Research on Influencing Factors of Government Affairs Short Video

-- A Case Study of TikTok Short Video

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Abstract. Under the background of the rapid development of the mobile Internet, since 2016, many short video platforms are constantly emerging and become one of the most popular social media today, and accumulate a large number of users. Furthermore, government departments opened government affairs TikTok accounts one after another under the background of growth spurt of the number of short videos. Taking the TikTok short video as an example, in this paper, according to the relevant data of government affairs TikTok account and 197 questionnaires, linear regression analysis is used to conduct research from the four aspects: social and economic environment, use feedback, information gap, and information characteristics, explore the public use condition and influencing factors for government affairs TikTok a at present in the hope of providing constructive suggestions for the optimization and development of government affairs short video. The study found that the penetration and utilization rate of government affairs short video is low, and the respondents who follow government affairs in the form of short videos are less than 20%.

Keywords: Government Affairs Short Video; Influencing Factor; Mobile Government Affairs; Government Affairs New Media.

1. Introduction

The short video platform is the product emerging at a historic moment when the mobile Internet develops to a certain stage, the author draws on the existing analysis methods of the research on the influencing factors of the public willingness to use government affairs clients such as government affairs microblog and government affairs WeChat, according to the characteristics of government affairs short video (government affairs TikTok), combines the platform's own operating experience, use feedback of TikTok users, professional data provided by the TikTok platform, as well as relevant research results in the e-government field, builds the following models, and hypothesizes from four aspects: social and economic environment differences, information gap, use feedback, and information characteristics. The public current and future use willingness for governmental affairs TikTok based on the built relevant assumptions and data verification.

2. Differences of Social and Economic Environment

Economic development is the basis for the government to accept and develop e-government affairs. The level of regional economic development will affect the public's demand for e-government. Verba&Nie (1972) proposed the social and economic model, it believed that social and economic backgrounds such as education, occupation, and income will affect the individual behaviors to actively contact the government: people with higher social status have the ability and skills to participate in governmental activities, and the experience of successful participation will form the positive feedback on the skills and attitudes of the participants. Therefore, the author assumes that the public with higher social and economic status, namely, well-educated, and high-income groups are more inclined to use government affairs TikTok to obtain government affairs information. Based on this, we make the following assumptions about the public's use of government affairs TikTok:

H1: The public with better education tend more to use government affairs TikTok to obtain government affairs information.

H2: The public with higher the income level tends more to use government affairs TikTok to obtain government information.

H3: The public officials in the government and public institutions tend more to use government affairs TikTok to obtain government affairs information in comparison with the public in other occupations.

3. Information Divide

The information gap is the digital divide, the famous American futurist Toffler proposed in 1990, the digital divide is the gap between developed and underdeveloped countries in information and electronic technology. For the people who use smart phones and mobile Internet frequently, they have deeper experience and more benefit for the convenience that mobile Internet brings to life and study, so they will choose to use government affairs TikTok; for public with strong ability of smart phones and mobile Internet, they usually pay less time cost to obtain high-quality information, so they will also choose to use government affairs TikTok; for the public with high acceptance of new media, they are more acceptable and adaptable to the development of new media, and are willing to try, so they also have the willingness to try it. Based on this, we make the following assumptions about the public use of government affairs TikTok:

H4: The public with higher ability to use the mobile Internet tend more to use government affairs TikTok to obtain government affairs information.

H5: The public with higher frequency to use the mobile Internet tend more to use government affairs TikTok to obtain government affairs information.

H6: The public with higher acceptance to new media tend more to use government affairs TikTok to obtain government affairs information.

4. Use Feedback

West believes that the public satisfaction with public services will affect their continuous contact with the government. The government affairs TikTok is similar. Fan Lan built the model of the influencing factors of WeChat users' willingness to continue to use based on the expectation confirmation theory, the empirical results show that perceived usefulness, perceived entertainment, satisfaction, and perceived user nature can all have direct positive impact on users' willingness to continue to use. Perceived usefulness, perceived entertainment and degree of confirmation indirectly affect users' willingness to continue using it through satisfaction [11]. The author believes that the positive feedback generated by the public use of government affairs TikTok will further strengthen the public use willingness, and make the public willing to use government affairs TikTok in the future. Based on this, we make the following assumptions about the public use of government affairs TikTok:

H7: The public who are more satisfied with the current use of government affairs TikTok will tend more to continue to use government affairs TikTok to obtain government information in the future.

