

Research on Evaluation of Core Competitiveness of Internet Enterprises —Tencent as an Example

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ABSTRACT. This article takes Tencent as the main research object. Researched Tencent's core competitiveness and explored the position of Tencent in Internet companies in terms of core competitiveness. The Analytic hierarchy process and TOPSIS method are used to establish a comprehensive evaluation model of the core competitiveness of enterprises. By selecting and comparing five other representative Chinese Internet companies (Baidu, Alibaba, Sina, Sohu, Netease) with Tencent, Tencent's core competitiveness can be more fully reflected. Finally, combined with the evaluation results, some suggestions are made for Tencent's future development.

1. INTRODUCTION

Internet companies have developed rapidly with the advent of the Internet era. At present, there are many competitors in Internet companies and the market demand is uncertain, which makes enterprises face a fierce competition environment, and also brings pressure and challenges to enterprise managers. In this environment, how to stand out from the fierce competition? How to obtain a competitive advantage to achieve excess profits? How to cultivate enterprise core competitiveness? These issues are especially important for an Internet company. This article selects Tencent as the main research object, and uses Baidu, Alibaba, Sina, Sohu, Netease as a reference group to compare and analyze with Tencent, which can better judge the overall level of Tencent's core competitiveness in Chinese Internet companies. The research on the core competitiveness of Tencent enterprises will make a useful exploration for the evaluation of the core competitiveness of China's Internet companies in the future, and at the same time, it can provide reference value and reference for the research on the core competitiveness of other Internet companies.

2. Research Status of Enterprise Core Competitiveness

At present, China's research on the core competitiveness of enterprises has rich results. It is found through the study that most of our theories are based on the excellent results of foreign companies' competitiveness theory, and then combined with the actual conditions of Chinese enterprises. It makes the theoretical system of research results more in line with China's specific conditions.

Amir A et al. (2016) introduced the concept of cost management while studying the core competitiveness of SMEs. Research on the relationship between the two found that the two were positively related. Liu Fengtao et al. (2011) first used the Delphi method and the AHP method, and then determined the weight of the core competitiveness evaluation index. Then the fuzzy comprehensive evaluation method is used to determine the final evaluation score. Yu Li (2013) found through research that strong scientific research capabilities have a significant impact on any enterprise, especially high-tech enterprises. Qin Dezhi et al. (2013) found through analysis that technological innovation, management and culture are important manifestations of the core competitiveness of an enterprise, and scarcity, systematic and stability are the main characteristics of the core competitiveness. Yu Hongjun (2014) took the source of the core competitiveness of the company as the starting point of research, and combined the characteristics of the core competitiveness to establish an evaluation index system. Ding Lifang (2017) summarized the

following characteristics of China's Internet industry through careful research: high efficiency, high risk, and low market share. And make recommendations based on this feature.

3. Research design

3.1. Model design

3.1.1. Establishing evaluation indicators of core competitiveness of enterprises

The expert scoring method is used to determine the weight of each indicator, and the expert scoring results are input into the yaahp software to obtain the indicator weight. See "Table 1".

Table 1. Weights of various core competitiveness indicators

index	Operating capacity	Profitability	Scientific research innovation ability	Solvency	Wi
	0.1197	0.3235	0.4837	0.0731	1
Total asset turnover	0.6667				0.0798
Turnover ratio of current assets	0.3333				0.0399
Roe		0.2102			0.0680
Gross profit margin		0.2708			0.0876
Main profit margin		0.3185			0.1030
EPS growth rate		0.1002			0.0324
Total profit growth		0.1002			0.0324
Number of patents			0.2446		0.1183
R			0.4021		0.1945
Current ratio			0.1372		0.0664
Operating income			0.0788		0.0381
Total assets			0.1372		0.0664
Assets and liabilities				0.25	0.0183
Equity ratio				0.75	0.0548

3.1.2. Comparison of Core Competitiveness of Enterprises with TOPSIS

3.1.2.1. Weighted normalization of indicators.

$$\text{Benefit indicators : } v_{ij} = \frac{x_{ij} - \min x_j}{\max x_j - \min x_j} \quad (1)$$

$$\text{Cost indicator : } v_{ij} = \frac{\max x_j - x_{ij}}{\max x_j - \min x_j} \quad (2)$$

$$\text{Weighting: } r_{ij} = v_{ij} * w_j (i=1,2,\dots,m; j=1,2,\dots,n) \quad (3)$$

