Research Article

Empirical on the Influencing Factors of Local Government’s Online Response

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The development of local government online questioning is a practical exploration to promote the digital governance of government. Exploring the influencing factors of local government online questioning response can provide guidance for the governance practice of online questioning. Based on the TOE framework, this paper constructs an analysis model of the influencing factors of local government online questioning response. By using SPSS tools to conduct regression analysis on data from 230 questionnaire samples, the results show five factors: technical competence, high-level support, perceived benefits, public readiness, and public satisfaction to the responsiveness of local government were 0.019, 0.332, 0.265, 0.156, and 0.048, respectively. Therefore, the research conclusion that technical ability, high-level support, perceived benefits, public readiness, and public satisfaction, have a positive impact on local government’s response ability. The analysis of the influencing factors of government’s online in this paper improves the existing research to a certain extent and provides a new path and perspective for the development of network politics in China.

1. Introduction

With the construction and development of e-government in China, Internet technology has become an important force in promoting communication and interaction between citizens and government and digital governance innovation in local governments. In the process of digital transformation of local governments, the popularization of the Internet has brought innovative changes in the way of advancing citizens’ participation in democratic politics and government response mechanisms, while adding uncertainty influencing factors and challenges to local governments in the response process. In the Chinese context, online politics is a channel for citizens to participate in democratic politics based on the real time and interactive nature of the Internet, a way to express citizens’ public opinion by combining the Internet and politics, and a new exploration of government-public interaction with Chinese characteristics. In recent years, the development of “online government” platforms has provided technical support to enhance government responsiveness and service capacity, and governments are increasingly inclined to provide online services through e-government platforms. The benefits of e-government that citizens perceive mainly come from the use of government online services, rather than electronic information or participation in the acquisition of the government should pay more attention to the development of e-government, so as to bring more benefits to users [1]. In 2018, Europe (0.7727) still maintained a leading position with the highest regional EGDI value, followed by Americas (0.5898) and Asia (0.5779). The most significant factor impacting success in implementing e-government projects is citizen orientation [2]. The institutionalized operation of network governance requires the government to build a platform for asking questions or set up government-related columns to interact with citizens in a regular network. While citizens actively participate in public governance, express public needs, and seek solutions to problems through online
platforms, they put forward higher requirements on how the government can effectively respond to citizens’ demands to achieve healthy political interaction. The construction of online government response mechanism for local governments in China in the era of big data is a useful exploration of government digital governance.

Research on online politics can be traced back to 1983 when Alvin Toffler first mentioned the study of online politics. He predicted that the era of information politics would come soon. At present, academic research on network politics is still in the stage of continuous development. In terms of research hot topics, scholars both at home and abroad focus on two hot topics: the study of the subject of online politics and the study of the media, while domestic scholars focus on the effect and influence mechanism of online politics. Sha et al. take “Ask Luzhou” and its related data as the research object to investigate the influence of the interactive behavior of the government and the people on the effect of online politics [3]. In contrast, foreign scholars have focused on the study of online political issues and diffusion mechanisms. Steve Cedric Bizimana used the qualitative methodology and framework provided by the European Commission to assess the e-readiness of public institutions and explore how to enhance citizens’ political will by using Brady government institutions as the subject of his study [4]. Jones et al. compared the impact of traditional and online media on young people’s political participation and voter turnout using the topic of democratic elections and found a facilitating role for online media during the presidential campaign of the 2012 election. Interpreting the current stage of academic research on online politics from the perspective of research methods, we can find that both domestic and foreign scholars have paid attention to the research methods of online politics. Domestic research is dominated by the case study method. Duan and Jiang other scholars used Delphi method to construct the performance index system of leadership mailbox response to conduct in-depth research on the logic of government response [5]. In terms of qualitative and quantitative research, domestic research is inadequate and has not yet formed a certain degree of research fervor. The main research methods include actor-network theory, meta-analysis, case study, network analysis, and so on. Bellanova analyzes the use of data protection and critically explores the potential and limitations of the “digital age” based on governmental research and actor-network theory [6]. Wirtz and Daiser creatively apply meta-analysis to the study of online governance, systematically revealing areas for further research based on an analysis of the previous literature on online governance [7]. ELKheshin and Saleeb used the Tam model to study the influential factors and determinants needed to promote citizens’ acceptance of e-government services in developing countries, using Egypt as an example [8].

