

Postprint: Impact Path Analysis of E-Government Performance from a Service-Oriented Government Perspective

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Abstract

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Full Text

Preamble

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Analysis of Impact Paths for E-Government Effectiveness from the Perspective of Service-Oriented Government

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Abstract

[Purpose/significance] This study explores the paths influencing e-government effectiveness from the perspective of service-oriented government and reveals its underlying mechanisms. **[Method/process]** From the service-oriented government perspective, a structural model was constructed with information quality, function quality, and service quality as independent variables; public use and internal application as mediating variables; and e-government effectiveness as the dependent variable. An empirical study was conducted using survey data from seven prefecture-level municipal governments in Hunan Province. **[Result/conclusion]** The results show that information, function, and service quality have differential effects on public use and internal application of e-government. These three quality dimensions significantly influence users' usage processes, outcomes, and future behavioral intentions, though government information quality exerts certain constraints on internal application. Public use and internal application mutually influence each other, with public use having a more significant impact. E-government effectiveness represents a comprehensive integration of social, economic, and political dimensions. Finally, the study proposes that service-oriented governments should innovate service models, monitor information quality, and transform governance philosophies.

Keywords: service-oriented government; e-government; quality; effectiveness; structural model

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Introduction

In the "Internet Plus" era, decision-making relies on complete information. After years of construction and application, China's e-government has contributed to equalizing public services, improving government service timeliness, and normalizing government transparency. However, substantial development potential remains in public information resource sharing, service efficiency, and service coordination. Against the backdrop of "Internet Plus Government Services" and "Internet Plus Public Welfare Services," e-government governance aims to universalize public services and enhance service capabilities, with effectiveness evaluation oriented toward meeting public demand. Influenced by New Public Management thinking, government performance evaluation has shifted toward comprehensive political and social performance centered on public satisfaction.

The national “Internet Plus Government Services” strategy provides an action guide for e-government governance. This study explores influencing factors and mechanisms of e-government effectiveness from a service-oriented government perspective, offering theoretical foundations and empirical support for innovating “Internet Plus Government Services” and providing ideas for implementing these development strategies.

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2 Literature Review

The effectiveness of e-government in service-oriented governments assesses the social, political, and economic value of information technology adoption. E-government systems provide online government information and services via the Internet [4], enabling information sharing among agencies and improving efficiency. The accessibility, effectiveness, and efficiency of government Web services are important evaluation indicators [5]. Government website credibility and usability significantly affect citizen satisfaction, online service efficacy, and government supervision effectiveness, with more usable websites achieving higher credibility [6]. Thus, the popularity and effectiveness of e-government applications are key manifestations of success.

W. DeLone and E. McLean identify information quality, service quality, system quality, system use, purpose of use, and user satisfaction as important factors affecting net benefits of information systems [7]. M. Kunstelj and M. Vintar argue that back-end information sharing and service coordination are key factors influencing e-government effectiveness [8]. A. Jansen believes e-government performance evaluation should consider e-services, e-management, and e-democracy alongside infrastructure and social culture [9]. Accenture Consulting proposes evaluating e-government effectiveness through service maturity, transformation rate, convenience, user acceptance, credibility, and satisfaction [10]. M. A. Alanezi et al. construct a universal e-government service quality model based on reliability, responsiveness, personalization, information and ease of use, security, and website design [11]. G. Kim et al. confirm that different measurement

methods and formative variables significantly affect results [12].

The Chinese Academy of Social Sciences Institute of Informatization and Guomai Internet Website Evaluation Research Center select distinctive government websites based on service, convenience, and interaction [1]. Zhang Chengfu and Tang Jun divide e-government performance indicators into output, outcome, and impact levels, emphasizing the “output” level [13]. Shi Huichang et al. construct a comprehensive evaluation system based on infrastructure, service level, project construction, and management guarantee [14]. Ma Jing et al. categorize e-government performance indicators into service planning, execution, supervision, correction, and public satisfaction [15], considering both front-end and back-end performance. Public service performance emphasizes meeting public interest needs, focusing on “outcome” evaluation, where ease of use, usefulness, and service effectiveness are important criteria [16].

