

COMPREHENSIVE EVALUATION MODEL OF MASS MEDIA ENTERPRISE COMPETITIVENESS FROM THE PERSPECTIVE OF STRATEGIC MANAGEMENT

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Abstract: The existing mass media enterprise competitiveness comprehensive evaluation model has the problem of unclear enterprise competitiveness index, resulting in poor interpretation. A mass media enterprise competitiveness comprehensive evaluation model from the perspective of strategic management is designed. Taking the market demand as the leading factor, extract the bilateral market characteristics of mass media enterprises, obtain the model coordinates by factor analysis method, group the variables according to the correlation between variables, obtain the enterprise competitiveness index from the perspective of strategic management, standardize the indicators of different measurement units, and adopt the multi index measurement and evaluation method, The ant colony algorithm is used to set the comprehensive evaluation mode. Experimental results: the average explanatory power of the mass media enterprise competitiveness comprehensive evaluation model in this paper and the other two models are 22.401%, 16.701% and 16.970% respectively, which proves that the mass media enterprise competitiveness comprehensive evaluation model from the perspective of strategic management has stronger competitiveness.

Key words: strategic management perspective; mass media enterprises; competitive power; comprehensive evaluation; bilateral markets; factor analysis;

0 Introduction

The mass media industry refers to the industrial cluster composed of media entities that disseminate all kinds of information and knowledge. It is a special industry that produces and disseminates all kinds of information products in the form of text, image, art, language, sound, sound, digital, symbol and so on^[1-3]. In China, the media industry mainly includes Journalism (newspapers, television, radio, Internet and communication), publishing (books, newspapers, periodicals, audio-visual, electronics, online publishing and printing, recording, recording, distribution, transportation, storage and sales), and advertising (design, production and distribution)^[4-5]. In addition, exhibitions, performing arts, communication and information transmission are also an integral part of the media industry. The social function of the media industry is to spread information, knowledge, cultural concepts and scientific and technological knowledge^[6]. The media industry is an industrial cluster involving many processes and fields. Although its sub objects and sub industries belong to the media industry, there are still great differences in object and nature. However, they all have the same common characteristics as the media industry. The mass media industry is a special industry. It has not only political and cultural attributes, but also economic, industrial and market attributes^[7]. Although different countries have different positioning of the above-mentioned attributes of the media industry and different means and methods to realize these functions, the multi-attribute characteristics of the media industry and

the basic ways for various attributes to function have a common regularity. China has also experienced a changing process in the positioning of the media industry. For a long time, we have paid too much attention to and emphasized its political and cultural attributes, while ignoring its economic attributes. Before the reform and opening up, all kinds of media were largely positioned as the role of the government's propaganda institutions. They were not for profit. Economically, they completely relied on state funding. Personnel appointment and organization management were directly controlled and guided by the government. At that time, there were no concepts such as "industry" and "market" in the media field, and there was no way to talk about the concepts of "competition" and "performance". In the past three decades, under the broad background of China's economic reform, the media industry has experienced transformational development: from focusing on a single social function to paying equal attention to social and economic benefits, and constantly strengthening the main position of media institutions. The commercialization of media products has gradually accelerated, and the media market has developed rapidly. The concept of media industry has gradually been widely accepted. The research perspective of this paper is undoubtedly based on the economic attribute of China's mass media industry, but the media industry also has political and cultural attributes which are inseparable. For example, the political and cultural attributes of the media industry have a very important impact on the market structure and market behavior characteristics of the media industry. The analysis of this paper will also involve the historical background and ecological environment of the political and cultural attributes of China's mass media industry. The media industry is an industry with rich connotations. It includes newspaper, television, radio, Internet and other sub industries. Although these sub industries have common characteristics, their personality differences are also great. It is the focus of academic circles to do a comprehensive and in-depth analysis of the media industry involving many sub industries.

1 Comprehensive evaluation model of mass media enterprise competitiveness from the perspective of strategic management

1.1 Extracting the bilateral market characteristics of mass media enterprises

A remarkable feature of mass media enterprises different from other industries is the bilateral market characteristics of the media market [8-9]. The reason why the media market has the characteristics of a bilateral market is that the media has a unique business model. In fact, media operators produce two different products at the same time and sell them in two markets. Taking the broadcasting of TV programs as an example, TV stations produce and broadcast TV programs to consumers or viewers of TV programs, and sell the TV advertising time of TV programs to TV advertisers as products. The subordinate structure of TV media is shown in Figure 1.