In 2018, the General Office of the State Council issued the Opinions on Promoting the Healthy and Orderly Development of New Media for Government Affairs, which pointed out that we should actively promote open government affairs through new media for government affairs, strengthen interpretation and response, enhance interaction between the government and the people, and continuously improve the government’s ability to perform its duties online. In the context of digital government, the development of China’s online government has shown new characteristics such as rapid dissemination and strong interaction, and local governments are facing new trends and challenges in online government to better improve their response capabilities to become a hot issue of current concern. At present, the study of local government’s response to online politics is still in need of continued in-depth exploration. The reasons for this are twofold. On the one hand, there are still relatively few research methods and models applied to local government online government response, and there is still room for development in qualitative and quantitative research. Second, the effective construction of responsive government in the context of digital governance is very important, and the people have put forward new requirements for government responses and services, so it is still of contemporary and progressive significance to deepen the research on local government online government responses. This paper establishes a research framework on the factors influencing local government online responsiveness based on the TOE theory of policy tool innovation and uses regression analysis to empirically study data from 230 questionnaires of domestic local government staff. This paper further identifies the factors influencing local government online responsiveness and its mechanism of action and provides certain research insights for the innovative development of online responsiveness in China.

2. TOE Theoretical Framework

2.1. Overview of TOE Theoretical Framework. Foreign scholars usually analyze e-government and digital government governance in the context of technology adoption and application and have developed a relatively rich analytical framework. Among the many studies on digital transformation of local governments in China, the TOE theoretical framework, which is a comprehensive analysis framework based on the context of technology application, is widely used, frequently applied, and highly recognized. The TOE framework, or “technology-organization-environment” framework, was first proposed by Tomatzky and Fleischer in 1990 in their book “The Process of Technological Innovation.” They emphasize the impact of multilevel and wide-area technology applications on the effectiveness of technology adoption. It is based on a combination of theories related to information technology innovation adoption and its expansion, mainly refers to the fact that the adoption of an innovative technology by an organization is influenced by three levels of factors, including the technical level (T), the organizational level (O), and the context level [9]. Among them, the technological factor mainly refers to the focus on the characteristics of the new technology itself and the inclusion of internal or external links related to the organization, such as the relative advantages, compatibility, complexity, experiment ability, and observability of the new technology. Organizational factors mainly refer to the
characteristics of the organization, including the size of the organization applying the technology, organizational structure, scope of operation, leadership support, communication mechanisms, and quality of organizational human resources. Environmental factors, on the other hand, refer to the specific environment in which the represented organization is located, such as political, economic, cultural, policy, and demographic. In other words, they refer to the external environment in which the organization operates and interacts with other organizations, such as the pressure and challenges outside the organization.

2.2. Application of TOE Theoretical Framework. The TOE framework, as a general analytical framework, has first been used to analyze the impact of technological, organizational, and environmental factors on the adoption of new technologies. Because its influencing factors do not specify specific explanatory variables, it has the advantageous features of being more holistic, systematic, flexible, and operable and has been widely used in the fields of government digital governance, e-commerce, enterprise innovation and development, and new business models. In recent years, the number of empirical studies applying TOE framework theory to e-government, government governance, and service-oriented government construction has gradually increased in domestic and foreign academia. Indonesian scholars examined the factors influencing e-government assimilation in Indonesia and used the TOE framework to construct a theoretical model to explain e-government assimilation and suggested that organization type could play a moderating role in the e-government assimilation process. In addition, the TOE framework has strong adaptability and explanatory power and can be flexibly adjusted according to the changes of specific research objects. The operation of online government is not only influenced by the resources possessed by the two interacting subjects of government and citizens themselves but also depends on whether the external environment in which the government and individual citizens live will have an impact on good government-citizen interaction, as well as the influence from organizational factors such as high-level support and organizational scale. Therefore, this paper applies the TOE model to the study of the influencing factors of government online government response, which has a high fit. In the practice scenario of online government in China, the factors influencing the responsiveness of local governments are complex and comprehensive, and it is of practical significance to promote the digital transformation of government through empirical analysis.

3. Empirical Analysis of the Influencing Factors of Local Government’s Response to Online Politics

3.1. Analysis Framework. Based on the theory of TOE framework, this paper selects five factors that influence local government’s online political response and constructs an analysis model of local government’s online political response influence factors, as shown in Figure 1. These five factors include one technical factor, two organizational factors and two environmental factors, which are technical capability, high-level support, perceived benefits, public readiness, and public satisfaction, respectively.

3.1.1. Technical Capability. Technological capability is the information system capacity possessed by an organization and consists of IT infrastructure and IT personnel. In the field of digital government technical capability is an important factor in determining the level of e-government services and e-government user satisfaction [10]. In the practice of online government in China, technical capability is an important guarantee for effective interaction between government and citizens. On the one hand, information technology infrastructure can provide technical guarantee for the information website, telephone hotline, video communication, and other government-citizen interaction platforms of online government, ensuring the fluency and transparency of government-citizen interaction. On the other hand, IT personnel have the relevant professional knowledge and skills to help in the Internet field. Therefore, the higher the level of technical competence of local governments, the higher the readiness of online political responses will be. Therefore, the hypothesis is as follows.

