvement of the neighborhood's cultural soft power. (In the interview, community worker 1 said: There is indeed a shortage of cultural facilities in terms of quantity and variety. Taking the library as an example, there is only one small library in our community, and the collection and variety of books are limited, making it difficult to meet the reading needs of residents. The monthly borrowing volume of the library far exceeds its carrying capacity, resulting in many residents being unable to borrow their favorite books. In addition, there is a lack of cultural venues such as museums in the neighborhood, which cannot provide residents with diverse cultural experiences. Instead, there are various commercial streets and restaurants, which meet the dining and shopping needs of residents, but the supply of cultural life is obviously insufficient. (Interview ID: 2023011016)

As an important part of public services, medical care also faces challenges in Yulin Street. In terms of medical services, there is a lack of large-scale comprehensive medical institutions with high-level medical capabilities within the street area. Residents often need to seek services across regions when facing medical needs, which not only increases the cost of medical treatment, but also brings inconvenience to residents' daily lives.

### **3.2.3 | The contradiction between parking supply and demand is prominent, and the right to slow traffic is not guaranteed**

The existing parking facilities in the Yulin area, including old residential areas, hospitals, primary and secondary schools, have low standards for parking allocation. In recent years, with the rapid growth of motor vehicle ownership, the total shortage of parking spaces in the area has increased, and the contradiction between parking supply and demand has become increasingly prominent. At the same time, due to road-blocking parking, mixed traffic of motor vehicles and non-motor vehicles, and disorderly commercial outdoor display, the width of slow-moving space is insufficient or even missing, resulting in poor convenience and comfort for walking (as shown in Figure 6).



**Figure 6: Entrance of Yulin Primary School**



### 3.3 | Community Environmental Issues

As a neighborhood in Chengdu with a profound historical and cultural heritage, Yulin Street boasts rich historical and cultural heritage resources. These heritage resources are not only carried by ancient architectural styles, but also closely connected to the daily lives and traditional culture of local residents, together forming a unique historical and cultural landscape of the neighborhood.

However, with the rapid advancement of urbanization and the impact of modern social culture, the awareness of local residents and tourists for the protection of historical and cultural heritage is particularly weak. Some historical buildings are facing the risk of structural damage and changes in appearance due to years of disrepair and lack of necessary maintenance. At the same time, in the process of pursuing modern convenience and commercial interests, some residents and businesses have carried out improper renovation and decoration of historical buildings, resulting in the loss of their original historical features and cultural value, which poses a serious threat to the historical and cultural integrity of the neighborhood.

The protection of historical and cultural heritage is a systematic project that requires sufficient financial and human resources as support. Restoring and maintaining historical buildings and enhancing the overall environment of the neighborhood require sustained and stable financial investment. However, due to the relatively lagging economic development level of the neighborhood and limited funding sources, the protection work faces enormous pressure and challenges.

In addition, the sustainable development of Yulin block needs to consider the interests of multiple parties. In the process of urban renewal, it is necessary to properly balance multiple goals such as the protection of historical and cultural heritage, the improvement of residents' living conditions, and the enhancement of commercial vitality. How to find a balance point among these intertwined needs and ensure the sustainable development of the block is a topic that requires in-depth research and long-term exploration. (In the interview, community worker 2 said: We have encountered significant challenges in the protection of historical and cultural heritage. The lack of funds and manpower is the main bottleneck. There are nearly 30 historical buildings in our neighborhood that need regular maintenance and restoration, but the annual budget for this purpose can only meet about two-thirds of the demand. This has led to some buildings in poor condition due to lack of timely maintenance. At the same time, although most residents and businesses support cultural heritage protection, there are still a few people who have made improper alterations to historical buildings in pursuit of commercial interests or convenience. Last year, we handled five such cases of illegal alterations. (Interview ID: 2023021016)

### 3.4 | Economic and Industrial Development Issues

#### 3.4.1 | Economic development lags behind

Compared to other bustling commercial districts or emerging economic development zones, the economic development of Yulin District, located in the heart of Chengdu, shows significant lagging behind. This lagging not only reflects in the rate of economic growth, but also highlights the lack of economic vitality and innovation ability. Specifically, the commercial activities in Yulin District mainly focus on traditional retail, catering and small service industries, lacking the layout of large-scale commercial complexes, high-end brand stores or innovative technology enterprises. This has led to a conservative business atmosphere in the district, making it difficult to attract young consumer groups and high-end business investment. At the same time, due to the generally small scale of enterprises and businesses in the district, the lack of financial and technical support has restricted their ability to innovate and expand, further weakening the vitality and growth potential of the district's economy.

