

Research on Performance Improvement Path of Municipal Government Websites—Based on Dynamic Capability Theory and fsQCA Method

Junhan Chen*

School of Public Administration, Shandong Technology and Business University, Yantai, Shandong, 264005, China

**Corresponding author: Junhan Chen*

Copyright: 2026 Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY-NC 4.0), permitting distribution and reproduction in any medium, provided the original author and source are credited, and explicitly prohibiting its use for commercial purposes.

Abstract: Grounded in dynamic capability theory, this study employs fsQCA methodology to conduct configurational analysis on performance disparities among 15 municipal government websites in Shandong Province, investigating the synergistic mechanisms of resource integration, technological innovation, and service optimization. The findings reveal five distinct pathways to high-performance government websites, where resource aggregation and transmission capabilities form foundational support, while big data applications and innovative practices play supplementary roles context-dependent, demonstrating “multi-concurrent” characteristics in performance enhancement. Breaking away from traditional linear analytical frameworks, the study provides theoretical basis for “city-specific strategies” in local government website development. Regions with robust digital infrastructure should prioritize data governance and intelligent services, whereas resource-constrained areas should focus on enhancing basic functionalities and public engagement mechanisms, thereby promoting differentiated development in digital government construction.

Keywords: Dynamic Capability Theory; Government Website Performance; Fuzzy Set Qualitative Comparative Analysis Method

Published: Aug 28, 2026

DOI: <https://doi.org/10.62177/apemr.v3i7.1668>

1. Introduction

With the rapid advancement of information technology and deepening digital transformation, government websites have become core platforms for government-public interaction, public service delivery, and information disclosure. As key vehicles for “Internet + Government Services,” their functions have expanded from simple information dissemination to encompass diversified services including online administrative procedures, citizen engagement, and data openness. The quality of website development directly impacts the modernization of governance capabilities and public satisfaction. Meanwhile, domestic policy frameworks have established clear requirements for standardized government website development. In December 2021, the National Development and Reform Commission released the “14th Five-Year Plan for National Government Informatization Engineering Construction,” emphasizing that advancing the modernization of national governance systems requires comprehensive planning for socioeconomic development, with deepening government service reforms being a critical component. As a pivotal tool for governance modernization, government website development at all levels will continue as foundational projects for implementing the “streamlining administration, delegating powers, and improving

services” reform, providing digital support for enhancing governance efficiency. In 2022, the State Council issued the “Guiding Opinions on Strengthening Digital Government Construction” (State Council Document [2022] No.14), marking a new phase of high-quality development in China’s digital government initiatives. This landmark document systematically outlines the blueprint and implementation roadmap for digital government construction, establishing overarching goals and structural frameworks while prioritizing integrated and intelligent upgrades for government websites and official new media platforms, thereby providing concrete guidance for improving service efficiency. Meanwhile, the Chinese government has issued a series of policy documents focusing on “one-stop online services”, “cross-provincial service accessibility”, enhanced government transparency, and governance reforms across industries. These policies have set higher standards for government websites in areas such as policy interpretation, public response mechanisms, and comprehensive governance information dissemination. However, despite the rapid expansion of government websites, significant performance disparities remain evident. Grounded in dynamic capability theory, this study establishes a performance evaluation framework for government websites and employs fuzzy set qualitative comparative analysis (fsQCA) to conduct configurational analysis of municipal government websites in Shandong Province. By examining the mechanisms underlying performance variations, the research reveals nonlinear interactions among influencing factors and identifies multiple high-performance driving pathway combinations. Through in-depth case studies, the study aims to provide region-specific optimization strategies and practical references for government website development, thereby enhancing the quality and efficiency of digital governance initiatives.

2. Literature Review

At present, domestic research on government website performance evaluation is mainly divided into the construction of government websites and the construction of government website performance evaluation models.

2.1 Research on the Construction of Government Portal Websites

With the continuous advancement of informatization in China, government portal websites have emerged as a natural response to societal needs. In this era of rapid electronic information technology development, these digital platforms serve as vital bridges connecting governments and citizens. Their construction and evolution not only align with national informatization strategies but also play an irreplaceable role in enhancing administrative efficiency, increasing government transparency, and optimizing public service delivery. This development process vividly reflects China’s transformative journey from traditional administrative management to modern e-government systems.