Comprehensive review reveals that research primarily focuses on evaluating electronic implementation degree, emphasizing “output” performance, with limited incorporation of internal effectiveness. Studies analyzing impact paths from the service-oriented government perspective are scarce, constraining application of evaluation results. Therefore, exploring these paths and mechanisms holds important theoretical and practical significance for innovating government administration.

1 Research Background and Problem Statement

The Third and Fourth Plenary Sessions of the 18th CPC Central Committee proposed transforming government functions, deepening administrative reform, innovating management methods, enhancing credibility and execution, and building law-based and service-oriented governments. A service-oriented government operates under democracy and rule of law, is citizen-centered, serves society and the public, provides public services and products through legal procedures, meets growing public needs, and assumes public responsibility. These concepts emphasize people-centered governance, democratic participation, and supervision. Integrating the “Internet Plus” trend requires intensive, efficient, and transparent governance to optimize organizational structures and processes, universalize public services, and provide simple, efficient, transparent, secure, and self-service public products. However, deficiencies in information resource sharing, service efficiency, cross-departmental collaboration, service universalization, and self-service have seriously affected expected e-government effectiveness, creating governance and innovation challenges.

Recent evaluation work by the Chinese Academy of Social Sciences Informatization Research Center, Guomai Internet Government Website Evaluation Center, Peking University Public Participation Research and Support Center, and China Software Testing Center has provided constructive recommendations [1-3]. However, e-government performance evaluation research has focused on informatization levels, website construction, transparency, and satisfaction, em-

phasizing “output” performance while offering limited analysis of influencing factors and internal mechanisms. The focus has shifted to public service capacity and level. This study examines impact paths from the service-oriented government perspective.

E-government serves as a public platform enabling citizens to conveniently access information and services, improving efficiency, reducing costs, and achieving service equalization. This study analyzes impact paths from external and internal perspectives. IT-based government services emphasize process electrification, timeliness, interactivity, and information sharing, highlighting real-time electrification throughout the service process.

Examining e-government operation models, information quality on government websites depends on correctness, relevance, and completeness. Reliable, timely, and effective network platforms provide the foundation for quality services. A platform with simple navigation, convenient operation, security, stability, and real-time interaction can promptly disseminate information, satisfy citizens’ right to know and supervise, enhance satisfaction, and demonstrate transparent government power execution. Through portals, government can reshape its image, simplify processes, achieve service coordination, rationally allocate resources, and improve execution efficiency and quality. To explore impact paths, this paper constructs a structural model shown in Figure 1 [Figure 1: see original paper].

3.1 Research Model

This model considers both public usage effectiveness and internal application performance. It treats e-government information quality, platform function quality, and service quality as independent variables; public use and internal application as mediating variables; and e-government effectiveness as the dependent variable, constructing different measurement dimensions accordingly.

3.2.1 E-Government Information Quality

In service quality evaluation, user (public and civil servant) perceived quality assessment is most common. Information accuracy, completeness, credibility, and consistency are important quality metrics [7]. When users perceive high credibility of government website information, perceived trust risk decreases, stimulating reuse and promoting expanded government information electrification, thereby affecting e-government effectiveness. When government website information closely relates to user needs with accurate audience targeting, usage frequency increases. A website presenting comprehensive, unreserved information demonstrates transparency and fairness, enhancing usage willingness and achieving e-government benefits. Therefore, providing “correct,” “comprehensive,” and “relevant” information increases public usage frequency and expands internal application scope.

H1-1: E-government information quality positively relates to internal application.

H1-2: E-government information quality positively relates to public use.

3.2.2 E-Government Platform Function Quality

E-government aims to provide fast, convenient, interactive, and secure services, making platform function quality critical. When users perceive good human-computer interaction, overall functional quality perception improves. If websites present pages in organized, hierarchical ways that quickly guide users, satisfaction increases dramatically. Conversely, poor page transitions cause users to exit or restart, substantially increasing dissatisfaction. If e-government websites effectively execute service requests, enabling timely receipt/provision of complete information without privacy leakage, perceived security and credibility increase, strengthening reuse willingness. For simple, user-friendly, fast-responsive, fully functional, secure, and reliable systems, e-government application can become normalized, better demonstrating value and benefits. Therefore, navigability, interactivity, ease of use, and security are key elements affecting e-government service effectiveness.