3.1.2.2. Calculate the positive and negative ideal solutions of each indicator.

$$S_j^+ = \max_{1 \leq i \leq m} \{r_{ij}\}, j=1,2,\dots,n \quad (4)$$

$$S_j^- = \min_{1 \leq i \leq m} \{r_{ij}\}, j=1,2,\dots,n \quad (5)$$

3.1.2.3. Calculate the closeness of each company's core competitiveness.

$$\eta_i^+ = \frac{Sd_i^-}{Sd_i^- + Sd_i^+}, i=1,2,\dots,m \quad (6)$$

3.2. Sample selection

In order to better study the core competitiveness of Tencent enterprises, five other representative Chinese Internet companies will be selected for comparative analysis with Tencent to obtain the overall level of Tencent's core competitiveness among Chinese Internet companies. In addition to Tencent, the evaluation targets also include: Alibaba, Baidu, Sina, Sohu and NetEase. See "Table 2".

Table 2. Five companies' core competitiveness evaluation index data (2018)

index	Tencent	Baidu	Alibaba	NetEase	Sohu	Sina
Total asset turnover	48.93%	19.00%	41.00%	85.00%	56.00%	36.00%
Turnover ratio of current assets	1.58	0.37	1.14	1.03	0.76	0.57
Roe	24.33%	14.75%	16.08%	13.16%	-4.00%	11.57%
Gross profit margin	45.45%	49.41%	57.23%	42.29%	43.07%	78.56%
Main profit margin	29.73%	27.57%	24.54%	9.64%	-3.58%	20.21%
EPS growth rate	9.74%	49.08%	43.04%	-41.57%	71.20%	-18.64%
Total profit growth	7.09%	28.39%	44.74%	-31.26%	58.99%	30.90%
Number of patents	7558	5756	9699	1364	113	49
R	229.36	157.72	227.54	77.93	4.41	3.46
Current ratio	1.07	2.73	1.89	1.96	1.96	2.91
Operating income	3126.94	819.12	2502.66	671.56	18.83	21.08
Total assets	7235.21	2975.66	7171.24	869.68	33.71	58.86
Assets and liabilities	50.77%	40.94%	38.72%	40.88%	53.93%	36.07%
Equity ratio	1.03	0.75	0.76	0.79	2.96	0.78

Note: The data comes from the 2018 annual reports of various companies in Flushing Finance.com; the patent data for the past three years comes from the China Patent Database.

3.3. statistical results

Table 3. Calculation of closeness of core competitiveness of five companies

enterprise	Tencent	Baidu	Alibaba	NetEase	Sohu	Sina
Closeness	0.693064	0.581505	0.754738	0.385796	0.19869	0.374043

The ranking results are: Alibaba, Tencent, Baidu, NetEase, Sina, Sohu.

4. Conclusion and outlook

According to the conclusion of the evaluation model, it can be concluded that Tencent's core competitiveness is at an excellent level, but there are still some shortcomings compared with Alibaba. In the future development of Tencent, it should first focus on core technology innovation and strengthen capital investment. We must increase our input in this area in light of our own actual conditions. Only after sufficient preparations for scientific research resources can we accelerate the transformation of scientific research results, with a view to achieving productivity as soon as possible. Strive to increase the proportion of patents owned by enterprises, and gradually form the core competitiveness of enterprises. Secondly, we should innovate the organizational management model and optimize the organizational structure. All employees should pay full attention to the formation of core competitiveness. In order to maintain the continuous development of the enterprise, Tencent must strengthen management and form its own unique management model and organizational structure. Finally, Tencent should also work hard to strengthen corporate culture and improve user experience. Advanced enterprises at home and abroad have their own unique corporate culture. Cultural construction is not only important to the development of an enterprise, but also plays an important role in market competition. Tencent has a high degree of consumer and employee cultural recognition, which is the company's advantage. It should be well grasped and continued to strengthen. Tencent's products are mainly targeted at consumers, so improving user experience is vital to Tencent. Nowadays, users have higher and higher requirements on the sense of use, and relying solely on functions can no longer meet the needs of consumers. Products and services can only meet the needs of consumers, and can no longer provide consumers with a satisfactory experience. At this time, we should pay more attention to the differentiation of products and services to improve the user experience. We must pay attention to the details of handling and caring for consumers and humanization.

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