2.1.1 Early research on government portal websites primarily focused on conceptual definition and functional classification

Li Guangqian (2004) defined it as an integrated cross-departmental service application system that provides convenient ^[1] access to government information and services for the public and government agencies ^[2]. Li Zhigeng and Qin Hao (2011) simplified it as the official website through which administrative agencies perform public functions and deliver services ^[3]. Although academic circles have subtle differences in functional positioning, the 2014 “Opinions of the General Office of the State Council on Strengthening Information Content Construction of Government Websites” explicitly defined it as the core platform for government-citizen interaction and duty fulfillment. The government websites referred to in this paper are electronic platforms established and operated by governments to provide function-related management and services.

2.1.2 Research on the Current Status of Government Portal Website Construction

According to the “Digital China Development Report (2020)”, all 31 provincial governments in China have fully established government service platforms covering provincial, municipal, and county levels, with 21 regions achieving full coverage of services at five levels: province, city, county, township, and village ^[4]. Currently, local governments have incorporated the construction of government service platforms into key evaluation indicators for regional development “soft environment” and have generally established feedback mechanisms for “service quality evaluations”. In terms of functional positioning, provincial government portal websites have evolved into comprehensive online service platforms integrating political-social interaction, public demand handling, and information data analysis, playing a pivotal role as core hubs in digital government development.

2.2 Research on Performance Evaluation Models for Government Portal Websites.

Performance evaluation of government websites constitutes a vital component of digital transformation initiatives in public administration. Developing citizen-centric portal platforms that enhance governmental efficiency has remained a key research focus in recent years. Current domestic studies on government portal performance assessment primarily concentrate on two dimensions: evaluation indicator systems and analytical methodology frameworks.

2.2.1 Indicator System for Performance Evaluation of Government Portal Websites

In this research domain, Si Wenfeng et al. (2022) proposed an evaluation framework comprising 5 primary^[5] indicators and 15 secondary indicators based on service capabilities^[6], while Jing Lingling et al. (2021) emphasized the need to establish evaluation criteria considering regional^[7] disparities. The Electronic Government Research Center^[8] of the Central Party School (2022) developed a performance-oriented evaluation system with 5 primary indicators and 21 secondary indicators, whereas CCID Consulting (2022) constructed a comprehensive evaluation model covering 8 dimensions. These studies signify that China's provincial government portal website evaluation systems have entered a mature development phase.

2.2.2 Methods and Models for Performance Evaluation of Government Portal Websites

The mainstream academic approaches for evaluating government website performance primarily include five methodologies: Analytic Hierarchy Process (AHP), a qualitative-quantitative evaluation method proposed^[9] by American scholar T.L. Satti in the 1970s that proves effective for complex operational decision^[10]-making problems requiring quantitative analysis; Han Jun (2007) applied this model to assess 11 prefecture-level municipal government portals in Zhejiang Province and formulated development recommendations; Fuzzy Analytic Hierarchy Process (FAHP), an enhanced version of^[11] traditional AHP incorporating fuzzy mathematics theory and quantitative importance metrics, effectively resolves consistency issues in judgment matrices under multi-criteria scenarios; Huang Zheng et al. (2010) utilized this method to^[12] evaluate public service satisfaction on Municipal Government Portal A, providing theoretical references for scientific indicator system development; Regression analysis quantifies correlations through mathematical modeling of variables; Fu Hao et al. (2006) conducted^[13] a study involving 15 sub-provincial cities, establishing an evaluation system encompassing information services and interactive features from user perspectives, and constructed a government website performance assessment model using regression^[14] analysis; Data Envelopment Analysis (DEA), an efficiency evaluation method based on multiple inputs and outputs, assesses relative efficiency through linear programming to construct production frontier surfaces. Li Hua et al. (2013) integrated statistical yearbook data with performance evaluation metrics to optimize indicator system design, providing an effective analytical tool for assessing resource allocation efficiency in provincial government websites. The Balanced Scorecard (BSC), a strategic performance management framework, establishes quantifiable metrics across four dimensions: financial performance, customer satisfaction, internal processes, and learning growth. Building upon the BSC framework, Yin Huaiqiong (2014) developed a government website evaluation model that effectively identified strengths and weaknesses in G2B services among China's official government portals.