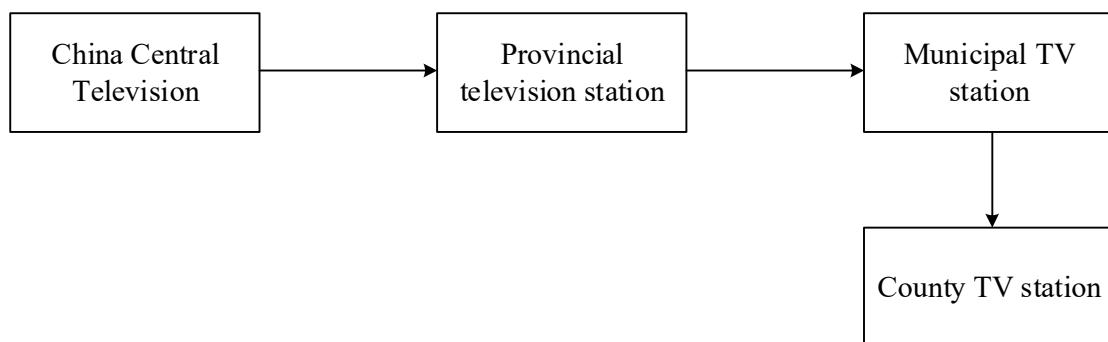


Fig. 1 Subordinate structure of TV media

As can be seen from Figure 1, although this "four in one" pattern originally had no subordinate relationship between superiors and subordinates, their administrative status naturally formed different media forces in the market. CCTV's program transmission covers the whole country. It has a national audience market, and the programs of local TV stations at different levels can only cover their own jurisdictions. Therefore, they can only have their own TV viewers. The characteristic of an industry dominated by market demand is that with the increase of demand for a product, the interests of operators in the industry will also increase. From the perspective of income, the price of another product will increase, and from the perspective of cost, economies of scale will play a role. Media industries such as newspapers, periodicals, radio and network media all have this characteristic. In the industry dominated by market demand, the bilateral market characteristics of the media market determine that the income of media operators mainly comes from advertising income, rather than charging consumers of media products for consuming media products or services, such as TV program viewing fees charged to TV program viewers, fees charged to newspaper readers for purchasing newspapers and periodicals, etc. From the perspective of social welfare, the traditional classical theory holds that monopoly will reduce social welfare and cause the loss of social welfare, but for the media industry, the bilateral market characteristics of media products may be different. Due to the bilateral market characteristics of media products and the interdependence of media product consumption and media advertising demand in the two markets of media product consumption and media advertising, even if media operators have a monopoly position in a certain media market, they do not control the market supply of media products^[10-11]. Increasing the price of media products to obtain its profits, but by reducing the price of media products as much as possible and expanding the number of consumers of media products, so as to obtain its profits through more advertising revenue. The behavior of media operators in the two markets is determined by the market state of their two types of products. Therefore, its market position in each market is determined by the market structure of the market, which in turn depends on the mutual substitution of consumer demand for media products and advertisers' demand for media advertising. Therefore, The market monopoly power of media operators is reduced due to the interdependence of products provided by media operators in the two markets. Based on this, the steps of extracting the bilateral market characteristics of mass media enterprises are completed.

1.2 Calculating model coordinates by factor analysis

The interests of mass media enterprises, especially listed enterprises, are related to investors, managers, employees, suppliers, customers, competitive enterprises, government departments and other subjects. They pay attention to the overall situation of the company from different perspectives and different interest demands^[12]. Therefore, it is particularly important to make a comprehensive and reasonable evaluation of the horizontal listed enterprises in the industry. The horizontal and vertical coordinates of the model created in this paper divide the plane into four areas, as shown in Figure 2.