H2-1: E-government platform function quality positively relates to public use.

H2-2: E-government platform function quality positively relates to internal application.

3.2.3 E-Government Service Quality

Trust, ease of use, reliability, and responsiveness are four determinants of e-service quality [17]. The fulfillment rate, credibility, timeliness, and reliability of e-government service commitments primarily shape perceived service quality. When the public encounters questions during online services, effective consultation via phone, WeChat, or email to reliably complete service requests creates a perception of no difference from in-person services, making reliability crucial for fulfilling service commitments. The core goal is saving time and costs. When citizens apply for services online, proactive, timely, and rapid completion by civil servants increases satisfaction. A service-capable, convenient, complete, and timely updated platform helps users quickly obtain valuable service information, improving evaluations. This study examines service quality through reliability, timeliness, and effectiveness to reveal how service quality affects e-government effectiveness.

H3-1: E-government service quality positively relates to internal application.

H3-2: E-government service quality positively relates to public use.

3.2.4 E-Government Effectiveness

Equalization, transparency, and sharing are service-oriented government goals; timeliness, ease of use, and effectiveness are e-government objectives. From the

service-oriented government perspective, e-government effectiveness is driven by information electronification, platform function quality, and service quality, which normalize public use and deepen internal application, generating service experience perceptions that reflect social, political, and economic value.

From the public perspective, effectiveness mainly assesses whether citizens' right to know and supervise are satisfied, whether services are convenient and cost-saving (time and money), and whether doubts are resolved. Public use effectiveness can be evaluated through website visit frequency, availability of government information, online service request completion rate, and public participation in evaluations. Internal application effectiveness measures service capability, efficiency, and quality through indicators including government information disclosure implementation rate, one-stop service completion rate, information resource sharing rate, inter-departmental collaborative service rate, and usage frequency. Higher e-government implementation drives stronger management innovation, helping governments transform toward transparency, fairness, and democracy, thereby improving service quality and realizing public value. Deeper and broader internal application promotes normalized public use; greater perceived value drives more frequent use, promoting comprehensive application and quality improvement. Therefore, service-oriented government e-government effectiveness comprises nine dimensions: democratic decision-making realization, service consciousness transformation, administrative cost reduction, fair public welfare implementation, power transparency, citizen rights protection, policy information circulation speed, management innovation, and citizen satisfaction.

H4-1: Internal application positively relates to public use.

H4-2: Public use positively relates to internal application.

H5: Internal application positively relates to overall e-government effectiveness.

H6: Public use positively relates to overall e-government effectiveness.

4.1 Sample Selection and Data Collection

This study selected research subjects based on three principles: (1) close connection between e-government applications and public/enterprise service needs; (2) sensitivity to public/enterprise perceived quality, value, and satisfaction; (3) demonstration effects in integrating service processes and improving execution efficiency. Seven prefecture-level municipal governments in Hunan Province (CS, ZZ, CY, CD, CZ, HH, and YY) and relevant departments were selected. Data collection used stratified sampling: setting sample sizes by region, selecting representative government departments, and randomly surveying citizens and civil servants. The questionnaire ratio was 2:1:1:1:1:1:1 (CS government: 20 departments; other cities: 10 departments each), matching regional e-government development status. Data collection combined questionnaires and website testing. Questionnaires were completed by randomly selected citizens receiving services and civil servants processing services, taking 5-7 minutes each. A total of 890 questionnaires were collected, with 815 valid (91.57% validity rate). Sample characteristics for the seven regions are shown in Table 1 and Table 2.

Table 1 shows the validity rates across seven regions. **Table 2** shows sample characteristics. Data indicates 90.3% of respondents obtained information about local development plans, key projects, and service policies through government websites. The sample is primarily educated young and middle-aged citizens, reflecting regional e-government cognition and usage behavior, meeting research requirements.

