

Original Research Article

Digital platform empowerment in urban community governance consortium: Implementation mechanisms of the "Xiaowu life" platform from China

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Abstract: Community is the foundation of urban governance. Digital technology has become central to modernizing China's grassroots governance. This study examines the "Xiaowu Life" platform in Wuhou District, Chengdu, revealing how it integrates community resources and fosters collaborative governance. By forming an organizational community linking government and residents, a value community with shared goals, an action community with coordinated efforts, and an interest community balancing diverse needs, the platform drives governance innovation. Future research should explore deeper digital integration to enhance efficiency, collaboration, and sustainability in urban community governance.

Keywords: Community governance community; Digital platform; Polycentric governance theory

1. Introduction

Grassroots governance is vital to national governance modernization and resolving key social issues. China's governance blueprint emphasizes co-construction, co-governance, and co-sharing, proposing a "social governance consortium" where all stakeholders participate and benefit. Nationwide, community governance consortia are being explored. With the rise of AI, blockchain, 5G, and big data, smart city concepts are extending to communities, making digital governance a key driver of innovation. It enhances governance tools, reshapes models, and transforms urban management^[1]. How exactly do digital technologies empower the construction of community governance communities? What is the underlying logic of this construction? These questions urgently require attention from the theoretical community.

2. Theoretical foundation and analytical framework

Polycentric governance theory originated in the mid-20th century, first proposed by British scholar Michael Polanyi in his book *The Logic of Liberty* to explain social order theory^[2]. This theory posits that the government is not the sole entity in public affairs governance and suggests exploring new governance paths beyond the government and the market. Polycentric governance theory has been applied in China's community governance, demonstrating high compatibility with community governance communities in terms of multi-subject participation, government role transformation, and the enhancement of residents' self-management capabilities^[3]. Grounded in the core principles of polycentric governance theory, this study constructs a framework for community governance consortia based on four key mechanisms: the coordination and linkage mechanism, the equality and autonomy mechanism, the mutual benefit mechanism, and the regulated operation mechanism.

First, the coordination mechanism illustrates how digital platforms empower urban governance by integrating diverse actors. In a polycentric framework, roles are distinct yet interdependent: the Communist Party of China provides value guidance, the government designs and implements policies, the public expresses interests,

social organizations act as key facilitators, and enterprises supply resources. This breaks the government-centric model, forming an organizational community. Second, the autonomy mechanism ensures equal participation and independent governance. By fostering shared norms and governance awareness, actors achieve consensus on co-construction, co-governance, and co-sharing, shaping a value-based community. Third, the mutual benefit mechanism accelerates interaction among actors. Digital platforms eliminate bureaucratic silos, enhance real-time information sharing, and transcend spatial barriers, streamlining cooperation and stimulating community vitality. This fosters an action-oriented community. Finally, the standardization mechanism ensures orderly governance. Digital platforms safeguard rights, balance stakeholder interests, and enhance transparency through public oversight, reinforcing accountability and forming an interest-aligned community.

This study examines the “Xiaowu Life” smart community governance platform in Wuhou District, Chengdu. From 2023 to 2024, the research team conducted 11 field investigations to explore how the platform enhances community governance and efficiency. Data was collected through in-depth interviews, participant observation, and secondary sources, ensuring validity via triangulation. Interviews with government officials, grassroots staff, and platform developers provided insights into platform design, resource integration, and governance optimization. Observations across 71 communities documented resident, worker, and enterprise interactions. Additionally, secondary materials, including user feedback, reports, and government documents, were analyzed to assess the platform’s impact.

3. Case analysis: The operational mechanism of digital platforms empowering community governance consortia

Amid the digital transformation wave, innovative community governance models have become essential for realizing the goals of co-construction, co-governance, and shared benefits. Rooted in the theory of polycentric governance, digital platforms—with their robust capabilities in resource integration and coordination—serve as key instruments in building community governance consortia^[4]. The *Xiaowu Life* platform in Chengdu’s Wuhou District exemplifies this approach, leveraging digital technologies to foster deep interaction and efficient collaboration among governance stakeholders. This has facilitated the construction of multi-faceted consortia encompassing organizations, values, actions, and interests. Through four primary mechanisms—coordinated linkage, equal autonomy, mutual benefit, and standardized operations—the platform has developed an organically integrated governance system, offering a concrete pathway and innovative paradigm for digital platforms in community governance^[5].