H1: Technical competence has a positive effect on local government’s response to online questioning.

3.1.2. Senior Leadership Support. Senior leadership support is the extent to which the organization’s senior leadership promotes information systems and IT uptake. Technology innovation in government is influenced by the capacity of e-government and the level of attention given by top leadership. The purpose of senior leadership support for government response can be understood as the public’s intention to change its interaction with the government because of the government’s application of a particular information system or information technology. The government’s response to public demands through Internet platforms has become the trend of building a responsive government. In terms of government responsiveness, most senior local government officials are receptive to citizens’ opinions and respond to citizens’ needs regardless of whether the public opinion is reflected from the formal system or informal online channels. In addition, citizens’ evaluation of the government in terms of responsive behavior has a certain degree of influence on local governments’ digital governance capacity. In summary, the second hypothesis is formed.

H2: Top leadership support positively influences the responsiveness of local governments’ online governance.

3.1.3. Perceived Benefits. Perceived benefits are the benefits that can be expected by an organization when information technology is put into use. There are four benefits of online governance for local government departments: first, it enhances the interactivity between citizens and government;
second, it promotes the improvement of public service capacity; third, it increases citizens’ enthusiasm to participate in democratic politics; and fourth, it reduces citizens’ cost of asking for government. In addition, the degree of citizens’ perceived value of the effect of online political questioning will have some influence on government behavior. Assuming that the online governmental approach is more cost effective than other governmental approaches, i.e., it costs less to get better services and has a better perceived experience, citizens will be more inclined to choose the online governmental approach to express their service needs and seek solutions to problems. Based on the fact that all these benefits drive the response of local governments to online government inquiries, a third hypothesis is formed.

H3: Perceived benefits have a positive impact on local government online government response.

3.1.4. Public Readiness. Public readiness can be defined as the state of mind in which the public is inclined or likely to accept a new technological service. Public readiness reflects the potential scale of demand for local government departments to serve the public through online government. Public readiness motivates government departments to respond to citizens’ needs and difficulties through online government. The public accepts and uses online government platforms so that government departments can provide public services to the public. If the public is not ready to use the web-based government platform, then government departments cannot respond and provide government services through web-based government. Therefore, there are the following hypotheses.

H4: Higher public readiness will positively influence local governments’ responses to online governmental inquiries.

3.1.5. Public Satisfaction. Public satisfaction is a concept that focuses on the public and is evaluated by public perception. The government provides public services that meet public preferences to help enhance government trust. Public satisfaction with public services is an important indicator and basis for measuring government performance and an important criterion for judging the level of social management of local governments. Public satisfaction depends on the experience of citizens’ perceptions after receiving online government services compared with the degree of public expectation before receiving them and reflects the public’s evaluation of local governments’ responses through online government platforms. The larger the ratio, the higher the public satisfaction. In summary, we make the following hypotheses.

H5: Higher public satisfaction will positively influence local government’s response to online questioning.

3.2. Variable Measurement. In order to better measure the subjects and research variables of this paper effectively, the research variables were measured using both the measurement scales that existed in previous studies and the corresponding measurement scales were developed for the research context. The three scales for technical competence were adapted from the literature [11], the three scales for high-level support were adapted from the literature [12], and the three scales for public readiness were adapted from the literature [13]. According to the research object of this paper, which is the responsiveness of local governments to online government, the scales of perceived benefits, public satisfaction, and responsiveness were designed specifically for this study. The scales of perceived benefits are (a) increasing interactivity between citizens and government; (b) making it easier for citizens to understand and receive government services; (c) promoting citizens’ participation in government governance; and (d) facilitating citizens’ feedback on government services. The scales of public satisfaction are (a) the degree of public expectation of government online questioning; (b) the quality of government response to public
3.4. Reliability Analysis. The reliability analysis of the study variables was conducted by using SPSS. The results of the analysis showed that the alpha values for technical competence, high-level support, perceived benefits, public readiness, public satisfaction, and responsiveness were 0.793, 0.775, 0.763, 0.814, 0.823, and 0.774, respectively. All α were above 0.70 (the results are shown in Table 1) and passed the reliability test.