4.2 Questionnaire Design and Variable Measurement

The measurement scale was designed based on domestic and international empirical research, with items adjusted according to Chinese citizen habits through expert consultation and two pilot surveys. The scale has two parts: (1) e-government application effectiveness indicators; (2) respondent background (gender, age, education, etc.). The first part includes nine e-government effectiveness indicators. To analyze internal mechanisms, ten pre-use indicators were established across three dimensions: information quality (3 items), platform function quality (4 items), and service quality (3 items); and nine post-use indicators: internal application (5 items) and public use (4 items). A 5-point Likert scale was used. Table 3 shows the main structural variables.

Table 3 presents confirmatory factor analysis results for the measurement model, showing factor loadings for 28 items including information correctness, relevance, comprehensiveness, system interactivity, ease of use, navigability, security, service reliability, timeliness, effectiveness, one-stop service completion rate, information disclosure normalization, inter-departmental collaboration, information resource sharing rate, service usage frequency, website visit frequency, public participation, information accessibility, online service completion rate, and overall satisfaction.

5.1 Reliability Test

Reliability testing is fundamental for model fit and hypothesis validation. LISREL confirmatory factor analysis removed items with factor loadings below 0.4. Standardized loadings ranged 0.711-0.896, indicating good reliability. SPSS split-half testing assessed internal consistency (Table 4).

Table 4 shows Cronbach's α coefficients. All subscales exceed 0.70 except service quality (slightly below), indicating good internal consistency. The total scale's 28 items achieved Cronbach's $\alpha = 0.854$, confirming reliability.

5.2 Validity Test

Validity testing includes content and construct validity. Content validity reflects the relevance between measurement content and collected information [18]. The scale was revised through expert consultation and multiple pilot tests, demonstrating good content validity. Construct validity examines the relationship

between measurement tools and conceptual structures, typically using SPSS for KMO and Bartlett's tests [11]. Results are shown in Table 5 .

Table 5 shows KMO = 0.889 (>0.8) and Bartlett's test $p < 0.001$, indicating suitability for factor analysis.

Confirmatory factor analysis using LISREL yielded good fit indices for all constructs: - Information quality: $\chi^2/df = 1.506$, RMSEA = 0.047, GFI = 0.99, AGFI = 0.97, NFI = 0.99, NNFI = 0.98 - Platform function quality: $\chi^2/df = 1.713$, RMSEA = 0.049, GFI = 0.98, AGFI = 0.96, NFI = 0.99, NNFI = 0.99 - Service quality: $\chi^2/df = 1.425$, RMSEA = 0.048, GFI = 0.97, AGFI = 0.98, NFI = 0.99, NNFI = 0.99 - Internal application: $\chi^2/df = 1.723$, RMSEA = 0.049, GFI = 0.99, AGFI = 0.97, NFI = 0.99, NNFI = 0.98 - Public use: $\chi^2/df = 1.874$, RMSEA = 0.049, GFI = 0.98, AGFI = 0.98, NFI = 0.99, NNFI = 0.98 - E-government effectiveness: $\chi^2/df = 1.374$, RMSEA = 0.048, GFI = 0.98, AGFI = 0.98, NFI = 0.99, NNFI = 0.98

All measurement models meet fit requirements.

5.3 Model Parameter Estimation and Overall Testing

After confirming reliability and validity, latent variables and items from Table 3 were entered into the structural model (Figure 1) for path coefficient estimation and hypothesis testing using LISREL. Results are shown in Table 6 .

Table 6 shows path coefficients and hypothesis tests. The path "information quality $\rightarrow$ internal application" is -0.123 ($T = -2.108$), significant at $p < 0.05$ but opposite to the hypothesized direction, leading to revised hypothesis: "Information quality negatively relates to internal application." All other paths are supported at $p < 0.05$, 0.01, or 0.001 levels.

Figure 2 [Figure 2: see original paper] shows the resulting variable path relationships. The model demonstrates good explanatory power for endogenous variables (public use and internal application) and overall fit ($\chi^2/df = 2.375$, RMSEA = 0.039, GFI = 0.943, AGFI = 0.93, NFI = 0.99, NNFI = 0.98), meeting ideal standards.