Currently, academic research in China employing Qualitative Comparative Analysis (QCA) methods to evaluate government portal website performance remains relatively limited. Notably, Ran Lian and Zhang Xi (2022) pioneered the application of this method in studying security management performance of provincial government data openness initiatives. Their^[15] findings not only validated the applicability and advantages of QCA methodology in this field, but also laid a crucial foundation for expanding QCA applications to broader research on provincial government portal website performance evaluation.

3. Research Methods and Design

3.1 Theoretical Basis

The Dynamic Capability Theory was proposed by Teece in 1997 in the Journal of Strategic Management (SMJ). Teece, Pisano, and Shuen (1997) defined dynamic capability as an enterprise's ability to integrate, build, and restructure^[16] internal and external competencies, as well as to consolidate and reconfigure internal and external organizational skills and resources to adapt to rapidly changing environments.

Recent studies have employed dynamic capability theory to explain the enabling effects of big data technology investments. By leveraging digital tools and platforms, big data applications drive organizational^[17] transformation, creating a "data chain"

that encompasses data collection, insights generation ^[18], analysis ^[19], and dynamic solutions. This accelerates product and service innovation, thereby enhancing government operational performance and securing sustainable competitive advantages (Cai Yuan, 2023; Xu Jun, 2023).

The Dynamic Capability Theory posits that business environments are inherently ^[20] dynamic ^[21] and uncertain, emphasizing the need for real-time responsiveness. Scholars such as Xie Weihong have applied this theory to define big data capability as an enterprise's ability to integrate internal and external big data resources, conduct in-depth analysis, and adapt to external environmental changes. This capability is categorized into three key components: resource integration capability, in-depth analytical capability, and real-time insight/prediction capability.

In today's digital economy era, dynamic capabilities have become increasingly vital, not only in driving organizational adoption and application of digital innovations but also in catalyzing digital innovation itself (Pavlou and El Sawy, 2010; Roberts et al., ^[22] 2016 ^[23]). Future research could explore factors driving digital innovation through the lens of dynamic capability theory. According to this theory, enterprises operating within complex innovation systems characterized by prolonged uncertainty ^[24] and volatility must cultivate new dynamic capabilities that enable scientific, real-time, and precise responses to internal and external environmental changes. Such capabilities manifest as digital capabilities in the digital economy context.

Table 1 Antecedent Variables under the Dynamic Competence Theory Framework

Theoretical Elements	Literature Empirical Study	Independent variable
Emphasizing the restructuring of resources and capabilities, Combination, Acquisition, and Adaptation	Teece, Pisano, and Shuen	resource aggregation capability
		resource fusion capability
		resource transfer capability
Emphasize the transformation and application of one's own capabilities	Cai Yuan, Xu Jun et al.	Big Data Application Capability
Emphasize real-time response	Xie Weihong, Huang M C, et al.	Demand Response Capability
Emphasize rapid innovation	Pavlou, Roberts et al.	Outstanding Case Innovation Index

3.2 Data Sources

This paper selects measurement indicators consistent with the local government website performance evaluation index system released by the China Software Testing Center. The data sources for municipal government websites are the results of the 23rd (2024) Local Government Website Performance Evaluation, as shown in the figure below.

Table 2 Performance Evaluation Scores of Local Government Websites

name	resource aggregation capability	Big Data Application Capability	resource fusion capability	resource transfer capability	Demand Response Capability	Outstanding Case Innovation Index	score
Qingdao	0.91	0.52	0.48	0.75	0.73	0.93	87.1
Jinan	0.83	0.42	0.17	0.71	0.5	0.7	72.5
Weihai	0.85	0.44	0.4	0.96	0.74	0.87	84.3
Weifang	0.9	0.43	0.46	0.67	0.6	0.6	79.5
Linyi	0.8	0.24	0.12	0.93	0.97	0.2	70.5
Yantai	0.81	0.56	0.2	0.47	0.51	0.6	69.7
Zibo	0.81	0.3	0.26	0.71	0.39	0.3	66.8
sunshine	0.82	0.44	0.27	0.55	0.31	0.28	66.2
TYAN	0.79	0.36	0.31	0.68	0.43	0.16	65.9
Heze	0.79	0.36	0.19	0.57	0.5	0.24	64.6
dongying	0.7	0.46	0.21	0.71	0.5	0.2	63.1

name	resource aggregation capability	Big Data Application Capability	resource fusion capability	resource transfer capability	Demand Response Capability	Outstanding Case Innovation Index	score
JiNing	0.78	0.33	0.16	0.54	0.47	0.26	62.9
Zaozhuang	0.74	0.3	0.22	0.63	0.38	0.3	62.3
Liaocheng	0.75	0.32	0.14	0.69	0.4	0.23	62
Binzhou	0.72	0.42	0.26	0.55	0.38	0.23	61.3

