



# Local Government Under the Background of Digital Government Construction

## Research on Governance Capacity Improvement

Jiahui Cao

Harbin Business University, Harbin City, Heilongjiang Province, China  
C1505362540@qq.com

**Abstract.** The construction of digital government has become an important engine driving the modernization of national governance systems and capabilities. Driven by the dual factors of rapid technological development and escalating public demands, local governments need to rely on digital tools to enhance governance efficiency, optimize public service provision, and strengthen policy implementation capabilities. However, in practice, local governments still face multiple challenges in advancing the construction of digital government, such as insufficient application of technology, poor data sharing, inadaptability of governance structures, inadequate talent support, and uneven digital literacy among the public. These issues not only restrict the full release of digital government efficiency but also affect the overall improvement of local government governance capabilities. This paper starts from the inherent logic between digital government construction and local governance capabilities, systematically analyzes the main dilemmas faced by local governments in digital transformation, and proposes a path for enhancing governance capabilities through the coordinated promotion of technology empowerment, institutional innovation, and organizational change, based on practical experience from typical regions. The study suggests that local governments should continue to invest in building a data governance system, integrating digital platforms, reengineering business processes, optimizing cross-departmental collaboration mechanisms, and cultivating digital talents, in order to achieve a deep transformation from technology application to governance model innovation. Promoting scientific government decision-making, precise management, and efficient services through digital means can effectively enhance local government governance capabilities and lay a solid foundation for advancing the modernization of national governance.

**Keywords:** digital government; local government; governance capacity; digital transformation

## 1 Introduction

The digital revolution has reshaped the operational logic of social governance and public services worldwide, and the construction of digital government has become a global strategic choice for countries to promote the modernization of national governance. In the context of the deep integration of digital technology and social econ-

© The Author(s) 2026

S. Garcia-Esteban et al. (eds.), *Proceedings of the 2026 5th International Conference on Social Sciences and Humanities and Arts (SSHA 2026)*, Advances in Social Science, Education and Humanities Research 1014, [https://doi.org/10.2991/978-2-38476-577-5\\_102](https://doi.org/10.2991/978-2-38476-577-5_102)

omy, the Chinese government has taken digital government construction as a key measure to advance the modernization of the national governance system and governance capacity, issuing a series of guiding documents and policy arrangements to promote the all-round digital transformation of government governance [3]. Local governments, as the direct executors of national governance policies and the main providers of public services, are the core carriers for the landing and implementation of digital government construction. Their digital governance capacity directly determines the effectiveness of national digital governance strategies and the quality of public services for the people.

In recent years, Chinese local governments have made remarkable progress in digital government construction, with the popularization of online government service platforms, the application of big data and artificial intelligence in social governance, and the continuous improvement of cross-departmental collaborative work efficiency. However, compared with the high requirements of national governance modernization and the growing public demand for convenient, efficient and personalized public services, the digital governance capacity of local governments still has obvious shortcomings. Existing studies have explored the dilemmas and paths of digital government construction from the perspectives of institutional design, technological application and talent cultivation [1,2,4], but there is still a lack of in-depth analysis of the inherent logical relationship between digital government construction and the enhancement of local governance capacity, and the research on the synergistic promotion mechanism of technology, system and organization is not sufficient.

Against this background, this paper takes the digital government construction background as the research context, takes the improvement of local government governance capacity as the research core, systematically sorts out the practical dilemmas faced by local governments in digital governance capacity building, explores the core value, realization mechanism and key conditions of digital government empowering local governance capacity, and puts forward targeted improvement paths. The research not only enriches the theoretical research system of digital government and local governance capacity, but also provides practical reference for local governments to break through the digital transformation bottleneck and improve the comprehensive level of governance capacity.

## **2 The Practical Dilemmas of Local Government Digital Governance Capacity Building**

### **2.1 The Legal System for Digital Governance is not Sound**

In fact, the construction of digital governance in our country is still far from mature. However, relying on our country's superior political system, remarkable technological development trend, and outstanding performance in areas such as information flow and social interaction, it demonstrates a promising development potential. The digital governance capability of the government is an important criterion for measuring government governance and a key entry point for promoting innovation in the government