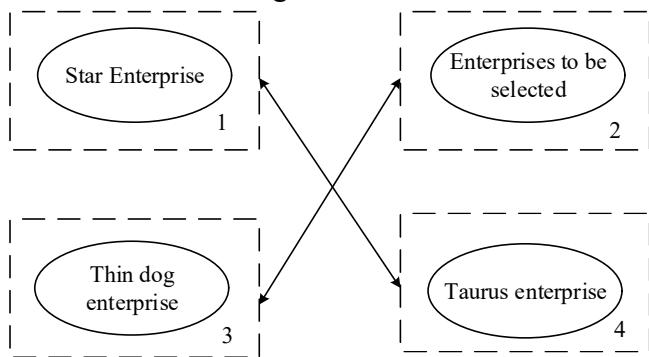


Fig. 2 Model plane area

As can be seen from Figure 2, the mass media enterprises in the first region, namely star enterprises, have strong comprehensive strength and high growth rate of comprehensive strength. Mass media enterprises located in the second region, that is, enterprises to be selected, have weak comprehensive strength, but the growth rate of comprehensive strength is high. The overall strategy adopted by such enterprises should be selective strategy, that is, invest in promising enterprises to gradually develop into star enterprises. The mass media enterprises located in the third region, namely thin dog enterprises, have a low growth rate in both comprehensive strength and comprehensive strength. Mass media enterprises located in the fourth region, namely Taurus enterprises, have strong comprehensive strength, but the growth rate of comprehensive strength is low. The overall strategy that such enterprises should adopt is maintenance strategy. Factor analysis is to determine a few representative main factors from some complex relationships. In order to analyze and explain many complex economic problems, we must grasp and study these main factors. The basic idea of factor analysis is to group variables according to the correlation between variables, that is, the correlation between variables in the same group is high, while the correlation between variables in different groups is low^[13-14]. Each group of variables represents a basic structure, which is named common factor. In the process of factor analysis, the common factor can be transformed into a linear combination of variables, so that the value of each factor, i.e. factor score, can be estimated through the measured value of variables. The specific expression formula is:

$$P_i = \beta_{i1}W_1 + \beta_{i2}W_2 + \dots + \beta_{in}W_n, (i=1,2,\dots,\alpha) \quad (1)$$

In formula (1), i represents the number of factors, β represents the number of variables, W represents the score coefficient of variables, α represents the observed samples, and n represents the observed values of variables.

$$W_0 = (W_{0mn}), (m=1, \dots, \gamma; n=11, \dots, \varepsilon) \quad (2)$$

In formula (2), W_0 represents the score value of the factor, m, n represents the measured value of the n th variable of the m -th sample, γ represents the representative factor, and ε represents the number of original variables. Next, the measured values of the samples are standardized, and the mean value of the standardized variables is 0 and the variance is 1, which is a necessary prerequisite for the comparison of variables. According to formula (2), the expression formula of the relationship between characteristic root and characteristic vector is obtained by Jacobian method:

$$ET = \phi T \quad (3)$$

In formula (3), E represents the eigenvalue, T represents the eigenvector, and represent the necessary and sufficient conditions of non-zero solution. The contribution rate of each main component is calculated as follows:

$$G = \frac{\varphi_e}{\sum_{d=1}^e \varphi_d} \quad (4)$$

In formula (4), e represents the principal component, d represents the principal component eigenvector, and φ represents the principal component variance. Because each main factor only reflects the characteristics of one aspect of the overall structure, only by combining these main factors can we comprehensively reflect the comprehensive development status and future trend of the overall system. The calculation method is to add the result of multiplying the contribution rate of each factor by the score value of the corresponding main factor of each sample, and then divide it by the sum of the cumulative contribution rate after the rotation of all main factors. The specific formula is as follows:

$$D = \frac{\sum (g_\eta \times h_{\eta-1})}{\sum g_\eta} \quad (5)$$

In formula (5), g represents the comprehensive score of the main factor of the sample, h represents the factor contribution rate, and η represents the number of sub factors. Among them, the positive and negative values of factor scores do not represent the original positive and negative number meaning, but only represent the positional relationship between the enterprise and the average level, that is, the average level is taken as the zero point, and the positive and negative of the comprehensive score of the main factor is the result of the variance standardization of the original data. When the score is positive, it indicates that it is higher than the average level; on the contrary, when the factor score is negative, it indicates that it is lower than the average level. For the problem studied, we can try to describe each component of the original observation by the sum of the least unmeasurable linear function of the so-called common factor and the special factor. In essence, factor analysis is to study the internal interdependence of correlation matrix and synthesize multiple variables into a few representative factors to show the correlation between original variables and main factors. Factor analysis is mainly used in two aspects: one is to simplify