3.1. Coordinated linkage mechanism: Co-construction and shared governance in building a community-resident consortium

Governance stakeholders within a community exhibit distinct characteristics, and the development of a community often involves diverse interests and demands, forming various action units in governance^[6]. Wuhou District has pioneered the “Party Leadership with Dual-Line Integration” governance mechanism, facilitating the deep integration of multiple stakeholders and advancing the construction of a community governance consortium. At the macro level, Wuhou District has established the “Party Leadership with Dual-Line Integration” governance model^[7], with Party organizations at its core. This model enables the coordinated operation of mechanisms such as social and comprehensive governance linkage, problem-solving collaboration,

and performance evaluation. By reinforcing a governance approach that combines Party leadership, government responsibility, and social participation, the district has broken away from the traditional “single-leader” governance structure. This shift has fostered shared governance responsibilities, thereby enhancing governance efficiency and strengthening the community’s foundation. At the meso level, Wuhou District has achieved vertical coordination among Party organizations and horizontal collaboration among government departments. By using Party leadership to drive administrative integration and community-based micro-governance, the district has established an efficient collaborative governance system. Government agencies, communities, Party organizations, and social organizations leverage the *Xiaowu Life* platform for effective dialogue and cooperation, optimizing the governance structure and improving organizational capacity and mobilization efforts for community development. At the micro level, the *Xiaowu Life* platform serves as an open-source, interactive service system that fosters communication between local businesses and residents, facilitating demand-supply matching and information exchange. Its “Online Deliberation Hall” feature enables residents to express their concerns and opinions, while community managers and social organizations can respond in a timely manner. By integrating online and offline engagement, this function strengthens connections and trust among various stakeholders, ultimately forming a community-resident cooperative consortium.

3.2. Mechanism of equality and autonomy: Consensus building for a unified community-resident value consortium

The theory of polycentric governance emphasizes that governance effectiveness relies on the interaction and collaboration of multiple stakeholders rather than a single power center. The *Xiaowu Life* platform leverages digital technology and open-function design to foster deep cooperation and consensus formation among diverse stakeholders, including the government, residents, social organizations, and local businesses. Specifically, the platform features functional modules such as the “Online Deliberation Hall,” “Resident Wish Wall,” and “Neighborhood Topics,” providing diverse interactive channels that enhance information transparency and democratic governance. Residents can voice personal demands on the Wish Wall or propose suggestions on community affairs through the Deliberation Hall. In turn, community managers and social organizations can respond to these inputs in real time, ensuring that diverse voices receive fair consideration and effective resolution. This mechanism reduces information asymmetry, improves communication efficiency, and strengthens trust and willingness to cooperate between residents and community governance entities. Moreover, the platform’s transparent operational mechanism fosters openness and inclusivity in governance processes, encouraging more residents to actively participate in community affairs and shaping a governance pattern characterized by multi-stakeholder collaboration.

3.3. Mechanism of mutual benefit: Resource sharing for a unified community-resident action consortium

The *Xiaowu Life* platform leverages digital and intelligent technologies to optimize community service models and processes, advancing service precision and personalization. With the platform’s support, the government can promptly assess residents’ needs and feedback, enabling efficient resource allocation and tailored service delivery. For example, the platform employs big data analytics to evaluate residents’ demands in health, education, and daily life, facilitating relevant departments and social service organizations in providing

targeted public services. This approach to information sharing and resource integration not only improves service efficiency but also enhances the quality of public services available to residents. Consequently, it strengthens residents' trust in and support for both the government and community managers, fostering a mutually beneficial relationship among government entities, residents, and service providers. Additionally, the *Xiaowu Life* platform integrates merchant resources with social organizations, creating an organic fusion of social and commercial services within a cooperative network. Residents can conveniently access information about daily services, shopping discounts, and volunteer opportunities, while merchants and social organizations can expand their service reach and market presence through the platform. This mutually beneficial model enhances residents' convenience and satisfaction while simultaneously promoting business growth and the development of social organizations.