Data source: Results of the 23rd (2024) Performance Evaluation of Local Government Websites

3.3 Data Calibration

Variable calibration refers to the process of assigning membership degrees to a set of variables, converting raw data into fuzzy membership values (ranging between 0 and 1) to accurately capture complex relationships between variables and research outcomes. This study employs the PERCENTILE function for dependent variable calibration, using Fiss Research to define complete membership, crossover points, and complete ^[25] non-membership at 95%, 50%, and 5% thresholds during calibration. In truth table analysis, data with membership degrees of 0.5 are excluded from analysis^[26], necessitating data processing adjustments of +0.001 or -0.001.

Table 3 Calibration anchor points for variables

Research variables		anchor point		
		complete membership degrees point	cross point	complete non-membership degree
outcome variable	score0	85.14	66.05	61.755
	zyhjn10	0.903	0.795	0.713
	sjyyn10	0.532	0.39	0.279
condition variable	zyrhnl0	0.466	0.215	0.133
	zycdnl0	0.939	0.675	0.5155
	sqxynl0	0.809	0.85	0.3555
	yxalzs0	0.888	0.27	0.186

4. Results

4.1 Necessity Test

Prior to configuration analysis, it is essential to conduct necessity tests on each causative condition. As shown in Table 5, the consistency indices of all six causative conditions were below the 0.9 necessity threshold (requiring consistency > 0.9 and coverage > 0.5), indicating that none of these individual conditions constituted necessary conditions affecting the results in this study.

Table 4 Necessity Analysis

score		
variable	consistency (Consistency)	Coverage
zyhjn10	0.891345	0.877333
~zyhjn10	0.464950	0.433333
sjyyn10	0.735336	0.724965
~sjyyn10	0.510730	0.451327
zyrhnl0	0.781116	0.729947
~zyrhnl0	0.545064	0.506649
zycdnl0	0.711016	0.749623
~zycdnl0	0.567954	0.474313

variable	score	
	consistency (Consistency)	Coverage
sqxynl0	0.758226	0.787519
~sqxynl0	0.502146	0.424426
yxalzs0	0.836910	0.803572
~yxalzs0	0.467811	0.423575
zyhjn10	0.469413	0.501333
~zyhjn10	0.885144	0.945333
sjyyynl0	0.458177	0.517630
~sjyyynl0	0.756554	0.766119
zyrhnl0	0.536829	0.574866
~zyrhnl0	0.747815	0.796543
zycdnl0	0.450687	0.544495
~zycdnl0	0.792759	0.758662
sqxynl	0.405743	0.482912
~sqxynl	0.821473	0.795647
yxalzs	0.444444	0.489011
~yxalzs	0.821473	0.852332

4.2 Configuration Analysis

This study employed fsQCA3.0 software to conduct configurational analysis on the performance levels of government websites. During the analysis process, the following parameters were set: the original consistency threshold was set at 0.80, and the case frequency threshold was set at 1. To enhance analytical accuracy, manual zeroing was applied to outcome variables with PRI values below 0.7 in the truth table. Three solution types were ultimately generated: complex solutions, intermediate solutions, and simplified solutions. The configurational analysis was conducted based on intermediate solutions, with core conditions (i.e., antecedent variables appearing in simplified solutions) identified through comparison with simplified solutions. The analysis results revealed five significant driving pathways contributing to high performance levels in government websites (see Table 5 for details).

