Research on the Youth Development Path of Local Network Media in Third and Fourth Tier Cities Based on Factor Analysis and SWOT Analysis

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ABSTRACT. *With the continuous expansion of the scale of new media platforms, the development of local online media, especially in third-tier and fourth-tier cities, is restricted. This paper explores the youth development path of local network media in third-tier and fourth-tier cities based on factor analysis model. And it used SWOT model to analyze the advantages and disadvantages of local network media as well as the existing opportunities and threats. Finally it put forward the following suggestions: firstly, strengthen technology to improve humanized service; secondly, do market research based on the development of local conditions; thirdly, build online and offline communities.*

KEYWORDS: *Local media, Youth development, Factor analysis, SWOT analysis*

1. Introduction

In recent years, the network media industry has developed rapidly. While promoting the expansion of new media platform, the market competition has become increasingly fierce.The first and second-tier cities attach great importance to new media, but the local new media development environment in the third and fourth-tier cities is not ideal.Government and enterprises mostly rely on official media for their propaganda. Network media is only used as a channel to attract customers,so its propaganda function is greatly weakened[1].At present, the main problems of network media in third-tier and fourth-tier cities are as follows:First, the platform has rich functions but low degree of specialization; second, the profit model is too single; third, the number of registrations is large but the number of real participants is small; fourth, the audience is middle-aged.Under the social background of big data, rapid development of Internet economy and few opportunities in third-tier and fourth-tier cities, how to build competitive local characteristic products, attracting more residents to participate in and enhancing customer adhesion is an urgent problem to be solved.This paper mainly studies the

development problems of network media and platform products in third-tier and fourth-tier cities to explores how local network media develop younger market and expand their competitive advantages.

2. Data Sources and Research Methods

(1)Questionnaire setting and sample analysis

In order to better analyze the views of young people in third and fourth-tier cities on the development of local Internet media, this study was conducted by issuing questionnaires. The questionnaire includes personal information, willingness to use new media platforms, opinions on the development of local forums and Suggestions on the development of local Internet media. In this survey, a total of 300 questionnaires were issued and 287 were recovered, with a recovery rate of 95.67%.The questionnaire was distributed to people aged between 18 and 35 in order to understand the factors that influence the frequency of local online media use by contemporary young people.

(2) Research methods

Factor analysis:

The core of factor analysis is to use fewer independent factors to reflect most of the information of the original variables, set the original P variables x_1, x_2, x_3, ..., x_p, The mean value of each variable (or after standardized treatment) is 0, and the standard deviation is 1[2].Each original variable is represented by a linear organization of K factors:

$$\begin{cases} x_1 = a_{11}f_1 + a_{12}f_2 + a_{13}f_3 + \cdots + a_{1k}f_k + \varepsilon_1 \\ x_2 = a_{21}f_1 + a_{22}f_2 + a_{23}f_3 + \cdots + a_{2k}f_k + \varepsilon_2 \\ \qquad\qquad\qquad \cdots \\ x_p = a_{p1}f_1 + a_{p2}f_2 + a_{p3}f_3 + \cdots + a_{pk}f_k + \varepsilon_p \end{cases}$$

The above formula is the mathematical model of factor analysis, and its basic steps are as follows:Firstly, the original variables are condensed to reduce the number of variables,Then, extract the factor, name the factor, and calculate the factor score of each observation,This paper designed matrix scale questions in the questionnaire to understand the factors affecting the frequency of young people using new media,By respondents for grade of each index is analyzed, the specific indicators including entertainment gossip, short live video or recommend jokes,local food and beauty recommendation, convenient service,match like-minded users, local policy information, update speed of platform information news, personalized recommendation, supervision degree of content, comfort degree of page layout, and convenience degree of obtaining various permissions of users.

SWOT analysis:

SWOT analysis is an analysis based on internal strengths and weaknesses as well as external threats and opportunities, and the conclusions drawn are often

decisive[3].This paper aims to analyze the advantages and disadvantages of the third-tier and fourth-tier local media and the threats and opportunities they face in the development process through SWOT model, then propose Suggestions for the development of the third-tier and fourth-tier network media through comprehensive analysis.