#### 3.4.2 | Single industrial structure

The problems in the industrial structure of Yulin Street cannot be ignored, mainly manifested in the excessive dependence on traditional industries and the lack of industrial diversity. For a long time, the economic pillars of the street have mainly been based on traditional industries such as retail, catering, and residential services. Although these industries have certain stability, their growth potential is limited and they are sensitive to changes in the external economic environment and consumption trends. In recent years, with the rise of e-commerce and changes in consumer shopping habits, some traditional retail businesses in Yulin Street have faced increasing competitive pressure. At the same time, due to the lack of diversified industrial support in the street, once traditional industries encounter recession or market fluctuations, the economic stability of the entire street will be seriously threatened. This single industrial structure not only restricts the growth potential of the street economy, but also reduces its ability to resist external risks. (In the interview, Businessman B said: Compared with other prosperous business districts, the business atmosphere here is indeed more conservative, lacking the layout of large-scale commercial complexes and high-end brands. This has limited our business growth and made it difficult to attract more young consumers and high-end investment. The customer flow of my store has only increased by less than 10% in the past three years, while the customer flow of stores in other business districts in Chengdu has generally increased by more than 30% during the same period. In addition, Yulin Street relies too much on traditional industries. With the rise of e-commerce, although my online sales have increased, the sales of offline physical stores have decreased by nearly 20%. This single industrial structure makes us lack flexibility and ability to resist risks when facing market changes. (Interview ID: 2023041016)

## 4| Empowerment Practice of Digital Governance in the Construction of Yulin Street Park Community

Based on the existing problems of community residents, street construction, community environment, economy and industrial development in Yulin Street, the idea of building a park community in the street was proposed. After that, an innovative and efficient governance model of digital governance was integrated to implement "resident participation and interaction empowerment", "smart city management empowerment", "green ecological technology empowerment", and "innovation-driven development empowerment". Through measures such as smart party building, the living standards of community residents were improved; through measures such as street management platform, the spatial form and development planning of the community were improved; through measures such as green building and energy-saving technology, the natural environment of the community was improved; through measures such as e-commerce media integration, the economic and industrial development of the community was improved. This will promote the construction of park communities in the future in this area, providing experience and ideas for Chengdu to build future park communities and park cities.

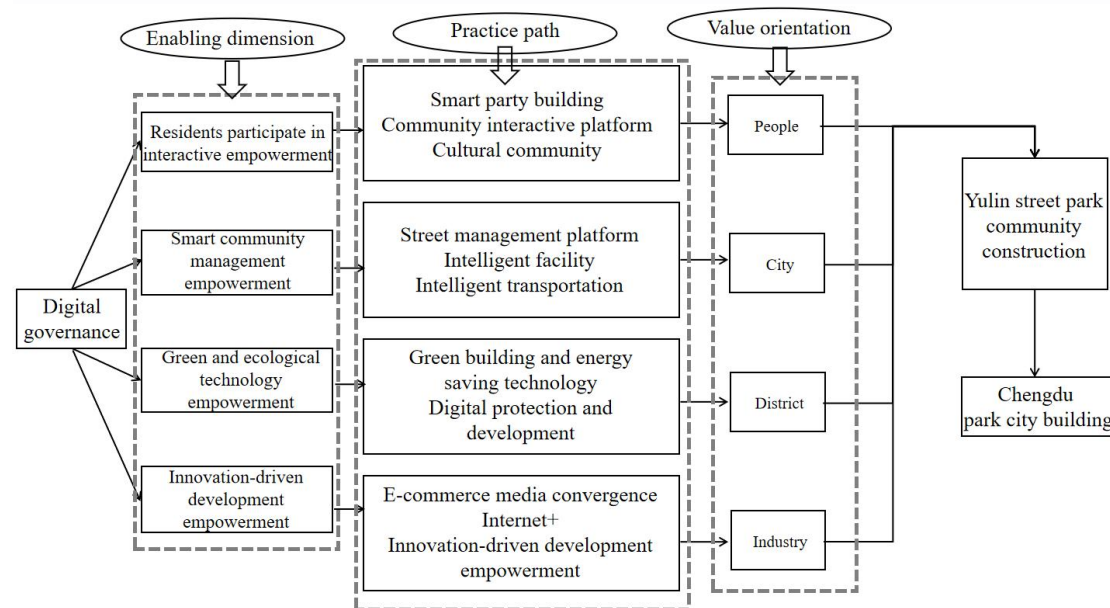


Figure 7: Logic diagram of digital governance empowering the construction of Yulin Street Park Community