the background of the research object and find the basic structure of the variable, that is, to reduce the dimension of the variable, so as to achieve the purpose of using a variable quantum set to represent the whole research object and explain the whole problem. Second, it can be used for classification, that is, according to the factor score value, it can be classified in the space composed of factor axis, which can be divided into variable classification or sample classification. The calculation of model ordinate is based on the calculation results of abscissa index. It can be seen from the above that the result of the abscissa calculation is the comprehensive strength score of the enterprise in each year. Subtract the comprehensive score of the beginning and end years of the study and divide it by the number of years minus 1. The result is the growth rate of the enterprise's comprehensive strength, that is, the ordinate of the model. After calculating the abscissa and ordinate, take the corresponding value as the abscissa and ordinate value of the point, make a point on the strategic model, and classify the enterprise according to the quadrant of the point, so as to formulate a strategy conducive to its development. Based on the above description, the steps of obtaining model coordinates are completed.

1.3 Obtaining enterprise competitiveness index from the perspective of strategic management

The so-called strategic management perspective is a series of overall, fundamental and long-term plans carried out by enterprises for the purpose of surpassing rivals and developing themselves, with the main content of competing for customers and the market under the condition of high development of market economy. As a process, strategic management is enterprise strategic management. Therefore, enterprise strategic management can be simply defined as: using enterprise strategy as a means to manage enterprise activities. According to the description of enterprise strategic management process, the above definition can be expanded as follows: enterprise strategic management is the process of formulating and implementing strategies according to the status and changes of the enterprise's external environment and its own conditions, and adjusting and formulating new strategies according to the evaluation and feedback of the implementation process and results. In a broad sense, any relative number can be called an index, which is a relative number reflecting the overall quantitative change of the phenomenon. In a narrow sense, it is a relative number that reflects the overall quantitative change of complex phenomena that cannot be added or compared directly. Its main function is to reflect the changes in the overall number of complex phenomena, study the long-term change trend of phenomena, and comprehensively evaluate and analyze the changes in the number of phenomena. Generally, in the comprehensive evaluation of the competitiveness of mass media enterprises, the concept of index refers to the value of standardized form with the same or similar dimensional phase, change law and trend, which is converted from the index values with different dimensions and characteristics through certain quantitative methods on the basis of the index value. The index obtained after conversion has a standardized form. During the calculation of enterprise competitiveness index, it is necessary to comprehensively evaluate the evaluation values of multiple indicators in the evaluation index system that reflect financial competitiveness. The linear

relationship between the evaluation indicators and the overall evaluation is the premise assumption of weighted legitimacy. The specific expression formula is as follows:

$$S = (\prod k \times R) \sum \frac{1}{k} \quad (6)$$

In formula (6), k represents the comprehensive evaluation value obtained by the evaluated object, and R represents the weight of the evaluation index. The evaluation index data of mass media competitiveness are all publicly available quantitative and objective data. However, because the data have both absolute and relative numbers, it is necessary to standardize the indicators of different measurement units. The standardized formula is:

$$U = \frac{\lambda_c - \min \lambda_c}{\max \lambda_c - \min \lambda_c} \quad (7)$$

In formula (7), λ represents the standardized value of financial indicators of competitiveness, and c represents the number of evaluation indicators. The financial competitiveness scores of the two secondary indicators of growth potential and business ability in the strategic management ability index show that the growth potential score is higher than the business ability score [15-16]. It can be seen that the growth potential of finance is a potentially important factor to enhance financial competitiveness. The operating ability index of financial competitiveness of media enterprises mainly reflects the ability of enterprises to obtain income and profits, but the expansion of enterprises should be accompanied by the ability to obtain cash [17-19]. With this ability, the enterprise has the conditions to accumulate and make little progress. In the process of operation, it can calmly face the risk of debt repayment, and have the foundation to expand reinvestment and continue to create new income and profit growth points. Therefore, the high growth potential index of the financial competitiveness of the media enterprise indicates that the future development of the media enterprise has a variety of possibilities. Based on this, complete the steps to obtaining the enterprise competitiveness index.