Table 5 Configuration Path Table

	Configuration 1	Configuration 2	Configuration 3	Configuration 4	Configuration 5
zyhjn1	●	●	⊗	●	●
dsjyyynl	●	●	⊗	⊗	⊗
zyrhnl		●	●	⊗	●
zycdnl		●	●	●	●
sqxynl	●		⊗	●	⊗
yxalzs	●	●	⊗	⊗	●
consistency	0.978	0.980	0.806	0.938	0.947
Original coverage value	0.582	0.359	0.243	0.217	0.232
Unique coverage value	0.286	0.060	0.047	0.074	0.019
Overall coverage			0.874		
overall consistency			0.923		

Note: • indicates the presence of a condition, ⊗ indicates the absence of a condition; where the large circle represents the core condition, the small circle represents the marginal condition, and blank indicates that the condition may be present or absent.

4.2.1 Resource Aggregation-Type Government Website

In Configuration 1, resource aggregation capability serves as the core determinant, explaining approximately 58.2% of cases, with 28.6% of cases being solely attributable to this factor. This configuration demonstrates that when big data application capabilities, public demand response capacity, and exemplary case innovation capabilities are all at advanced levels, the strength of resource aggregation capability directly determines the performance level of government websites. Taking Qingdao Municipal Government Website as an example—a model of sub-provincial city government websites—it vividly illustrates this paradigm. First, the website leverages advanced data collection and analysis technologies such as sensors and API interfaces, combined with machine learning and data mining methods, to build precise user profiles and behavioral analysis models. Complex data is visually presented through charts and maps using data visualization tools, providing scientific basis for government decision-making. Second, the website establishes diversified feedback channels including online comments, telephone hotlines, and WeChat official accounts, ensuring user feedback accessibility and coverage. Efficient response mechanisms and problem resolution processes enable rapid issue resolution and service optimization. Additionally, two Qingdao cases were selected for the 2024 Innovative Case Demonstration Project, further enhancing government service quality and efficiency. Building on these three capabilities, Qingdao Municipal Government Website has achieved comprehensive integration of administrative data, public service data, and social data through cross-departmental and multi-level data sharing mechanisms. The data sources span government agencies, public institutions, enterprises, and social organizations, encompassing both structured and unstructured data types. Through real-time or high-frequency update mechanisms, the system ensures data timeliness and accuracy, significantly enhancing resource aggregation capabilities and effectively improving the performance of government websites.

4.2.2 “Comprehensive” Government Website

In Configuration 2, resource aggregation capability, resource integration capability, resource transmission capability, and exemplary case innovation index serve as core criteria. This configuration demonstrates that when government websites possess strong resource processing capabilities, their inherent innovation capacity determines the performance level of these platforms. This pathway accounts for 35.9% of case studies. For instance, the Weifang Municipal Government Website exhibits robust resource aggregation, transmission, and integration capabilities, primarily attributed to its systematic digital governance strategy. By establishing standardized data collection interfaces and a government data sharing platform, the website consolidates administrative data and public service resources from various municipal departments, creating a comprehensive resource repository covering administrative approvals and public services. Through a multi-channel service matrix comprising seven platforms (PC terminals, mobile apps, self-service terminals, etc.), the website employs intelligent recommendation algorithms to deliver personalized services. In cross-departmental operations, mechanisms such as unified identity authentication, electronic certificate sharing, and process optimization have consolidated services previously scattered across 42 departments into 12 thematic service packages. This integrated resource management framework has established a new paradigm of government services featuring “front-end unified acceptance, mid-platform intelligent processing, and back-end collaborative handling,” laying a solid foundation for performance enhancement. In 2024, Weifang City’s government website was selected as an innovative case demonstration project. Building upon its resource processing capabilities, the platform further strengthened innovation capacity, securing a top ranking in municipal government website performance evaluations.

4.2.3 “Resource Integration and Transfer-Oriented” Government Websites

In Configuration 3, resource integration and resource transfer capabilities serve as core requirements. This configuration demonstrates that government websites possessing only these two capabilities can achieve high performance levels, though this approach accounts for only 4.7% of cases. Taking the Tai ‘an Municipal Government Website as an example, while it excels primarily in resource transfer and integration capabilities, these two aspects play pivotal roles in enhancing governmental website performance. Resource transfer capability ensures timely and accurate dissemination of government

information to the public, fulfilling their demand for information access—a fundamental function that forms the basis of government-public communication. Resource integration capability reflects a website’s ability to consolidate and optimize diverse information resources. By effectively combining resources from various sources and formats, it provides more comprehensive, systematic, and user-friendly services, improving public engagement and satisfaction. In contemporary government website development, strong performance in these two areas can significantly compensate for potential shortcomings in other dimensions, driving overall performance improvement and enabling websites to stand out among peers with higher evaluation scores.

