

# Process Reengineering and Efficiency Improvement Path of Local Government E-Government Services

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**Abstract.** With the rapid development of information technology, local government e-government services are facing problems such as complex processes, information silos, and insufficient departmental collaboration, which affect service efficiency and quality. Local governments need to optimize and integrate administrative processes through the reengineering and efficiency improvement of e-government service processes. By establishing a unified technology platform, promoting cross departmental data sharing, and optimizing internal government management processes, the response speed and service quality of e-government can be effectively improved, thereby enhancing government transparency and public satisfaction. Implementing these strategies not only helps improve government service efficiency, but also enhances trust and participation from all sectors of society, promoting modernization of government governance.

**Keywords:** E-government; Process Reengineering; Efficiency Improvement; Data Sharing; Cross Departmental Collaboration.

## 1. Introduction

The traditional government management model and service processes are difficult to adapt to the rapidly developing social needs, leading to serious problems such as information silos, lengthy processes, and insufficient collaboration, which seriously restrict the efficiency and quality of government services. How to achieve efficient, transparent, and intelligent government services through the process reengineering and efficiency improvement of e-government has become a core issue that urgently needs to be addressed. Exploring the path of reengineering and improving the efficiency of local government e-government service processes, analyzing the theoretical basis, practical path, strategic measures, and guarantee mechanisms for their implementation, and providing theoretical support and practical guidance for improving the level of local government services.

## 2. The Current Situation and Challenges of Local Government E-government Services

### 2.1 Definition and Development History of Local Government E-Government Services

Since the launch of information technology construction by the Chinese government, local government e-government services have gradually evolved from a single government website construction to more complex service platforms. This process has gone through a development stage from information disclosure to online business processing, and then to the construction of an integrated government service platform. Local governments promote the informatization process by establishing government internal and external networks, building information resource libraries, and integrating service systems, in order to enhance government transparency, simplify work processes, and improve work efficiency. Although some progress has been made in technology, there is still significant room for improvement in overall service capabilities, platform interconnectivity, information sharing, and other aspects.

### 2.2 Main Challenges Faced by Local Government E-Government Services

The lack of technological uniformity and platform fragmentation have made it difficult for information systems of various government departments to communicate, seriously affecting data sharing and resource integration[1]. The low level of technological infrastructure and digitalization

in some regions limits the widespread coverage and deep application of e-government services. At the institutional level, the government management system, division of departmental functions, and traditional administrative processes often fail to adapt quickly to information transformation, resulting in low information flow efficiency and lengthy approval processes. The data security and privacy protection mechanisms of local governments in e-government services are relatively weak, lacking effective legal and regulatory support, which has a negative impact on public trust and participation.

### **3. Theoretical Basis for the Reengineering of E-Government Service Processes**

#### **3.1 Basic Concepts and Methodology of Process Reengineering**

The core goal of process reengineering is to break down traditional functional barriers, reconstruct cross departmental collaboration mechanisms, eliminate redundant links, shorten business processes, and improve service quality. In the e-government environment, process reengineering usually involves two important aspects: optimization of information flow and restructuring of service processes. Firstly, information flow optimization requires government departments to achieve seamless connection of data and information on electronic platforms, thereby eliminating information silos between departments, ensuring real-time sharing of information, and avoiding work delays caused by information lag or incompleteness.

Service process reengineering requires the government to adjust the existing process path from the perspective of the public based on the needs of service recipients. Optimize the approval process, reduce unnecessary steps, promote "one window" or "one-stop" services, and enable various government services to be completed through a unified platform. Therefore, the methodology of process reengineering generally includes four stages: process diagnosis, process reconstruction, process implementation, and process monitoring. The process diagnosis stage mainly involves data analysis and process review to identify bottlenecks and inefficient links in the existing process; Process reengineering is the process optimization plan proposed on this basis and the design of new processes; The implementation phase of the process involves carrying out actual operations according to the newly designed process and ensuring the smooth operation of the new process; Finally, the process monitoring phase ensures continuous improvement and optimization of the process through a continuous feedback mechanism.

#### **3.2 Key Theoretical Support for E-Government Process Reengineering**

The service chain theory emphasizes that through a clear service chain, the government can organize resources and arrange services more efficiently, ensuring that each link can accurately respond to public needs[2]. In the e-government environment, the construction of a service chain is not only about optimizing service processes, but also fundamentally reshaping the interactive relationship between the government and the public, ensuring that the services provided by the government are no longer fragmented services, but collaborative services based on overall needs. The theory of networked collaboration focuses on how government departments can achieve efficient collaborative work with the support of information technology. Through networked information platforms, cross departmental and cross level collaboration can be achieved, reducing latency and errors in information transmission, and improving the timeliness and accuracy of decision-making.