H8: The public who perceive more usefulness of government affairs TikTok will tend more to continue to use government affairs TikTok to obtain government affairs information in the future.

5. Information Characteristics

In order to distinguish the above user characteristics from the following information characteristics, the analysis process of the relevant information characteristics will be listed separately. The intermediary variables of the information resource characteristics have an impact on the information behavior in a specific situation, which is emphasized in the Wilson information behavior model [12]. Information resource characteristics include information contents and information forms. The information contents cover a wide range, the information contents of government affairs TikTok

specifically includes the video title, video body, and video publisher. Generally, the information contents of commonly used video are the main body of the video. Whether the government affairs information can be forwarded depends on the amount of information carried by the contents, the size of the content emotional factor [13] and the degree information processing. By surveying the element analysis of government affairs TikTok video and people around, we make the following hypotheses about the public use of government affairs TikTok:

H9: The information contents of government affairs will affect the public willingness to use government affairs TikTok.

H10: The information title of government affairs will affect the public willingness to use government affairs TikTok.

H11: Video duration will affect the public willingness to use government affairs TikTok.

H12: The authority of the information publisher will affect the public willingness to use government affairs TikTok.

6. Research Methods

6.1 Data Collection

Combining the literature and papers related to e-government affairs, in October 2019, we designed a questionnaire that fits this research model as rigorously as possible; in order to increase the credibility of the data as much as possible, the questionnaire set up two related questions for each variable. Some questions were adjusted and revised through trial filling. In December 2019, the questionnaire was distributed and collected. Some invalid questionnaires with too short response time or consistent answers were eliminated, leaving 197 valid questionnaires.

6.2 Variable Measurement

This research is divided into three parts, the first part studies the influence of variables such as socioeconomic environment differences and information divide on users' current willingness to use. Independent variable education level, set the question "your education level"; independent variable income, set the question "your current monthly income"; independent variable occupation, set the question "your occupation is"; independent variable new media acceptance "How do you accept new media (especially in information technology)"; for the use of mobile Internet, set the frequency and ability to use mobile Internet. The dependent variable in this part is the user's current usage, set the question "How often do you use government affairs TikTok". Part 2 mainly studies the public use feedback after using the government affairs TikTok, and further explores its impact on the public future use intention through the user's attitude evaluation after use, and sets up "satisfaction" and "perceived usefulness" two questions. Use "Are you satisfied with the combination of government affairs TikTok" and "Do you think government affairs TikTok brings convenience to your life" for measurement. Part three set questions about information characteristics to explore the tendency of the public to use government affairs TikTok.

7. Research Findings and Data Analysis

7.1 Statistical Analysis Results

According to the data in Table.2, the public current willingness to use government affairs TikTok is not high, the average value is only 1.18, it shows that the penetration rate of government TikTok among the public is relatively low. The public average use willingness in the future is 3.57, it is much higher than the current, and it shows that government affairs TikTok have potential market space. The use frequency and ability of the public for the mobile Internet are at a relatively high level. In the use feedback, the average satisfaction rate of the public is 3.69; it is slightly higher than the average value of perceived usefulness 3.62.

Table 1. Variable measurement

variable	measurement	minimum value	maximum value
current use condition	How often do you use government affairs TikTok?	1=never use	5=extremely frequent
use willingness in the future	How is your willingness to continue using government affairs TikTok?	1=extremely unwilling	5=extremely willing
new media acceptance	How is your acceptance of new media (especially information technology)?	1=extremely passive	5=extremely active
use frequency of mobile internet	How often do you use smartphone?	1=never use	5=extremely frequent
use ability of mobile Internet	How do you use smartphone?	1=extremely unskilled	5=extremely skilled
satisfaction	Are you satisfied with the combination means of government affairs TikTok?	1=extremely dissatisfied	5=extremely satisfied
perceived usefulness	Do you think government affairs TikTok brings convenience to your life?	1=strongly disapprove	5=extremely identify
education	What is your education level?	1=junior college education and below	4=PhD and above
income	What is your current monthly income?	1=below 3000 yuan	5=over 10000 yuan
occupation	What is your occupation?	0=other occupations	1=public employees of the government or utilities
gender	What is your gender?	0=male	1=female
age	What is your age group?	1=below 20 years old	5=over 60 years old