1.4 Ant colony algorithm sets up comprehensive evaluation mode

Although the research on competitiveness is divided into different levels of countries, industries and enterprises from the competitive subject, its internal analysis logic is the same. Because the industrial structure of a country is composed of different industries, and different industries are composed of different enterprises in industry, the competition among mass media enterprises in various countries finally reflects the competition between countries. At the beginning, the evaluation model is used to study the source of industrial competitive advantage and then the corresponding industrial competitiveness. Based on the layer by layer inclusion relationship among countries, industries and enterprises, the model can be used to study national competitiveness upward and enterprise competitiveness downward [20]. Enterprise financial competitiveness is a part of enterprise competitiveness, therefore, diamond model theory can also be used for research and analysis. Through the analysis of the competitive advantage brought by the six elements in the theory, according to the logical idea that competitive advantage brings competitiveness, then the enterprise's financial competitive advantage will bring competitiveness. Therefore, the six elements in the model can bring competitive advantage to the industry, which

can be summarized as three core elements for enterprises to obtain three aspects of financial competitive advantage: financial strategic management, and then bring three aspects of financial competitiveness, that is, the three elements of financial competitiveness, financial resource allocation ability and financial interest coordination ability, so as to analyze and evaluate competitiveness. The theoretical deduction from the formation process of financial competitive advantage to the core elements of competitiveness is shown in Figure 3.

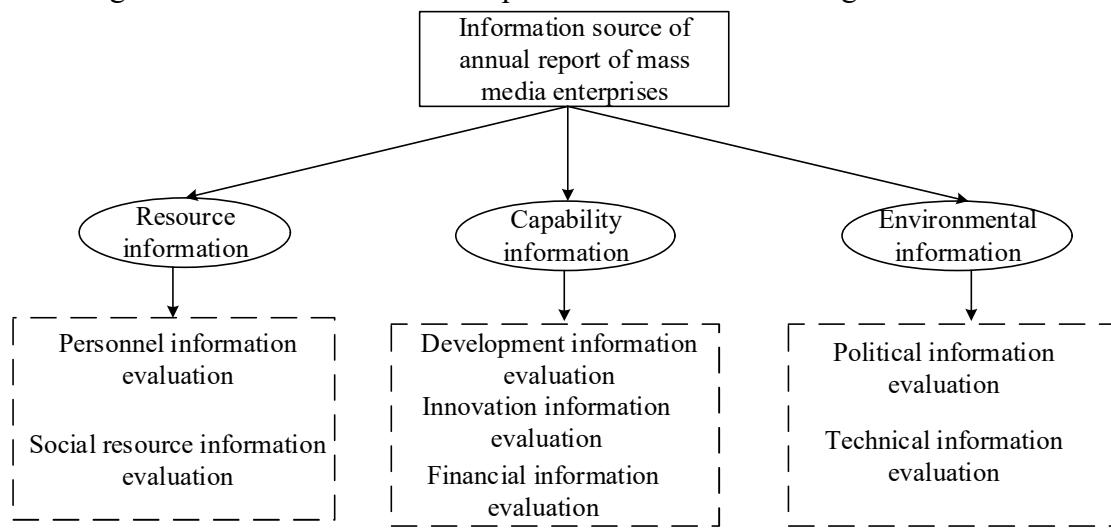


Fig. 3 Schematic diagram of financial competitive elements

As can be seen from Figure 3, data is a set of elements that can be quantitatively analyzed, and enterprise competitiveness is a complex concept. The contents of enterprise competitiveness in the annual report include quantifiable financial data, patent quantity and market share, as well as those that are difficult to express with data, such as corporate strategy, corporate culture, enterprise innovation, etc,. These are the things that need to be analyzed for enterprise competitiveness. At this time, the selection of indicators must include these two types, and make an objective judgment on the research content from the combination of quantitative and qualitative methods. The elements of strategic management capability correspond to the enterprise strategy, structure and horizontal competition elements of diamond model. The reason is that the organizational form of the enterprise reflects the enterprise strategy. The rationality of the establishment of organizational form has an impact on the competitive efficiency of enterprises, which also has an impact on the competitive advantage and competitiveness of enterprises. The financial strategy is subordinate to the enterprise strategy, so the financial organization form under the financial strategy reflects the enterprise's financial strategy. Similarly, the rationality of the financial organization system under the financial strategy is also the embodiment of the financial strategy management ability, which will have an impact on the financial competition efficiency. The main purpose of enterprise strategic management is to improve the adaptability of enterprises to the external competitive environment through competition and make enterprises achieve sustainable development. Similarly, financial strategic management is also based on adopting more effective and changeable financial management behaviors to enable enterprises to establish balanced internal capital flow by expanding market share, so as to adapt enterprises to

environmental changes and help enterprises achieve sustainable development. The specific structure is shown in Figure 4.