6 Conclusions and Recommendations

This study explores e-government effectiveness impact paths from the service-oriented government perspective. Main conclusions and recommendations:

(1) Information, function, and service quality have differential effects on internal application. Function quality shows the strongest effect (path coefficient = 0.516, $p < 0.001$), followed by service quality (0.191, $p < 0.01$). Information quality shows a negative effect (-0.129, $p < 0.05$), contrary to existing research [3-5], suggesting Chinese e-government information quality currently constrains internal application. This may reflect how information correctness, relevance,

and comprehensiveness requirements affect departmental and civil servant interests, weakening reform motivation. Good platform navigability, interactivity, and ease of use enhance civil servants' perceived service value and accelerate application. Limited service timeliness, reliability, or security reduces efficiency and willingness, constraining service-oriented government development. Information disclosure strengthens power supervision, a necessary trend. Government must adapt to social development, transform service consciousness, fulfill responsibilities, improve efficiency, and monitor information quality, confirming the correctness and urgency of the 18th Party Congress's innovation proposals.

(2) Information, function, and service quality differentially affect public use. Path coefficients are 0.585, 0.581, and 0.352 respectively (all $p < 0.001$), with function quality having the smallest effect. This shows governments emphasize information and service quality when building service-oriented e-government, enhancing usage willingness. Limited information quality affects trust and satisfaction; poor function quality affects perceived value; untimely service processing fails to demonstrate efficiency value; low reliability or effectiveness reduces reuse intention. Government should innovate management and strengthen functional development.

(3) Public use and internal application mutually influence each other, with public use more significant (coefficients: 0.285 vs. 0.185, both $p < 0.01$). When public use becomes normalized, it drives reform to meet demands, protect rights, and promote comprehensive application. High e-government implementation enables expected value and efficiency, making public use popular. Public demand is the driving force for management innovation, process optimization, information disclosure, security, and service sharing. E-government development should adhere to innovation, coordination, sharing, and openness.

(4) Service-oriented government e-government effectiveness evaluation must integrate social, political, and economic dimensions comprehensively, not simply from internal or external perspectives. Table 3's standardized loadings, Table 5's KMO value, and model validation confirm the indicator system's reliability and discriminant validity. The effectiveness indicator system covers democratic decision-making, service consciousness transformation, administrative cost reduction, fair public welfare implementation, power transparency, citizen rights protection, management innovation, and citizen satisfaction—multidimensional content mostly measured through public perception, highlighting service philosophy. Path coefficients show public use (0.578) and internal application (0.377) both significantly affect effectiveness ($p < 0.001$), confirming service-oriented government evaluation criteria. Establishing public-oriented e-government goals helps comprehensively improve service-oriented government efficiency.

Limitations: (1) The survey only covered seven prefecture-level cities in one province; generalizability requires further verification. (2) This study focuses on the service-oriented government perspective and user (public/civil servant) survey data, but information quality control and cross-departmental collaboration mechanisms need deeper research. Future studies should adopt richer

perspectives and methods.