3.4. Standardized operational mechanism: Establishing a community-resident shared interest consortium

Effective supervision is a crucial element in community governance, preventing power abuse, enhancing transparency, and ensuring accountability. Digital platforms can establish robust oversight mechanisms that standardize stakeholder behaviors, ensuring that every decision and interaction in community governance is traceable. This approach effectively mitigates information asymmetry and prevents closed-door decision-making. The *Xiaowu Life* digital platform fosters a transparent supervisory mechanism through open and traceable information. Specifically, the platform features public community deliberation and decision-making functions, such as the *Online Discussion Hall* and *Wish Wall* modules, enabling residents to discuss and oversee various community affairs openly. Each decision and public affair resolution is meticulously recorded on the platform, documenting resident participation, feedback, voting results, and decision rationales. This traceability mechanism not only ensures transparency in governance actions but also enables effective monitoring and accountability. Moreover, the platform provides residents with dedicated reporting and complaint channels, allowing them to flag misconduct, regulatory violations, and unfair governance practices. With transparency and oversight mechanisms in place, residents' supervisory rights are fully safeguarded, reducing the risk of opaque operations and regulatory non-compliance. Additionally, the platform integrates data analysis and report generation systems, enabling real-time monitoring of community activities and automatically producing governance reports accessible to both residents and administrators. This further enhances governance transparency while empowering residents to actively participate in the supervisory process, ultimately fostering open, fair, and standardized community governance practices.

4. Conclusion

This study examines the “Xiaowu Life” platform in Wuhou District, Chengdu, to analyze digital platforms' role in urban community governance through the lens of polycentric governance. It explores the mechanisms shaping a governance consortium in the digital era. First, a coordinated linkage mechanism has been established. At the macro level, an integrated governance model—Party-led with government responsibility and social participation—has emerged. At the meso level, vertical and horizontal coordination integrates Party-building, administrative services, and community governance. At the micro level, the platform connects merchants and residents, facilitating demand-supply interactions. Second, an equitable autonomy mechanism leverages digital

tools for information sharing and decentralization, fostering collaboration and empowering stakeholders through distributed decision-making. Third, a mutually beneficial mechanism enhances service precision through digital technologies while encouraging resident participation, revitalizing community autonomy. Fourth, a standardized operational mechanism ensures governance transparency through regulatory oversight and legal protections, maintaining balanced interests among stakeholders.

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References

- [1] Liu Peigong. The "Intelligent Governance" Logic and Practical Path of Community Governance Consortium from the Perspective of Digital Governance [J]. *Theoretical Exploration*, 2023, (05): 77-84.
- [2] Wang Xinglun. Polycentric Governance: A New Public Management Theory [J]. *Journal of Jiangsu Administration Institute*, 2005(1): 96-100.
- [3] Chen Yanmin. The Theory of Polycentric Governance: An Institutional Theory of Autonomous Governance in Public Affairs [J]. *Xinjiang Social Science Forum*, 2007(3): 35-38.
- [4] Ren Keqiang, Hu Penghui. The Construction of Community Governance Systems from the Perspective of Social Governance Communities [J]. *Journal of Hohai University (Philosophy and Social Sciences)*, 2020, 22(5): 99-105+109.
- [5] Zhang Yi, He Xinmeng. Can Digital Empowerment Alleviate the Gap in the Equalization of Public Services?—A Case Study of Value Co-Creation in Community Public Services from a Resource Perspective [J]. *Chinese Public Administration*, 2021(11): 131-137.
- [6] Zheng Xiaodong, Huang Fan, Ma Haomeng. The Generation and Operational Mechanism of Community Micro-Governance Under Field Theory [J]. *Governance Research*, 2021, 37(1): 59-69.
- [7] Hu Weiwei, Zhang Di. The Construction Logic and Operational Mechanism of Smart Governance Communities in Urban Neighborhoods: An Empirical Study of "Smart·Home Space" in Chenghua District, Chengdu [J]. *E-Government*, 2022(9): 15-26.