3. Empirical Analysis

(1)Young people's views on new media in third and fourth-tier cities

SPSS software was used to conduct factor analysis feasibility test for the 11 index data collected in the questionnaire.KMO test statistics are used to compare the degree of correlation between variables.A KMO value in the range of 0.7 ~ 0.8 means that the data can be used for factor analysis; a value greater than 0.8 means that the data is suitable for factor analysis.According to the calculation[4], KMO value was 0.807, Bartlett value was 568.169, and P value was 0.0001, indicating that the overall validity of the questionnaire was within a relatively high acceptable range, that is, the data was suitable for factor analysis.The specific results are shown in the table below:

Table 1   Questionnaire validity analysis table

Kaiser-meyer-olkin measurement with sufficient sampling		0.807
Bartlett's sphericity test	The approximate chi-square	568.169
	df	55
	Sig	0.0001

In this paper, the 11 measurement indicators are converted into the mean score, and the factor load is used as the weight, which is condensed into three factor influence degree indexes, as shown in the table below:

Table 2   Rotation orthogonal factor table of factors affecting the development market of network media platform

Index	Factors			Name
	1	2	3	
Personalized recommendation	**0.764**	0.091	0.163	Platform technical service factor
Supervision degree of content	**0.718**	0.370	-0.148	
Update speed of platform information news	**0.698**	0.315	-0.088	
Match like-minded users	**0.695**	-0.125	0.338	

Convenience degree of obtaining various permissions of users	**0.681**	0.368	-0.004	
Comfort degree of page layout	**0.678**	0.270	0.137	
Convenient service	0.323	**0.779**	-0.033	Platform life service factor
Local food and beauty recommendation	0.009	**0.735**	0.384	
Local policy information	0.422	**0.661**	0.003	
Short live video or recommend jokes	0.136	0.056	**0.852**	Platform entertainment service factor
Entertainment gossip	0.018	0.099	**0.831**	

By observing the above table, it can be clearly seen that the component coefficients of each load factor have been significantly polarized and have a stronger ability to explain factors.

The first factor, named as the technical service factor of the platform, has a larger factor load in terms of personalized recommendation, content supervision, update speed of information and news of the platform,match like-minded users,convenience of obtaining various permissions of users, comfort degree of page layout.

The second factor,named as the life service factor of the platform, has a large factor load in terms of convenient service, local food and beauty recommendation, local policy information.

The third factor,named as the entertainment service factor of platform, has a large factor load in terms of short live video or recommend jokes and entertainment gossip.

Finally, it can be concluded from the analysis that the factors that affect the development of local online media platforms can be summarized as three: technical service factors of the platform, life service factors of the platform and entertainment service factors of the platform.

Table 3   Local network media development market factors index statistical table

Index	Factor loading	weight	Mean value	Population average index	Name
Personalized recommendation	0.764	0.180	3.78	3.85	Platform technical service factor
Supervision degree of content	0.718	0.170	3.90		
Update speed of platform information news	0.698	0.165	3.93		
Match like-minded users	0.695	0.164	3.45		
Convenience degree of obtaining various permissions of users	0.681	0.161	3.98		
Comfort degree of page layout	0.678	0.160	4.06		

Convenient service	0.779	0.358	3.98		Platform life service factor
Local food and beauty recommendation	0.735	0.338	3.86	3.89	
Local policy information	0.661	0.304	3.83		
Short live video or recommend jokes	0.852	0.506	3.30	3.345	Platform entertainment service factor
Entertainment gossip	0.831	0.494	3.39		

As can be seen from the table, with the development of the society, more and more users pay more attention to the satisfaction of spiritual needs. Compared with entertainment time, users pay more attention to the life services provided by the platform and the comfort provided at the technical level in the process of use, whether the page layout is comfortable and beautiful, and how easy it is for users to browse, publish messages and reply on the platform's web pages. Therefore, it can be concluded that the development of local network media should be based on the local environment, adhere to the people-oriented principle, and provide users with comfortable experience and services close to life by enhancing technology and becoming "urban life service providers"[5].Local online media must design products based on market demand with the goal of improving customer satisfaction.