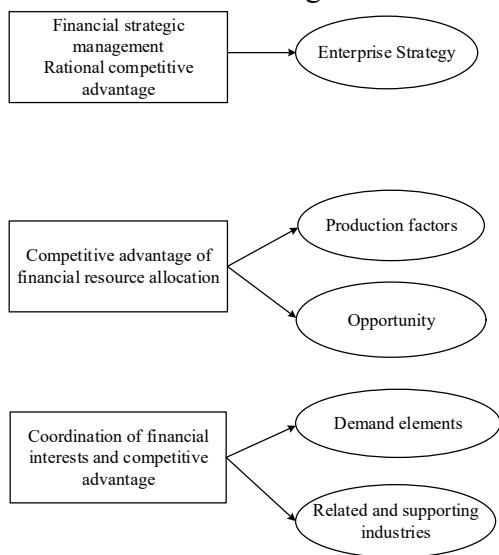


Fig. 4 Theoretical deduction of the formation of core elements of enterprise competitiveness

As can be seen from Figure 4, the six elements contained in the evaluation model are the sources of the three elements of financial competitive advantage and financial competitiveness. Therefore, theoretically, the financial competitiveness is finally formed when the six elements of the diamond model are used as the basic factors. Ant colony algorithm is a probabilistic algorithm used to find the optimal path in the graph. In this paper, the principle of the ant colony algorithm is used, combined with the development planning of mass media enterprises, and the method of multi index measurement and evaluation is adopted. In multi index measurement and evaluation, the larger the value of some indicators, the better the evaluation, which is called positive indicators. The smaller the value of some indicators, the better the evaluation, which is called reverse indicators. In addition, the closer the value of some indicators is to a certain value, the better. They are called neutral indicators or moderate indicators. Therefore, in the process of comprehensive measurement and evaluation, the indicators must be treated with the same trend first. Generally, the reverse indicators and moderate indicators are transformed into positive indicators, so it is also called the forward of indicators. The asset liability ratio of mass media enterprises emphasizes the principle of appropriate debt. The enterprise's debt ratio is too high, the financial leverage is too large, and the business failure leads to a great risk of bankruptcy. The debt is too low and the financial leverage is not enough, which limits the normal development of enterprises. Based on the average asset liability ratio of each sample enterprise, the asset liability ratio index of the enterprise is positively treated as follows:

$$F = \frac{1}{|V - \text{mean}(V)| + 0.01} \quad (8)$$

In formula (8), V represents the asset liability ratio of mass media enterprises. For mass media enterprises, to enhance their competitiveness, it is more important to have good value creation ability and operation level, but their solvency, profitability and development ability can

not be ignored and they still occupy an important position. In addition, by comparing the weighting of various common factors, we can clarify the development direction of the enterprise. In the current development environment, the sustainability of enterprise development is particularly important. While maintaining its own development, we can improve the overall financial performance level. Therefore, media enterprises should clarify their concerns according to the empowerment results, formulate enterprise development plans in combination with the current situation of the enterprise, and maximize the value of the enterprise. Based on this, complete the steps of setting the comprehensive evaluation mode.

2 Experimental analysis

2.1 Selecting experimental samples

In order to verify the effectiveness of the design model, the experimental test is carried out, and the experimental samples are selected according to the experimental needs. In the measurement of the competitiveness of mass media enterprises, this paper takes all non * SST and ST stock companies listed before 2020 as samples. In order to further reduce the error, the samples exclude financial listed companies, comprehensive listed companies, mass media companies with incomplete variable data and abnormal data, so as to make the research conclusions more representative, In terms of sample selection, the article does not exclude other industries except the financial category and comprehensive category. Finally, the total number of samples is 120. When testing the correlation between the degree of industry competition, the shareholding ratio of the largest shareholder and the degree of enterprise diversification and enterprise competitiveness, this paper further excludes the 120 sample enterprises that can not correctly obtain the company diversification index - income Herfindahl index through wind database There are 53 Enterprises with data such as the time of listing and the holding proportion of the largest shareholder. Finally, the test sample is obtained. SPSS statistical software is used to analyze and process the collected sample company data. The factor analysis method is used to simulate and solve the competitiveness index of enterprises. Partial correlation analysis, statistical analysis of variance and regression analysis were used to test the sample data.