The theory of information flow starts from the perspective of information flow, studying how government information flows efficiently through information systems, so that various policies, instructions, and services can be timely conveyed to relevant departments and the public. Specifically, in terms of e-government process reengineering, information flow theory emphasizes the important role of data integration, storage, analysis, and feedback mechanisms throughout the entire reengineering process. Based on these theoretical supports, e-government process reengineering is not only about simplifying administrative processes, but also fundamentally rethinking and designing

government service models to ensure that the government can efficiently respond to public needs in the context of informatization, improve service quality and satisfaction.

## **4. Practical Path for Reengineering the E-Government Service Process of Local Governments**

### **4.1 Optimize Internal Government Management and Service Processes**

The government needs to comprehensively review existing management and service processes, analyze the actual operation of each process link, and identify redundant, inefficient, or unnecessary steps. Based on this analysis, the process reconstruction method is adopted to optimize the existing process. Specific measures include simplifying the approval process, reducing administrative steps, and improving decision-making efficiency. By using an electronic platform, we can achieve "one-stop" government services, reduce the transmission of paper documents, and achieve electronic submission and review of materials, thereby shortening the service cycle. Optimize the internal management process of the government, promote the clarification of functional department powers and standardization of processes, and use information technology to monitor and coordinate the work of various departments in real time. Build a unified government work platform to achieve online application, approval, feedback, and statistics of various government services, ensuring transparency and efficiency in all work.

In terms of optimizing service processes, efforts should be made to break through the limitations of traditional offline service models and promote the transformation from "window services" to "platform services". By building a unified online service platform and integrating various government services, the public can easily and quickly complete various tasks at any time and place, without the need to personally go to the government service hall. This transformation not only improves work efficiency, but also enhances the flexibility and convenience of services, meeting the diverse needs of the public. At the same time, the government needs to regularly conduct evaluations of service processes, use big data analysis and feedback mechanisms to monitor the operation of services in real time, and obtain genuine feedback from the public on services. By continuously tracking and optimizing service processes, potential issues are identified and improved in a timely manner to ensure a steady improvement in service quality. The introduction of regular evaluation and feedback mechanisms can help the government identify weak links and unsmooth parts in services, enabling process improvement not only to have immediate effects, but also to achieve long-term management, promoting the continuous optimization and innovation of the government service system.

### **4.2 Strengthen Data Sharing and Cross Departmental Collaboration**

Establish a unified data standard and data sharing mechanism to ensure that all government departments can share data within a unified framework[3]. Data sharing does not mean that all data must be open, but rather selectively shares relevant data based on government business needs and the needs of service recipients, avoiding repeated information entry and submission, and reducing the cost of handling affairs for the public and enterprises. In order to achieve data sharing, the government needs to establish a sound data management system, classify and standardize data, and strengthen data security and privacy protection measures to ensure that data sharing does not infringe on the legitimate rights and interests of the public. Promote cross departmental collaboration and establish a collaborative work mechanism based on data sharing. Under the traditional government management model, there are significant functional barriers between departments, leading to low efficiency in government operations.

In the e-government environment, by establishing cross departmental collaboration platforms, various departments can access relevant data in real time, break down information barriers between functional departments, and promote collaborative work among government functional departments. To achieve this, local governments need to rely on technologies such as big data and cloud computing

to build centralized data platforms and realize centralized management and application of data resources. Through this platform, departments can obtain corresponding data support according to different business needs, collaborate on work, and make quick responses and decisions based on data analysis. This move can not only improve administrative efficiency, but also help the government achieve precise policy implementation and resource allocation. Another key to cross departmental collaboration is process reengineering and optimization. The government should redesign the workflow between departments based on the actual situation of data flow, so that departments can collaborate efficiently on a common platform, reduce unnecessary intermediate links, and improve the transparency and efficiency of administrative work.

## **5. Strategies and Measures to Improve the Efficiency of Local Government E-Government Services**

### **5.1 Comprehensive Application of Information Technology and Digital Means**

Build a unified digital platform, gather data resources from various departments, and form a global digital information system. On this basis, big data technology is used to conduct in-depth analysis of government service data to identify bottlenecks and deficiencies in services, further optimize government service processes, and ensure accurate and efficient services. Through artificial intelligence technology, the government can achieve automated processing in approval, service, consultation and other links, reduce manual intervention, and improve approval speed and accuracy.

The widespread application of cloud computing can provide local governments with more efficient computing power and storage space. Through cloud services, government departments can achieve cross regional and cross departmental data sharing and collaboration, further improving administrative efficiency. The government should encourage various government service platforms to achieve elastic expansion through cloud computing, ensuring that the platforms can flexibly adjust resources according to changes in service demand, thereby maintaining efficient operation. This information technology can also be used to enhance the government's decision-making support capabilities. By establishing an intelligent decision-making system, the government can monitor the operation of various government services in real time, dynamically adjust policies, and optimize resource allocation. The comprehensive application of digital means can not only improve the efficiency of internal government management and services, but also further reduce administrative costs and enhance the public's experience in handling affairs.