3.5. Validity Analysis. The analysis of the results of the KMO and Bartlett’s sphericity test on the study variables showed that the KMO statistic was 0.925, with a value greater than 0.8. The approximate chi-square of Bartlett’s sphericity test was 1321.911, with a degree of freedom of 15 and a significance of 0.000 less than 0.05 (the results are shown in Table 2). The results prove that the research model is more satisfactory, there is correlation between variables, and the questionnaire has high validity.

3.6. Correlation Coefficient Analysis. The results of correlation analysis show that all variables are significantly correlated at the 99% significance level, and the correlation coefficients are greater than 0, which is a positive correlation (see Table 3). According to the analysis of the results in Table 3, the influence of senior leadership support and perceived benefits on the responsiveness of local governments to online political issues is more significant.

3.7. Regression Analysis. In this paper, regression analysis was used to calculate the significance by regression analysis of 230 valid questionnaire data to test the hypothesis model (see Tables 4 and 5).

The validation results show that the adopted model provides a more effective and accurate analysis of the factors influencing the government’s online government response. The regression coefficients of technical competence, senior leadership support, and perceived benefits on responsiveness were 0.019, 0.332, and 0.265, respectively, and were significant at the 0.01 level. The regression coefficients of public readiness and public satisfaction on responsiveness were 0.156 and 0.048, respectively, and were significant at the 0.05 level. Therefore, the hypothesis that factors such as technical competence, senior leadership support, perceived benefits, public readiness, and public satisfaction have a significant positive influence relationship on the responsiveness of government online questioning is verified, and H1–H5 of the proposed hypothesis is supported. Analyzed from the perspective of the influence of each factor, the logical meaning of this analytical model is reasonable, and the user behavior is adequately explained.

3.8. Result Analysis and Discussion. The results of the regression analysis lead to a graph of the path coefficients of the research model, as shown in Figure 2.

The regression coefficient of technological capability on the responsiveness of local government online questioning is 0.019, which is an important factor influencing the response of government online questioning. As China’s economy is developing rapidly, the local Internet infrastructure is being improved, and the Internet penetration rate is growing year after year. At the same time, to a certain extent, it has also prompted the public to put forward higher requirements for government service platforms. As a government affairs platform that is built, developed, and operated and maintained by the main government body, the relevant departments of local governments should not only strengthen the construction of specialized information centers or contact third-party enterprises to operate and maintain them because of their strong dependence on technical resources and strengthen the information technology training for relevant personnel to further enhance the technical capacity of local government departments.
Table 3: Correlation analysis among the dimensions.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Responsiveness</th>
<th>Technical capacity</th>
<th>Senior leadership support</th>
<th>Perceived benefits</th>
<th>Public readiness</th>
<th>Public satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsiveness</td>
<td>Pearson correlation</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technical capacity</td>
<td>Pearson correlation</td>
<td>0.740**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior leadership support</td>
<td>Pearson correlation</td>
<td>0.820**</td>
<td>0.700**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived benefits</td>
<td>Pearson correlation</td>
<td>0.816**</td>
<td>0.689**</td>
<td>0.763**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Public readiness</td>
<td>Pearson correlation</td>
<td>0.788**</td>
<td>0.656**</td>
<td>0.754**</td>
<td>0.823**</td>
<td>1</td>
</tr>
<tr>
<td>Public satisfaction</td>
<td>Pearson correlation</td>
<td>0.767**</td>
<td>0.674**</td>
<td>0.772**</td>
<td>0.790**</td>
<td>0.805**</td>
</tr>
</tbody>
</table>

**Significant correlation at the 0.01 level (two-tailed).

Table 4: Model summary.

<table>
<thead>
<tr>
<th>Model</th>
<th>( R )</th>
<th>( R^2 )</th>
<th>Adjusted ( R^2 )</th>
<th>Error in standard estimation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.889a</td>
<td>0.790</td>
<td>0.785</td>
<td>0.358</td>
</tr>
</tbody>
</table>

Table 5: Coefficients.

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized coefficient</th>
<th>Standardized coefficient</th>
<th>( t )</th>
<th>Significance</th>
<th>Covariance statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>-0.007 0.071</td>
<td>-1.988 0.048</td>
<td></td>
<td></td>
<td>2.270</td>
</tr>
<tr>
<td>Independent variable</td>
<td>Technical capabilities 0.185 0.045</td>
<td>0.265 0.01</td>
<td>4.117 0.000</td>
<td>3.023</td>
<td>2.270</td>
</tr>
<tr>
<td></td>
<td>Senior leadership support 0.331 0.055</td>
<td>0.332 0.000</td>
<td>5.995 0.000</td>
<td>3.023</td>
<td>2.270</td>
</tr>
<tr>
<td></td>
<td>Perceived benefits 0.268 0.062</td>
<td>0.265 0.000</td>
<td>4.330 0.000</td>
<td>4.023</td>
<td>4.014</td>
</tr>
<tr>
<td></td>
<td>Public readiness 0.148 0.058</td>
<td>0.156 0.011</td>
<td>2.555 0.011</td>
<td>4.014</td>
<td>4.014</td>
</tr>
<tr>
<td></td>
<td>Public satisfaction 0.045 0.056</td>
<td>0.048 0.021</td>
<td>0.806 0.021</td>
<td>3.775</td>
<td>3.775</td>
</tr>
</tbody>
</table>