2.2 Experimental result

The comprehensive evaluation model of mass media enterprise competitiveness based on cluster analysis and the comprehensive evaluation model of mass media enterprise competitiveness based on data mining are selected for experimental comparison with the comprehensive evaluation model of mass media enterprise competitiveness in this paper. Under different FCI index conditions, the greater the value is. It is proved that the better the model performance, the experimental results are shown in table 1-4.

Table 1 FCI index 20 interpretation (%)

Number of experiments	Comprehensive evaluation model of mass media enterprise competitiveness	Comprehensive evaluation model of mass media enterprise competitiveness	The comprehensive evaluation model of mass media enterprise

	based on cluster analysis	based on mining	data competitiveness in this paper
1	9.339	9.786	13.637
2	10.237	10.309	15.901
3	9.675	11.248	14.826
4	11.332	9.909	15.331

As can be seen from table 1, the average interpretation strength of the comprehensive evaluation model of mass media enterprise competitiveness in this paper and the other two models are 14.924%, 10.146% and 10.313% respectively.

Table 2 FCI index 40 interpretation (%)

Number of experiments	Comprehensive evaluation model of mass media enterprise competitiveness based on cluster analysis	Comprehensive evaluation model of mass media enterprise competitiveness based on data mining	The comprehensive evaluation model of mass media enterprise competitiveness in this paper
1	15.664	14.128	18.994
2	13.508	13.543	17.309
3	12.109	13.987	19.338
4	14.398	14.209	18.411

It can be seen from table 2 that the average interpretation strength of the comprehensive evaluation model of mass media enterprise competitiveness in this paper and the other two models are 18.513%, 13.920% and 13.967% respectively.

Table 3 FCI index 60 interpretation (%)

Number of experiments	Comprehensive evaluation model of mass media enterprise competitiveness based on cluster analysis	Comprehensive evaluation model of mass media enterprise competitiveness based on data mining	The comprehensive evaluation model of mass media enterprise competitiveness in this paper
1	17.447	18.242	23.886
2	18.170	18.390	24.109
3	18.388	19.321	23.575
4	17.003	17.387	24.393

It can be seen from table 3 that the average interpretation strength of the comprehensive evaluation model of mass media enterprise competitiveness in this paper and the other two models are 23.991%, 18.335% and 17.752% respectively.

Table 4 FCI index 80 interpretation (%)

Number of experiments	Comprehensive evaluation model of mass media enterprise competitiveness based on cluster analysis	Comprehensive evaluation model of mass media enterprise competitiveness based on data mining	The comprehensive evaluation model of mass media enterprise competitiveness in this paper
1	25.584	23.767	32.646
2	24.688	24.984	30.537
3	25.787	25.508	31.648
4	23.890	26.812	33.877

It can be seen from table 4 that the average interpretation strength of the comprehensive evaluation model of mass media enterprise competitiveness in this paper and the other two models are 32.177%, 24.987% and 25.268% respectively. The performance of the comprehensive evaluation model of mass media enterprise competitiveness in the explanatory text is better.

3 Conclusions

When measuring the competitiveness of mass media enterprises, we actually need to consider all aspects of mass media enterprise indicators, including enterprise operation effect. This paper considers various hard indicators related to enterprise production and development when measuring the competitiveness of mass media enterprises, but for some soft indicators of mass media enterprise competitiveness, such as enterprise reputation, reputation brands are not measured, which may cause a certain deviation in the competitiveness index of mass media enterprises. In the future research, we could use the methods of questionnaire survey, expert interview and brand ranking for reference. When calculating the competitiveness of mass media enterprises, various soft indexes related to the competitiveness of mass media enterprises are comprehensively considered.

Reference

- [1] Ivanova, S. A. , & Abdrashitova, Y. V.. (2020). Compound adjectives in english-language and german-language written mass media texts: linguistic and translation aspect. Bulletin of Udmurt University Series History and Philology, 30(2), 270-281.
- [2] Andersen, T. O. , Dissing, A. S. , Varga, T. V. , & Rod, N. H. . (2021). The smartsleep experiment: evaluation of changes in night-time smartphone behavior following a mass media citizen science campaign. PLoS ONE, 16(7), e0253783.
- [3] Moiseenko, L. V. , & Mikheeva, N. F. . (2021). Precedent phenomena of the contemporary russian and spanish mass media as cognitive structures of a linguistic identity. Revista EntreLinguas, 7(2), e021028.
- [4] Lin H. Situation Analysis of Chinese Virtual Streamer Industry from the View of Media Materiality. Advances in Social Sciences, 2020, 09(8):1287-1299.
- [5] Wang Y , Shao Y , Shui S . (2019). Analysis of Sports Media Industry Organization in China based on SCP Framework. Journal of Sports Adult Education, 35(04), 24-27+69..