7.2 Regression Analysis Results

The analysis results show (Table.3) that the use frequency and ability of the public to the mobile Internet has no significant impact on the use of government affairs TikTok, the convenience brought by the high use frequency in the hypothesis and the low time cost brought by the strong use ability are not clearly reflected here.

The analysis results in Table.4 show that satisfaction, perceived usefulness, new media acceptance, mobile Internet use frequency, and mobile Internet use ability all have significant impact on the public use willingness in the future. The public use feedback on government affair TikTok (satisfaction, perceived usefulness) and attitude evaluation will be positively fed back to the public, enhance users' desire to continue using it. The public good use of the mobile Internet and new media will also have significant impact on the public continuous use of government affairs TikTok.

Table 2. Descriptive analysis results

	variable	average value	standard deviation	minimum value	maximum value
dependent variable	current use condition	1.18	0.54	1	5
	use willingness in the future	3.57	0.92	1	5
independent variable	new media acceptance	3.79	0.90	1	5
	use frequency of mobile internet	4.03	0.90	1	5
	use ability of mobile Internet	3.51	0.92	1	5
	satisfaction	3.69	0.84	1	5
	perceived usefulness	3.62	0.84	1	5
	education	1.90	0.41	1	4
	income	2.20	0.58	1	5
	occupation	0.17	0.34	0	1
control variable	gender	0.58	0.49	0	1
	age	1.61	2.76	1	5

Table 3. Analysis results 1

dependent variable	current use condition	regression coefficient	standard error	T value
independent variable	new media acceptance	0.070	0.272	0.258
	use frequency of mobile internet	0.050	0.278	0.179
	use ability of mobile Internet	0.161	0.269	0.600
	education	0.120	0.780	0.153
	income	0.238	0.303	0.784
	occupation	-0.324	0.433	-0.747
control variable	gender	0.506	0.544	0.930
	age	0.343	0.589	0.582

Table 4. Analysis results 2

dependent variable	use willingness in the future	regression coefficient	standard error	T value
independent variable	current use condition	0.124	0.077	1.622
	satisfaction	1.009	0.059	17.075
	perceived usefulness	0.833	0.123	6.796
	new media acceptance	0.533	0.126	4.218
	use frequency of mobile internet	0.511	0.132	3.864
	use ability of mobile internet	0.402	0.135	2.979
control variable	education	-0.010	0.425	-0.023
	income	-0.172	0.164	-1.048
	occupation	0.442	0.229	1.932
	gender	0.396	0.293	1.350
	age	-0.219	0.320	-0.684

7.3 Descriptive Analysis Results

Table.5 shows the descriptive analysis results of information characteristics. The data shows that the impact average of duration on the public use of government affairs TikTok is about 3.5, namely, the public has no significant tendency to duration set of government affairs TikTok video; in the main content, the public tend more to watch witty and humorous government affairs video than serious and formal expressions; the title has no significant impact on the public willingness to watch government affairs video, the average value is around 3.4, the public slightly tends to government affairs videos with suspenseful title, authority is a major measurement index of the public choice to watch government affairs videos, the public tend more to watch authoritative videos, the average is 4.12.