4.2.4 “Resource Aggregation and Transfer Website”

Unlike Configuration 3, Configuration 4 demonstrates that when government websites exhibit relatively weak resource integration capabilities but demonstrate strong resource aggregation and dissemination capacities, enhancing demand response capabilities can effectively improve website performance. Taking the Linyi Municipal Government Website as an example, although the platform has not yet adopted advanced resource integration technologies such as big data analytics and intelligent recommendation systems, it has systematically integrated six functional modules—including Mayor’s Mailbox, Government Interviews, and Public Opinion Solicitation—within its “Government-Citizen Interaction” section, establishing a diversified public demand response mechanism. This strategy compensates for resource integration deficiencies by optimizing demand perception, improving feedback efficiency, and enhancing the quality of government-citizen interactions. Such user demand-oriented response mechanisms significantly boost public satisfaction and government service efficiency, enabling performance optimization even under technical constraints.

4.2.5 Resource-processing Government Website

In Configuration 5, resource-related metrics serve as core criteria, leading to the designation of this configuration as “Resource-Driven Government Governance.” The configuration demonstrates that when government websites possess robust capabilities in resource aggregation, integration, and dissemination, moderate incorporation of innovative elements can significantly enhance performance outcomes. This conclusion is thoroughly validated through the case study of Zibo Municipal Government Website. Although the website adopted relatively conservative technical approaches, refrained from utilizing cutting-edge technologies like big data analytics, and relied solely on traditional email systems for public feedback channels, it achieved systematic aggregation of government information through efficient resource integration mechanisms. Specifically, Zibo Municipal Government Website established a cross-departmental information collaboration platform, implemented seamless data integration via standardized interfaces, and demonstrated exceptional capabilities in deep resource integration. Additionally, the website implemented an information classification tagging system and multi-dimensional search functionality, substantially improving information accessibility and transmission efficiency. This resource management-centric development model, complemented by appropriate service innovations (such as policy visualization and scenario-based service guides), yielded remarkable results in government website performance evaluations. The case highlights that foundational resource management capabilities may prove more critical than mere technological innovation in e-government development. When resource integration systems reach maturity, even limited innovation investments can generate significant performance improvements.

5. Conclusion

Building on dynamic capability theory and fsQCA methodology, this study systematically analyzes differentiated pathways for performance enhancement in municipal government websites, revealing complex interactive relationships among resource integration capabilities, technological innovation, and public service efficacy. The findings demonstrate that high-performing government websites exhibit diversified capability combinations, with resource aggregation and transmission capabilities serving as foundational supports, while big data applications and innovative practices demonstrate differentiated impacts across various contexts. These insights transcend traditional linear analytical frameworks, providing novel theoretical perspectives for advancing digital government development.

The research findings indicate that municipal government website development should adhere to the principle of “city-specific strategies,” selecting optimization pathways based on local resource endowments and developmental stages. For regions

with robust digital infrastructure, priority should be given to strengthening data governance systems and intelligent service capabilities, enhancing performance through cross-departmental data sharing and precision service delivery. In areas with limited resources, improvements should focus on refining information release mechanisms and public engagement features, leveraging foundational service efficiency to compensate for technological shortcomings. Concurrently, all regions should establish dynamic performance evaluation mechanisms to regularly monitor key indicators such as resource integration, technological compatibility, and public satisfaction, ensuring coordinated advancement of website development and digital transformation strategies.

Funding

No

Conflict of Interests

The authors declare that there is no conflict of interest regarding the publication of this paper.