### **5.2 Innovation and Upgrade of Government E-Government Service Platform**

The government should focus on promoting the integration and optimization of e-government service platforms, forming a unified and comprehensive government service platform[4]. By integrating the business systems and data resources of various departments, a multifunctional and one-stop service platform is established, allowing the public to complete various government affairs on one platform, reducing the need for repeated login and information input, and improving work efficiency. The innovation of platforms should not only be limited to functional expansion, but also focus on improving user experience. By introducing mobile Internet technology, the government can develop applications that adapt to mobile terminals, tablet terminals and other multiple terminals to achieve "anytime, anywhere" access to government services, so that the public can successfully complete all kinds of government affairs at any time and anywhere.

The upgrade of e-government service platforms should also focus on the security and stability of the system. With the increase of data volume and the expansion of service content, the government should strengthen the security protection of platforms, especially in data storage, information transmission, identity verification, etc., to ensure that the personal information of the public is not leaked, tampered with or abused. The government should also actively promote the intelligent upgrading of platform functions, combining artificial intelligence and big data analysis technology to

optimize user interaction experience. Through intelligent decision-making assistance and automated approval mechanisms, the government can improve service efficiency and quality. In order to ensure the continuous updating and optimization of the service platform, local governments need to establish a dedicated technical support team to regularly inspect and evaluate the platform, timely discover and solve potential technical problems.

## **6. Measures to Ensure the Reengineering and Efficiency Improvement of Local Government E-Government Service Processes**

### **6.1 Institutional Safeguards and Policy Support**

The government should formulate and improve relevant laws and regulations, clarify the legal framework and regulatory mechanism of e-government, and ensure that all e-government activities are carried out in accordance with the law and regulations. This includes strict regulations on data security, information protection, privacy rights, and other aspects to address the new challenges brought by information technology applications. The government should introduce special policies to promote the widespread implementation and in-depth development of e-government, ensuring the rational allocation and efficient utilization of resources. The focus of policy support should include support for the construction of e-government infrastructure, funding for e-government construction in various departments, and technical support for platform construction. By implementing targeted and actionable policies, the government can address practical issues encountered in promoting e-government, such as inadequate interdepartmental collaboration mechanisms and information silos. The government should strengthen cross departmental coordination and cooperation, establish a cross departmental coordination mechanism for e-government work, and ensure information sharing and business collaboration among departments. The government should also clarify the division of responsibilities, strengthen supervision and assessment, and ensure that policies are implemented effectively.

### **6.2 Talent Cultivation and Social Participation**

The government should increase its efforts to cultivate talents related to e-government, and enhance the information technology literacy and business capabilities of existing staff[5]. Government officials can enhance their professional abilities in information technology, data analysis, system development, and other areas by organizing specialized training courses and conducting regular skill evaluations and certifications. The government should guide and encourage universities and research institutions in the field of public services to cooperate with government departments, carry out targeted training and research, and cultivate a group of composite talents who understand both technology and government management. The enthusiasm for social participation is another important guarantee for improving the quality of e-government services. The government should strengthen cooperation with various forces such as social organizations, enterprises, and civil society groups, and encourage broad participation from all sectors of society in the design and optimization of government services through the establishment of open platforms. Especially when promoting service innovation and process reengineering, it is necessary to combine public needs and collect feedback and suggestions from all sectors of society to ensure that government services are more in line with the actual needs of the public. By enhancing social participation, the government can continuously optimize service processes, improve service efficiency, and ensure the sustainability and adaptability of e-government construction.

## **7. Conclusion**

The reengineering and efficiency improvement of local government e-government service processes are important ways to enhance the level of government public services and promote modernization of governance. By optimizing internal government management, strengthening data

sharing, and promoting cross departmental collaboration, the efficiency of government work can be significantly improved, and interaction and trust between the government and the public can be promoted. To achieve efficient and accurate e-government services, a comprehensive guarantee of institutional safeguards, policy support, and talent cultivation is required. In the future, local governments should continue to deepen the construction of e-government, innovate service models, promote the reconstruction of service chains, better adapt to the needs of social development, enhance governance capabilities, and ultimately achieve the goal of efficient, transparent, and convenient government services.

## References

- [1] Guan Chao. Analysis of Electronic Document Encryption Technology in E-Government [J]. Science and Technology Wind, 2024, (36):52-54.
- [2] Ling Chuanli. Financial standardization process reengineering and efficiency improvement in the era of artificial intelligence [J]. Chinese Brand and Anti Counterfeiting, 2024, (12):173-175.
- [3] Zhou Liping, Zhao Feng, Lu Xiaojuan, etc. Application of Process Reengineering Theory in Patient Admission Procedures [J]. Modern Hospital Management, 2024, 22 (06): 63-66.
- [4] Bi Junjun. Exploration of the aging path of digital human society e-government services [J]. Employment and Security, 2024, (11):16-18.
- [5] Yin Xing, Suolang Laji, Li Hao. The Dilemma and Approach of Xizang County level Government E-government Information Sharing [J]. Xizang Development Forum, 2024, (06): 97-102.