Table 5. Analysis results 3

question set	minimum value	maximum value	average value	standard deviation
I believe that too long video duration will affect my desire to watch government affairs video	1	5	3.58	1.012
I believe that too short video duration will affect my effect to watch government affairs video	1	5	3.48	0.953
I will choose government affairs videos with more witty and relaxed expressions	1	5	4	0.904
I tend to be more formal and serious government affairs video	1	5	3.06	1.018
I tend to have government affairs video with formal and serious title	1	5	3.2	0.833
I will choose government affairs video with suspense or rhetorical questions in the video title	1	5	3.54	0.734
I will pay more attention to government affairs video published by authoritative publishers	1	5	4.12	0.773
I will more choose to watch government affairs video released by TikTok accounts at the provincial level and above	1	5	3.62	0.83

8. Conclusion

In allusion to the above research results, we make the following suggestions:

First, enhance public satisfaction. Integrate high-quality information resources and issue them, make content expressions younger, and get rid of the lifeless and rigid status quo. Government departments need to lower their profile and use a simpler approach close to people's lives, so that the public can easily, accurately, and efficiently understand the information they need.

Second, publicize government affairs TikTok and realize "content seeding." Share and recommend government affairs TikTok via content introduction, display, etc., stimulate others' use desire. Another important reason why the current government affairs TikTok penetration is not high is that publicity on government affairs information, government affairs services, and government affairs TikTok has not yet been put in place. In the promotion of government affairs TikTok, try to increase the probability of government affairs short video appear on the homepage of TikTok, publishers also need to increase news sensitivity and publish government affairs information with news value as much as possible.

Third, consolidate current users and seek progress while keeping stability. At the moment when the government affairs client is soaring, the government affairs TikTok not only needs to keep up with the trend of the times, optimize and innovate, before that, it is also important to improve user stickiness and consolidate user loyalty. Firmly grasp the influencing factors that affect users' willingness to continuously use-satisfaction and perceived usefulness. The TikTok platform should always be vigilant about user experience in posting videos, and regard user experience and content

services as the norm, videos should try to reflect the needs of public and people's livelihood, make information interaction timely, and make platform contents more rich and comprehensive.

Fourth, there are still some shortcomings in this research. The effective data collected is insufficient, the sample is not representative, the age group is relatively concentrated, the proportion of students is relatively large, and the respondents are generally concentrated in northeastern cities. It is hoped that the above shortcomings can be improved in future research, expand the scope of data collection, conduct data analysis comprehensively and accurately, and further make high-quality suggestions.

References

- [1] China Internet Network Information Center. The 45th China Internet Network Development Statistical Report [R]. Beijing: China Internet Network Information Center, 2020.
- [2] Bonsón E, Bednárová M. YouTube Sustainability Reporting: Empirical Evidence from Eurozone-Listed Companies [J]. *Journal of Information Systems*, 2014, 29(03): 35-50.
- [3] Chen Lan. Analysis on the Performance Difference from the Statistical Data in Our Regional Government Portal Website[J]. *China Management Informationization*, 2008(17): 105-107.
- [4] Ma Liang. The Development of E-government from the Perspective of Government Innovation Diffusion: An Empirical Study on Chinese Provincial Governments[J]. *Library and Information Service*, 2012, 56 (07): 117-124.
- [5] Ma Liang. What Drive the Performance of Government Microblogging?: An Empirical Study of Prefecture-Level Cities In China[J]. *Digital Governance Review*, 2018: 26-45.
- [6] Wang H. Determinants of Citizens' Intent to Use Government Websites in Taiwan[J]. *Information Development*, 2013, 29(2): 123-137.
- [7] Manoharan A. A Study of the Determinants of County E-Government in the United States[J]. *The American Review of Public Administration*, 2013, 43(2): 159-178.
- [8] Choudrie J, Ghinea G, Songonuga V N. Silver Surfers, E-Government and the Digital Divide: An Exploratory Study of UK Local Authority Websites and Older Citizens[J]. *Interacting with Computers*, 2013, 25(6): 417-442.
- [9] Taipale S. The Use of E-Government Services and the Internet: The Role of Socio-Demographic, Economic and Geographical Predictors[J]. *Telecommunications Policy*, 2013, 37(5): 413-422.
- [10] Han Xiao. Research on the Influencing Factors of Public Participation in Government Microblog[D]. Chengdu: University of Electronic Science and Technology of China, 2016: 71-74.
- [11] Fan Lan. Research on WeChat Users' Willingness to Continue to Use It[D]. Beijing: Beijing University of Posts and Telecommunications, 2013.