Reference

- [1] Guangqian, L. (2004). How to understand and improve government portal websites? *EGovernment*, (1), 95-101.
- [2] Zhigeng, L., & Hao, Q. (2011). Construction and maintenance of government websites. Beijing: Beijing Personnel Publishing House.
- [3] General Office of the State Council. (2014). Opinions of the General Office of the State Council on strengthening information content construction of government websites (State Council General Office Document No. 57 [2014]).
- [4] Cyberspace Administration of China. (2021). The national internet information office released the “Digital China Development Report (2020)” [EB/OL]. Retrieved March, 2023.
- [5] Wenfeng, S., & Guangwei, H. (2018). Patterns of electronic government service capability disparities in mainland China from a governmental dimension perspective. *Journal of Intelligence*, 37(5), 161-168+188.
- [6] Lingling, J., & Hongfei, D. (2021). Research on influencing factors and characteristics of public access to government websites: An analysis based on annual work reports of 31 provincial government portal websites. *Social Policy Research*, (1), 67-80.
- [7] Electronic Government Research Center of the Central Party School (National Academy of Governance). (2022). Release of “Evaluation Report on Integrated Government Service Capabilities of Provincial Governments and Key Cities (2022)” [EB/OL]. Retrieved March, 2023.
- [8] CCID Consulting. (2022). “2022 China Digital Economy Development Research Report” [EB/OL]. Retrieved March, 2023.
- [9] Jun, M. (2023). Research on performance level of China provincial government portal websites [Master’s thesis]. Hangzhou Normal University.
- [10] Jun, H. (2007). Research on evaluation model for government portal websites based on analytic hierarchy process: A case study of 11 prefecturelevel city government portal websites in Zhejiang province. *Library Science Research*, (12), 87-93.
- [11] Zheng, H., Guibo, W., & Wen, L. (2010). Performance evaluation of Chinese government portal websites based on fuzzy analytic hierarchy process: A case study of City A’s government portal website. *Enterprise Guide*, (4), 270-271.
- [12] Hao, F., Weiwei, L., & Manmei, L. (2006). Empirical analysis of regional marketing performance of local government portal websites: A case study of 15 subprovincial cities. *Urban Issues*, (5), 68-72+91.
- [13] Hua, L., & Xiaodong, X. (2013). Research on provincial egovernment performance evaluation based on data envelopment analysis. *Modern Intelligence*, 33(8), 73-78+97.
- [14] Huaqiong, Y. (2011). Research on comprehensive evaluation of government portal websites based on CRMBSC [Master’s thesis]. Central South University.
- [15] Lian, R., & Xi, Z. (2022). Influencing factors of data security management performance in provincial government data openness: A qualitative comparative analysis based on 20 provincial government samples. *Information Science*, 40(6),

59-65+81.

- [16] Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 18(7), 509-533.
- [17] Kunpeng, Y., & Wei, L. (2021). Research on big data empowering manufacturing enterprises' transformation and development from the perspective of organizational inertia. *Scientific Decisionmaking*, (11), 49-65.
- [18] Jiayuan, C. (2023). Exploration of development pathways for the "digital government integrated service platform". *News Sentinel*, (15), 26-27.
- [19] Jun, X. (2023). Research on enhancing government website service capabilities from the perspective of digital government. *Journal of Beijing University of Chemical Technology (Social Sciences Edition)*, (2), 42-48.
- [20] Huang, M. C., Yen, G. F., & Liu, T. C. (2014). Reexamining supply chain integration and the supplier's performance relationships under uncertainty. *Supply Chain Management: An International Journal*, 19(1), 64-78.
- [21] Weihong, X., Gao, L., & Tianhui, W. (2016). Research on the connotation, dimensions of big data capability and its relationship with group control. *Science and Technology Management Research*, 36(14), 170-177.
- [22] Pavlou, P. A., & El Sawy, O. A. (2010). The "third hand": IT-enabled competitive advantage in turbulence through improvisational capabilities. *Information Systems Research*, 21(3), 443-471.
- [23] Roberts, N., Campbell, D. E., & Vijayasarathy, L. R. (2016). Using information systems to sense opportunities for innovation: Integrating postadoptive use behaviors with the dynamic managerial capability perspective. *Journal of Management Information Systems*, 33(1), 45-69.
- [24] Jiabin, Y., Xiao, L., & Xiaoping, Y. (2021). Agricultural digital transformation from the perspective of innovation ecosystem theory: Driving factors, strategic framework, and implementation pathways. *Agricultural Economic Issues*, (7), 101-116.
- [25] Fiss, P. C. (2011). Building better causal theories: A fuzzy set approach to typologies in organization research. *Academy of Management Journal*, 54(2), 393-420.
- [26] Zhang, M., & Du, Y. Z. (2019). Application of QCA method in organizational and management research: Positioning, strategies, and directions. *Journal of Management Science*, 16(9), 1312.