governance system [1]. The widespread application of digital technology, while driving profound changes in government governance models, also poses new requirements for the construction of the legal system in the digital era. Currently, the overall construction of digital government in our country is still in the intermediate stage of development, transitioning from digital interaction to digital transaction processing applications. The laws, regulations, and institutional norms in the digital field are not yet sound, and a unified, standardized, scientific, and comprehensive legal system for digital governance has not been established. Firstly, the laws and regulations for digital governance are not sound. In the face of the continuous advancement of digital governance and the accelerating pace of digital reforms by local governments, the existing laws and regulations in the digital field often struggle to be updated and improved in a timely manner. There are certain legal gaps in areas such as data openness and sharing, data security guarantees, platform construction standards, and overall coordination and governance. There is also a lack of continuous and systematic laws and regulations for various governance challenges encountered by some local governments in digital governance practices. Secondly, the institutional norms for digital governance are not sound. Effective institutional norms have not been established in areas such as internal data management applications, platform construction and operation, departmental organization and coordination, subject responsibility supervision, and assessment and incentive evaluation within the government. At the same time, the definition of rights and obligations of local governments in digital governance is also relatively vague.

## **2.2 The Digital Governance Concept is not Updated in a Timely Manner**

Philosophy is the precursor to action, and establishing a scientific and correct digital governance philosophy plays a crucial role in enhancing the effectiveness of digital governance development. Enhancing the digital governance capabilities of the government is an inevitable requirement for adapting to the development of the digital era and embracing digital transformation. Currently, there remains a certain gap between the digital governance capabilities of local governments in China and the expectations of the public as well as the development of digitalization. There are still shortcomings in areas such as digital governance concepts, collaborative participation in digital governance, and the legal system of digital governance [2]. A prominent issue affecting the digital governance capabilities of local governments is that some leading cadres and government staff have not fully updated their digital governance concepts, and there are still certain deviations in their understanding of digital governance. Firstly, the traditional bureaucratic concept is deeply ingrained. Under the traditional bureaucratic logic, the government is the most important, or even the sole, dominator of governance activities, and it pays more attention to meeting its own governance needs in the actual governance process. Enhancing the digital governance capabilities of the government is an inevitable requirement for adapting to the development of the digital era and embracing digital transformation. Despite the bureaucratic concept having been impacted to some extent by the wave of the information era, with the continuous updating of governance concepts and digital technology, the pace of updating local government governance concepts often lags behind the construction speed of digital information

infrastructure. Some local governments have cognitive biases towards digital governance methods of thinking, institutional norms, etc., lacking modern digital governance thinking such as systematization, diversification, and data-driven approaches.

### **2.3 The Governance Structure is Difficult to Adapt to Digitalization Needs**

The construction of digital government is not only a technological transformation but also a profound change in organizational structure and governance model. However, many local governments still adhere to traditional bureaucratic structures, with significant departmental barriers and imperfect collaborative governance mechanisms. In this context, even with advanced technological platforms, it is difficult to achieve cross-departmental and cross-domain collaborative governance. Furthermore, local governments lack effective performance evaluation and incentive mechanisms in the process of digital government construction, leading to low enthusiasm among staff for participating in digital transformation and insufficient motivation for digital innovation. The service efficiency of digital government depends not only on the construction level of the government side but also on the public's ability to use it. However, in some areas, especially rural areas and among the elderly population, the problem of insufficient digital literacy is prominent, making it difficult for them to fully enjoy the convenience brought by digital government. The existence of the digital divide not only affects the equalization of public services but also restricts the improvement of digital government governance efficiency.

## **3 Paths to Enhancing Local Government Governance Capacity through Digital Government Construction**

### **3.1 Strengthen Digital Infrastructure and Build a Unified and Efficient Data Governance System**

According to the "Guiding Opinions of the State Council on Strengthening the Construction of Digital Government" issued in June 2022, promoting the construction of a digital government is not only a strategic choice in line with the trend of a new round of technological revolution and industrial transformation, but also an important measure to lead the digital economy to leap forward, drive innovation in digital social governance, and build a high-quality digital ecosystem through digital means. It plays a crucial supporting role in comprehensively deepening digital transformation in various fields [3]. To enhance technical support capabilities, local governments should increase investment in digital infrastructure, including broadband networks, cloud computing platforms, big data centers, etc., to provide a solid technical foundation for the construction of a digital government. At the same time, they should actively promote the in-depth and wide application of digital technology in areas such as government services, social governance, and urban management, effectively improving the digitalization and intelligence level of governance work. Data governance is the core of digital

government construction. The rapid development of big data technology has had a profound impact on local government governance. By effectively collecting, analyzing, and utilizing massive data, local governments have significantly improved governance efficiency and decision-making scientificity, achieving precise grasp of social dynamics. At the same time, big data has also prompted the transformation of government governance towards a more transparent and open model, strengthening interaction with the public. Local governments should accelerate the integration of data resources, establish a unified data standard system, and improve data sharing and opening mechanisms. At the same time, they should strengthen data quality governance, improve data accuracy, completeness, and timeliness. Furthermore, they should enhance the intelligent functions of platforms to increase online processing rates and service convenience.