Figure 2: Path factor diagram.
The regression coefficient of top leadership support on the responsiveness of local government online questioning is 0.332, which is a factor that positively affects the responsiveness of local government online questioning. Top leadership support for informatization as an attitude and behavior actually reflects the informatization policy of the relevant organizations in a certain environment. In the context of digital government construction, high-level leadership support appears to be important for promoting digital government governance, which also has a greater impact on the development of local government online questioning. High-level leadership support can, on the one hand, from overcoming internal resistance, motivate the relevant personnel to work enthusiastically on network questioning response, on the other hand, can promote the introduction of external resources to achieve the effective connection of internal and external resources of network questioning. Therefore, high-level leadership support should strengthen the policy orientation of the promotion and use of network questioning platform.

The regression coefficient of perceived benefits on the responsiveness of local government online government is 0.265, which has a positive effect on the responsiveness of local government online government. Citizens’ willingness to use the local government online government platform depends to some extent on the perceived benefits of using the platform. For example, whether the web-based government questioning method is more cost effective than other methods, i.e., whether it costs less to get better services. The importance that local governments attach to online government also depends on the perceived benefits of online government. Local governments should take citizens’ needs as the guide, enhance the interaction between citizens and the government through online government, facilitate citizens to seek services and solve problems from the government regardless of time and space, and strive to improve their own government service capability and level.

The regression coefficient of public readiness on the responsiveness of local government online questioning is 0.165, which plays a significant positive influence on local government online questioning response. The platform carriers of local government online questioning include government websites, government APP, and government WeChat. At present, the number of Internet users in China has exceeded 800 million people, reflecting the potential scale and market of e-government services in China, and the number of potential groups of users of online government inquiries is still quite large. In recent years, the meta-universe concept has begun to be proposed to be applied in the field of government digital governance, which has a positive impact on enhancing the experience of citizens’ online government inquiries. Local governments should further popularize the use and convenience of web-based government to more residents, with an eye to improving the responsiveness of solving residents’ needs and problems and promoting web-based government as a convenient and beneficial service for citizens.

The regression coefficient of public satisfaction on the responsiveness of local government online questioning is 0.048, which is one of the important influencing factors of local government online questioning response. The level of services provided by government online government platforms varies, and users’ sense of public service experience in online government platforms also varies. Users’ evaluation and feedback in experiencing the government’s ability to solve difficult problems through online questioning have a positive effect on the government’s ability to improve its response to online questioning. Local governments should improve the public satisfaction evaluation system for online government and collect user satisfaction evaluation and feedback for existing problems and shortcomings. For example, failure to respond to users’ demands in a timely manner, poor responsiveness, and poor interaction with users, etc., to make adjustments and improvements and then give citizens a better service experience.

4. Conclusion

The conclusion of the study indicates that technical competence, senior leadership support, perceived benefits, public readiness, and public satisfaction are important factors that have a positive impact on the response of local governments to online inquiries. While the platform carrier of online government is changing in the direction of diversification, it is necessary to further break down the barriers of local government to enhance the ability of online government and achieve innovative development according to the degree of support of its influencing factors. First of all, the new technology gives the government governance ability to improve is still huge, technology can provide the basic operation guarantee for network questioning, as well as can enhance the citizens to use the network questioning the degree of convenience and experience. Second, at the organizational level, the government is the main body of online governance, and it is the core element of further development of online governance through institutional reform, resource supply, and policy control to promote the development of online governance. Finally, at the environmental level, citizens are the beneficiaries of the development of online government, and the development of online government requires the analysis of objective external needs and resources, so environmental factors are important external conditions for the robust development of online government. The contribution of this paper’s research mainly focuses on the construction of an analytical model of the influencing factors of local government response based on the TOE theoretical framework. Compared with technical and environmental factors, organizational factors have a greater impact on government e-service capability, which has enlightening implications for the further development of local government online questioning.

Data Availability

The data sets used or analysed during the current study are available from the corresponding author on reasonable request.
Conflicts of Interest

The authors declare that they have no conflicts of interest.

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