(2)SWOT analysis of local network media in third and fourth-tier cities

Table 4 SWOT analysis

Internal factors / External factors	Strength	Weakness
	1.Rich content and wide audience 2.Long operation time and great regional influence 3.based on local, regional, new strong 4.Local staff with strong professional quality	1.Cluttered layout, inconvenient to browse 2. No characteristic plate to maintain vermicelli viscosity 3. Lack of fashion elements makes it difficult to attract young readers 4.Lack of funds
Opportunity	**Utilize**	**Improve**
1.The new media advertising market has a good prospect. 2.More opportunities for future government-enterprise cooperation. 3.The market influence of new media is increasing.	1.Contact the public departments, enterprises and businesses of the local government to launch various forms of activities 2.Enhance the advertising value and the commercial value of the platform itself.	1. Integrate existing content, redesign page layout and menu bar 2. Conduct layout classification and content selection 3. Employ local young "we media" to meet the information preferences of local young people.
Threat	**Monitor**	**Eliminate**
1.Similar media platforms are constantly emerging and seizing the market 2. the pace of replacement is fast, the heat is not easy to maintain 3. Industry norms have not yet been fully formed	1. Pay close attention to the trend of relevant industry norms and policies 2. Regularly update versions and design content columns 3. Maintain the team's technical level and work enthusiasm.	1.Unreasonable layout 2.The content is less fashionable, and the audience is younger 3.Lack of innovation in columns and activity forms 4.blindly follow the crowd, lack of their own characteristics.

4. Conclusions and Recommendations

(1)Strengthen technology to improve humanized service

People-oriented, strengthen humanized services: Network media is a platform serving the public. No matter the young group or the middle-aged and old group, they all hope to get satisfaction in the process of using new media.As a new media platform in third-tier and fourth-tier cities, compared with first-tier and second-tier cities, it is difficult to provide high-end and high-consumption services. Instead, it should provide services in daily life and spiritual needs.Adhere to the "to meet the needs of users" concept of service users, strengthen humanized services.Under the background of big data, each e-commerce website strengthens technology promotion, and recommends various products on the homepage of the website by using big data technology according to the purchase record and browsing footprint of users. As a local new media platform, it can also recommend articles that users are interested in according to their browsing record.As a new media platform in third-tier and fourth-tier cities, although it cannot provide a large number of services or enterprise cooperation benefits, it can try its best to meet consumers' preferences according to users' needs and achieve the ultimate in humanized services.

Obtain government support and expand business scope: With a huge user base and developed market economy, first-tier and second-tier new media platforms have attracted the attention of the government and enterprises, with a broad development prospect.If the new media in third-tier and fourth-tier cities want to develop, they must cooperate with the government and serve the society through the development platform supported by the government.Add a backlink to the official website of the government as well as a survey and topic discussion on the implementation effect of local policies on the new media platform, so that users can participate in the policy services.

(2)Market research, based on the development of local conditions

Market research is the foundation of enterprise development. Only by in-depth understanding of the market environment and trying to match supply and demand can enterprises achieve better development and gain benefits.The development of new media market in third-tier and fourth-tier cities requires regular investigation along with the development of urban economy, investigation of market demand and user usage, regular acceptance of user feedback, and change of platform content according to local conditions and users' living habits.Third-tier and fourth-tier cities should be based on their economic environment and pursue the development orientation of first-tier and second-tier cities in different ways. Instead, they should serve the city's own consumption level and habits and provide the latest promotion activities.Provide daily local livelihood news, policy implementation and so on, as a service provider of urban life.

(3)Build online and offline community

Online and offline cooperation mode is one of the characteristics of urban life service providers.Online delivery of information for users, offline set up physical

stores to provide users with services.At the same time, compared with the new media platforms nationwide, local new media platforms have the advantage of making friends in the same city, and the establishment of offline communities can also promote the increase of online discussion participants.Offline new media platforms are set up in fixed areas of the city for users to communicate, organize activities, and set up managers to ensure the safety and reliability of offline friendships.

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