### **3.2 Promote the Participation of Multiple Stakeholders and Establish a Diversified Governance Structure**

Promoting collaborative participation in governance by multiple stakeholders is not only an inherent requirement of meta-governance theory but also an important aspect of enhancing the level of government digital governance. With the rapid development of information technology and the continuous advancement of national governance modernization, digital government has become a key path for enhancing government governance capabilities, optimizing public services, and promoting socio-economic development [3]. In terms of digital construction and operation, the government should proactively open and share various types of information resources, actively promote cooperation with social entities such as enterprises, universities, and social organizations, jointly promote the opening and sharing of various types of data, narrow the data gap between the government and society, and achieve efficient allocation of data resources and interconnection and sharing of digital information. At the same time, while ensuring data security, various stakeholders are encouraged to participate in government digitalization construction, and a long-term mechanism is established to clarify the distribution of rights and responsibilities of cooperating entities and ensure the smooth and effective collaboration among multiple stakeholders.

### **3.3 Improve Cross-departmental Collaborative Governance Mechanisms and Enhance the Efficiency of Digital Government Governance**

The construction of digital government requires cross-departmental cooperation. Local governments should establish and improve collaborative governance mechanisms, including cross-departmental working teams, information sharing mechanisms, and collaborative decision-making mechanisms. By breaking down departmental barriers, optimal allocation of governance resources can be achieved. Furthermore, cooperation between the government, enterprises, and social organizations should be promoted to form a pattern of diversified co-governance. Talent is the key to the construction of digital government. Local governments should strengthen digital skills training to

improve civil servants' digital literacy and technical application abilities. Digital government has become an important way to promote the modernization of the government governance system and governance capacity. Against this backdrop, cadres, as the backbone of government operations, have a direct impact on the government's work efficiency and service level due to their digital literacy[4]. At the same time, professional digital technology talents should be introduced, and a talent cultivation mechanism for cooperation between the government, universities, and scientific research institutions should be established. Strengthen top-level design and improve collaborative development systems and mechanisms. At the national level, the central government should further strengthen its overall leadership in digital governance work, and establish an overall linkage and coordination mechanism from the central to the local levels by establishing relevant leading groups. At the provincial level, digital governance across various regions and departments should be promoted from top to bottom. Guidance and support should be provided to various regions and departments in terms of development planning, institutional arrangements, organizational structure, normative standards, etc., to achieve integrated and systematic development of government digital governance.

### **3.4 Strengthen the Cultivation of Cadres' Digital Capabilities and Enhance Their Ability to Perform Their Duties Digitally**

Enhancing the digital governance capabilities of the cadre team is a long-term and systematic task. Local governments need to build a professional, systematic, and scientific cadre digital capability cultivation system under the guidance of top-level design, combining local economic and social development characteristics with the needs of cadre competency and quality. Firstly, it is necessary to conduct assessments of cadres' digital governance capabilities and establish a training curriculum system based on classification and grading. Due to the uneven digital governance capabilities and varying participation levels of staff in different government departments and units, it is necessary to fully understand the digital governance situation of various departments and units of local governments and grasp the curriculum needs for enhancing cadres' digital governance capabilities through survey methods such as questionnaires and interviews, with the aid of relevant assessment tools and methods. Secondly, it is important to build a platform for enhancing cadres' digital literacy and skills, and continuously enrich cadre training scenarios. Local governments should gather various learning resources from relevant local departments, enterprises, research institutes, etc., and innovatively build a professional, diversified, and characteristic platform for enhancing cadres' digital literacy and skills. It is necessary to expand various learning scenarios such as digital work, digital learning, and digital innovation for cadres through multiple channels, build a digital literacy cultivation system that is in line with local characteristics and covers all government personnel, continuously enhance cadres' understanding of digital technology iteration and rapid information feedback, and enable cadres to continuously enhance their digital governance capabilities in modern digital platforms and rich practical scenarios.