### 4.1| Enhancing Community Residents' Living Standards through Digital Governance: "Resident Engagement and Interaction Enablement"

#### 4.1.1| Implementing the "Smart Party Building" Project

In the community governance of Yulin Street, the concept and technological means of "Smart Party Building" are actively introduced. By establishing a comprehensive party member



information management system, digital management of basic party member information is achieved, enhancing the efficiency of party member management. Leveraging the internet and mobile application technologies, an online party building platform is created, facilitating party members to participate in organizational life, learning exchanges, and other activities anytime and anywhere. Meanwhile, through technologies such as big data analysis, scientific evaluations of party members' participation are conducted, providing decision-support for party organizations. The implementation of the "Smart Party Building" project not only strengthens the connection and interaction between party organizations and members but also enhances the scientific nature and effectiveness of party building work.

#### **4.1.2| Build an interactive platform for Yulin's characteristic communities**

A community interaction platform with local characteristics is built tailored to the actual situation of Yulin Street. The platform not only provides basic functions such as community information dissemination and feedback collection but also incorporates elements of Yulin Street's history, culture, local customs, and other factors to create an attractive online community space. By hosting online Yulin cultural lectures, traditional handicraft exhibitions, and other activities, residents are attracted to participate and interact, enhancing their sense of identity and belonging to Yulin Street. The platform encourages residents to share their Yulin stories and daily life experiences, forming unique community memories and further strengthening the connection and cohesion among residents.

#### **4.1.3| Cultivating a Community Cultural Commons**

Through digital technologies such as establishing cultural databases and virtual exhibitions, local culture is reproduced and transmitted. Community websites and social media are utilized to promote online exchanges among residents and sharing of cultural stories. Online cultural events and digital art exhibitions are held, introducing modern elements to create a cultural brand with contemporary characteristics. Residents are encouraged to participate in the planning of digital cultural activities, enhancing their digital literacy and contributing to community culture together.

### **4.2| Improving Community Spatial Form and Development Planning through Digital Governance: "Smart City Management Enablement"**

#### **4.2.1| Establishing a Yulin Street Management Platform**

This platform integrates advanced technologies such as big data, IoT, and GIS to conduct comprehensive monitoring and smart management of various resources within the street. Through real-time data analysis, the platform can optimize resource allocation, improve management efficiency, and ensure smooth and safe operation of the street. The smart management platform also provides data support for decision-making in Yulin Street, promoting sustainable development of the street.

#### **4.2.2|Promoting Smart Facilities in Yulin Street**

Smart street facilities, including smart streetlights, smart trash cans, smart bus stop signs, etc., are actively promoted. These facilities can automatically sense environmental changes and make corresponding adjustments, providing residents with a more convenient and comfortable living environment. Smart facilities also assist the street in achieving energy conservation, environmental protection, and optimal resource allocation, driving Yulin Street towards a green, low-carbon, and smart direction.

#### **4.2.3|Implementing Smart Traffic Management in Yulin Street**

Modern information technology means such as smart traffic signal control systems and electronic payments are introduced to conduct real-time monitoring and smart regulation of traffic flow within the street, effectively alleviating traffic congestion. Smart traffic management also improves the safety and operational efficiency of street traffic, providing residents with a safer and smoother travel experience. Through the implementation of smart traffic management, the traffic conditions in Yulin Street will be significantly improved, further enhancing the overall image of the street and resident satisfaction.