References

- [1] Xiong Shuchu, Luo Yihui. E-government Effectiveness Evaluation Model and Empirical Study—Taking Some Hunan Prefecture-Level Cities as Examples [J]. Journal of Hunan University of Commerce, 2015(2): 15-24.
- [2] Peking University Public Participation Research and Support Center. China Administrative Transparency Observation Report [EB/OL]. [2016-09-11]. <http://ogi.cppss.org/a/gb2312/news/20150930/1404.html>.
- [3] China Software Testing Center. 2015 Chinese Government Website Performance Evaluation Report [EB/OL]. [2016-09-11]. <http://2015wzpg.cstc.org.cn/wzpg2015/zbq/zbqglst.html>.
- [4] Shareef M A, Kumar V, Kumar U, et al. E-government adoption model (GAM): differing service maturity levels[J]. Government Information Quarterly, 2011, 28(1): 17-35.
- [5] Hsieh P H, Huang C S, Yen D C. Assessing Web service quality[J]. International Journal of U- and E-Service, Science and Technology, 2010, 3(4): 1-18.
- [6] Huang Z, Benyoucef M. Usability and credibility of e-government websites[J]. Government Information Quarterly, 2014, 31(4): 584-595.
- [7] DeLone W, McLean E. The DeLone and McLean model of information systems success: a ten-year update[J]. Journal of Management Information Systems, 2003, 19(4): 9-30.
- [8] Kunstelj M, Vintar M. Evaluating the progress of e-government development: a critical analysis[J]. Information Polity, 2004, 9(3): 131-148.
- [9] Jansen A. Assessing e-government progress: why and what?[ED/OB]. [2016-09-11]. https://www.researchgate.net/publication/228618143_{Assessing}E-government_{progress}-why_{and}_{what}}.
- [10] Accenture. E-government leadership: engaging the customer[R/OL]. [2016-09-11]. <http://www.unic.pt/images/stories/publicacoes/eGovernment%20Leadership%20Engaging%20the%20>
- [11] Alanezi M A, Kamil A, Basri S. A proposed instrument dimensions for measuring e-government services of emerging economies in an eastern country: service quality[J]. Government Information Quarterly, 2013, 30(3): 267-276.
- [12] Kim G, Shin B, Grover V. Investigating two contradictory views of formative measurement in information systems research[J]. MIS Quarterly, 2010, 34(2): 345-365.
- [13] Zhang Chengfu, Tang Jun. Research on E-Government Performance Evaluation Models[J]. E-Government, 2005(24): 38-44.
- [14] Shi Huichang, Wan Daopu, Wang Yanhui. Design of E-Government Performance Evaluation Indicator System[J]. E-Government, 2008(10): 14-23.
- [15] Ma Jing, Xu Xiaolin, Chen Tao. Research on E-Government Performance Evaluation—From the Service-Oriented Government Perspective[J]. Henan Social Sciences, 2012(2): 70-74.
- [16] Yan Peining. Empirical Research on E-Government Public Service Performance Based on AHP and Process-Result Model[J]. Chinese Public Administration, 2012(4): 104-108.

- [17] Li Chunqing, Sun Ying, Guo Chengyun. Research on E-Service Quality Determinants and Measurement Model[J]. Operations Research and Management Science, 2004(3): 132-136.
- [18] Xiong Shuchu, Luo Yihui. Impact of Retail Enterprise Public Information on Customer Perception-Satisfaction-Loyalty Relationships[J]. China Soft Science, 2008(6): 99-108.

Author Contributions

Xiong Shuchu: Proposed research ideas and methods, designed the study, collected and processed data, tested and analyzed the model, wrote and revised the paper.

Luo Yihui: Participated in data collection and processing, model testing and analysis, and paper revision.

Study on the Impact Paths of the Effect for E-government Based on the Perspective of Service-oriented Governance

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Abstract: [Purpose/significance] This article intends to figure out whether and how e-government can act on the development of the public-service oriented government. [Method/process] On the view of the service-oriented government, a structural model was built which consisted of information quality, function quality and service quality as independent variables, citizen use and internal application as mediators, and e-government effectiveness as a dependent variable. Based on the survey data of local governments in seven cities, an empirical research on the effect of e-government was conducted. [Result/conclusion] The results show that information quality, function quality and service quality have different effects on citizen use and internal application. In particular, these three have significant effects on the use procedure, the use result and the future attention of users, and the information quality has certain restriction role in the internal application, even though it has certain promoting effect on building a service-oriented government. Furthermore, citizen use and internal application interact and influence each other, while citizen use has more significant effects. The effectiveness of e-government for the civil service has multiple dimensions and should be evaluated comprehensively at social, economic and political aspects. Finally, we suggest that the government should develop an innovative service model, change the ruling idea, and control the quality of the information service.

Keywords: service-oriented government; e-government; quality; effectiveness; structural model

Note: Figure translations are in progress. See original paper for figures.

Source: ChinaXiv — Machine translation. Verify with original.