## **4 The Deep Relationship Between the Construction of Digital Government and the Enhancement of Local Governance Capacity**

### **4.1 The Core Value and Strategic Position of Digital Government Construction**

The construction of digital government is an important part of promoting the modernization of national governance system and governance capacity. In the new era, digital government is not only a technological upgrade of government work, but also a strategic choice to adapt to the development of digital economy and meet the public's demand for high-quality public services. Its core value lies in breaking the information barriers between departments, improving the efficiency of administrative operation, and building a more open, transparent and service-oriented government. From a strategic perspective, digital government provides strong technical support and institutional guarantee for local governance, and becomes an indispensable driving force for the high-quality development of local society and economy.

### **4.2 The Realization Mechanism of Digital Government Empowering Local Governance Capacity**

Digital government empowers local governance mainly through multi-dimensional mechanisms. On the one hand, it promotes the innovation of governance models by means of data sharing, intelligent analysis and online services, changing the traditional government-led governance structure and forming a collaborative governance pattern. On the other hand, it promotes the transformation of service concepts, shifting from government supply-oriented to public demand-oriented, so as to improve the accuracy and effectiveness of public services. In addition, the improvement of data governance level and the construction of digital talent team also provide solid foundation and human support for the continuous improvement of local governance capacity.

### **4.3 Key Conditions for Digital Government to Effectively Improve Governance Effectiveness**

To make digital government truly improve governance effectiveness, several key conditions must be satisfied. First, it is necessary to realize the synergistic integration of technology, institutions, organizations and social forces, so that digital technology can be combined with actual governance scenarios. Second, institutional innovation and organizational reform are essential premises, which can eliminate institutional obstacles in the process of digital transformation. Only under the guarantee of complete systems, reasonable mechanisms and sound support conditions, can digital government play its due role and continuously enhance the level of local governance capacity. In summary, the relationship between the construction of digital government and the enhancement of local governance capabilities is not a simple linear one, but rather a

dynamic, interactive, and systematic one. Only when synergistic effects are formed in terms of technology, system, organization, and talent can digital government truly become an important driving force for enhancing local governance capabilities.

## 5 Conclusion

With the continuous advancement of technologies such as cloud computing and big data, local government digital governance capability is the ability to play a role in areas such as smart city construction, optimization of public service supply, enhancement of community integration capacity, and innovation of public participation forms, relying on advanced information technology[5]. Local government digital governance capability originates from the deep embedding and innovative application of information technology. As an important carrier of organizational reform in public departments, the government integrates intelligent tools and data resources systematically, innovates public service models, optimizes information resource management processes, and significantly improves the efficiency of public policy formulation and service resource allocation[6].

In the new era, the construction of digital government is facing new development opportunities and higher requirements. Local governments should take the modernization of national governance as the overall goal, based on local actual governance practice, break through the digital transformation bottleneck from the aspects of concept update, institutional improvement, technological application and talent cultivation, and realize the profound transformation from simple digital technology application to in-depth governance model innovation. At the same time, local governments should strengthen inter-regional exchange and cooperation, learn from the advanced experience of digital government construction at home and abroad, and explore a digital government construction path suitable for local characteristics. In the future, with the continuous deepening of digital technology innovation and the continuous improvement of the digital governance system, digital government will play a more important role in empowering the improvement of local governance capacity, and lay a more solid foundation for promoting the all-round modernization of the national governance system and governance capacity.

## Reference

1. Liu Shijin. Research on Local Government Digital Governance Capacity Based on Public Values [D]. Shandong University of Finance and Economics, 2025
2. Kong Jianhan. Research on the Paths to Enhancing Local Government Digital Governance Capacity from the Perspective of Meta-governance [J]. Journal of the Party School of the CPC Zhengzhou Municipal Committee, 2024, (06): 62-67
3. Chen Fang. Research on the Dilemmas and Countermeasures of Grassroots Government Data Sharing in the Context of Digital Government [D]. Shanxi University of Finance and Economics, 2025

4. He Kai. Research on the Path to Enhancing the Digital Governance Capacity of Ethnic Minority Area Governments in the Context of Digital Government [D]. Guizhou University, 2025
5. Alonso RG. Castro LD. Technology Helps. People Make: A Smart City Governance Framework Grounded in Deliberative Democracy[M]. Springer International Publishing, 2016.
6. Jr. Gil-Garcia, S. Dawes Sharon and T. A. Pardo. Digital Government and Public Management Research: Finding the Crossroads. in Public Management Review. Vol. 20, No. 5, 2018: 633-646.

**Open Access** This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