### **4.3|Rectifying the Community's Natural Environment through Digital Governance: “Green Eco-technology Enablement”**

#### **4.3.1|Promoting the Application of Green Building and Digital Energy-saving Technologies in Yulin Street**

Green buildings adopt environmentally friendly materials and designs to reduce the impact of the building itself on the environment. At the same time, digital technologies such as smart energy consumption monitoring systems and automated energy-saving control equipment are utilized to achieve precise control of building energy consumption. New buildings can be encouraged to adopt green building standards, and existing buildings can undergo energy-saving renovations. Digital governance means can be used for real-time monitoring and optimized management of building energy consumption, thereby reducing carbon emissions across the entire street and enhancing the comfort of the living environment.

#### **4.3.2|Digital Protection and Development of the Traditional Streetscape in Yulin Street**

Firstly, advanced digital technology means such as 3D scanning and virtual reality are used to conduct high-precision recording and reproduction of the architectural style and historical relics of the traditional streetscape, establishing a comprehensive digital archive. Secondly, through the construction of digital platforms, these precious cultural heritage sites are presented to the public in an interactive and immersive manner, enhancing residents' and tourists' awareness and experience of the traditional streetscape. Finally, combining the concept of digital governance, a management system for street protection and development is established to achieve smart

management and supervision of historical building repairs, cultural event organization, and other tasks, ensuring the sustainable inheritance of the traditional streetscape.

#### **4.4 | Promoting Community Economic and Industrial Development through Digital Governance: “Innovation-driven Development Enablement**

##### **4.4.1 | Combining Digital Governance to Promote the Integrated Development of E-commerce and Social Media in Yulin Street**

To effectively expand the sales market of Yulin Street products and enhance their brand influence and market competitiveness, official stores are opened on mainstream e-commerce platforms, introducing the street's special products and high-quality services into the online market, breaking geographical restrictions and attracting a broader consumer base. Leveraging the wide reach and interactivity of social media, precise marketing and brand promotion activities are conducted to establish close connections with consumers and enhance product popularity and reputation. Strengthen training and support for e-commerce and social media operations teams to ensure professional operational capabilities and market insight, thereby more effectively promoting product sales and brand building.

##### **4.4.2 | Implementing the “Internet+” Industrial Upgrading Plan for Yulin Street**

This plan aims to promote the digital transformation and upgrading of traditional industries such as retail, dining, and resident services within the street through deep integration of internet technology and traditional industries. Smart management systems, online service platforms, and data analysis tools are introduced to enhance the operational efficiency and customer experience of traditional industries. Enterprises are encouraged to leverage the internet to expand markets, innovate business models, and cultivate new formats and industries, thereby enriching the industrial ecology of the street and enhancing economic competitiveness and sustainable development capabilities.

##### **4.4.3 | Implementing the “Innovation-driven Development Enablement” Plan for Yulin Street**

An innovation and entrepreneurship support fund is established to provide financial support and incubation services for startups and innovative projects. Industry-university-research cooperation is promoted, guiding universities and research institutions to collaborate with street enterprises and facilitating the transformation and application of scientific and technological achievements. Innovation and entrepreneurship competitions, innovation forums, and other activities are held to build exchange and cooperation platforms and attract innovative talents. Through these measures, Yulin Street will create a community filled with an innovative atmosphere and entrepreneurial vitality, injecting strong impetus into sustained economic growth.

## 5 | Conclusion

The empowerment of Yulin Street Park Community construction through digital governance is a practice of Xi Jinping's thought on ecological civilization and a significant measure to promote the harmonious coexistence of ecological civilization construction and economic and social development. This paper reviews and comments on the literature related to digital governance and park communities and obtains relevant information through field research and interviews with local communities, studying the current status of Yulin Street construction. It analyzes the existing issues in the four aspects of people, city, environment, and industry within the street community and explores the path for the construction of Yulin Street Park Community. Through the four enablement strategies of resident engagement and interaction, smart city management, green eco-technology, and innovation-driven development, digital governance can enhance community residents' living standards, improve community spatial form and development planning, rectify the community's natural environment, and promote community economic and industrial development. With the continuous advancement and innovative application of information technology, the application of digital governance in urban community construction will become more profound and extensive. Future research can further focus on the long-term effects and innovative paths of digital governance in enhancing community residents' quality of life, promoting sustainable community development, facilitating environmental remediation and ecological protection, and driving economic and industrial transformation and upgrading. This will help comprehensively understand the value of digital governance and provide strong support for building livable, harmonious, and modern urban communities.

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