- [6] Oke, F. O. , Olorunsogo, G. , & Akerele, D. . (2021). Impact of information communication technology (ict) and mass media usage on technical efficiency of fish farming in ogun state, nigeria. *Journal of Agribusiness and Rural Development*, 60(2), 143-150.
- [7] Nilsson, M. . (2021). Conflicts around elder care in mass media: a case study of a swedish tv-documentary and the reactions to it in public discourse. *Interações Sociedade e as novas modernidades*(39), 41-66.
- [8] Langman, L. . (2020). Emotional lives: dramas of identity in an age of mass media. by e. doyle mccarthy. new york: cambridge university press, 2017. pp. xiv+167. \$116.00 (cloth); \$34.99 (paper). *American Journal of Sociology*, 126(1), 165-167.
- [9] Volova, V. M. , & Vasil'Eva, Y. S. . (2020). Proper names as a part of telescopic nomination in english-language publicistic texts of the modern mass media. *Филология научные исследования*(7), 1-9.
- [10] Meena Z N , Radhika. R . (2020). Forecasting the Impact of Social Media Advertising among College Students using Higher Order Statistical Functions. *Scalable Computing*, 21(2), 291-307.
- [11] Alp, M. , & Akkili, M. E. . (2020). Kitle letiim aralarnn gen semenlerin davransal niyetleri zerindeki etkisi/ the effects of mass media on the behavioral intentions of young voters. *Celal Bayar Üniversitesi Sosyal Bilimler Dergisi*, 18(2), 21-35.
- [12] Castillo-Soriano, M. , Canavati-Espinosa, A. , & Maldonado-Flores, D. I. . (2021). O imaginário suburbano e o mass media: um reflexo de sua construo e desmontagem na gerao do chamado baby boom nos estados unidos (1946-1974). *Revista Perspectivas*, 6(1), 6-23.
- [13] Wang Y , Xie J , You Y , Wang Y , Xu Y , Guo Y. (2021). A new multi-site multi-variable stochastic model with inter-site and inter-variable correlations, low frequency attributes and stochasticity: a case study in the Lower Yellow River Basin. *Journal of Hydrology*, 599, 126365.
- [14] Naik, B. . (2020). Extra-tree learning based socio-economic factor analysis and multi-class adaptive boosting meta-estimator for prediction of agricultural productivity. *Indian Journal of Science and Technology*, 13(29), 2081-2101.
- [15] Kuzmynchuk, N. , Yevtushenko, V. , Kutsenko, T. , & Terovanesova, O. . (2020). Sustainable enterprise competitiveness in the context of organizational, theoretical and methodological management tools. *Journal of European Economy*, 19(3), 558-575.
- [16] Arefieva O., Miahkykh, I. , Kovalenko, N. , O. Jam, & Popova, G. . (2021). The process management of ensuring the enterprise competitiveness in the conditions of economic processes informatization. *Financial and Credit Activity Problems of Theory and Practice*, 1(36), 302-309.
- [17] Mili, T. . (2020). Key factors of enterprise competitiveness by consumer profiles in the republic of serbia. *Marketing*, 51(1), 51-60.
- [18] Yang, Y. . (2020). Comprehensive evaluation of logistics enterprise competitiveness based on sem model. *Journal of Intelligent and Fuzzy Systems*(3), 1-11.
- [19] Lupak, R. , Kunytska-Ilias H , M. , Berezivskyi, Y. , Nakonechna, N. , & Vasyltsiv, T. . (2021). Information and analytical support system of enterprise competitiveness management. *Accounting*, 7(7), 1785-1798.

- [20] LIAO Hai-feng, Eunice B.Custodio. . (2020). A nonlinear Evaluation Model of Regional Coordination Based on Del Entropy Method. Computer Simulation, 37(10), 374-377,420.