

# Analysis of Internet Enterprise Profitability Based on DuPont Analysis—Taking Tencent as an Example

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**Abstract:** In recent years, the Internet industry continues to develop deeply and has increasingly become an important force to promote economic development. Therefore, it is of far-reaching significance to analyze the profitability of Internet enterprises. As an effective financial analysis method, DuPont analysis method can integrate all aspects of the financial content of the enterprise and comprehensively analyze the financial situation of the enterprise, so as to provide guidance for the enterprise. This paper takes Tencent as an example, uses DuPont analysis method to analyze its financial situation, finds the problems existing in its development, and puts forward relevant suggestions.

**Keywords:** profitability, DuPont analysis, Tencent enterprise

## 1. Introduction

The Internet provides an information platform for various subjects in economic life. With the development of information technology, traditional industries have gained new vitality through the Internet. Internet enterprises, as the main participants in the operation of the Internet, have played a crucial role. Profitability is a key indicator of the fate of an enterprise. Analyzing the profitability of enterprises can prevent small problems and guide the direction for the future. Tencent is a leading enterprise in the Internet industry, and its research can serve as a reference for other Internet enterprises.

As a comprehensive financial analysis tool, DuPont analysis is used by many scholars to analyze the financial status of various industries. Zeng Fanrong and Wu Beibei analyzed the carbon efficiency of China's four major airlines, built an ecological efficiency multiplier model based on DuPont analysis, found the relationship between environment and efficiency, and came up with a method for sustainable development<sup>[1]</sup>. Cao Kaichen and Li Xiaoguang also adopted the DuPont analysis method in the financial analysis of Kunlun Gas, found a series of problems existing in the operation of Kunlun Gas, and put forward suggestions and measures to improve the quality and efficiency of Kunlun gas<sup>[2]</sup>. Lv Li analyzed the profit status of a financial institution of a bank in Shanxi by using DuPont analysis method, explored the source of the bank's profit and its support for the real economy, and put forward conclusions and suggestions on the real economy and virtual economy<sup>[3]</sup>. Taking Xiamen Public Hospital as an object, Zeng Yanbing and Yang Tianjiao used DuPont analysis method to analyze its financial indicators and found that the research object had a good profit situation but still had some improvements, such as the need to increase the investment of external funds, control costs and improve operation level<sup>[4]</sup>.

Chen Xinzi built a profitability index evaluation system according to the asset-light characteristics of Internet enterprises, studied the e-commerce profitability of Shanghai Steel Association, found that the enterprise had the problem of high cost, and put forward relevant suggestions<sup>[5]</sup>. Hou Xuhua took the profit dilemma of Internet insurance companies as the entry point, analyzed their profit models, found problems in product structure, pricing, dependence on third-party platforms and other aspects of Internet insurance companies, and proposed corresponding solutions<sup>[6]</sup>. Wang Peipei used factor analysis to study the factors that affect the profitability of Internet banks and found that innovation, efficiency and document factors are the main factors that affect the profitability of Internet banks<sup>[7]</sup>. On this basis, he put forward a series of development suggestions. Liu Xinhua took Jumeiyoupin as an object to study its profit model and found that Jumeiyoupin had advantages such as good cost control, attention to customer flow and innovative marketing methods, but it also had some disadvantages, so he put forward corresponding improvement suggestions<sup>[8]</sup>.

In summary, the DuPont analysis method is widely applicable across industries for reliable financial analysis. Scholars often adapt it to industry-specific characteristics, driving continuous innovation. Amid the rapid growth of the Internet industry, profitability remains a key focus, yet few studies use DuPont analysis for financial evaluation. This paper's application of DuPont analysis to study the financial status of the Internet industry thus represents a notable innovation.

**2. Theory and method**

**2.1. Theory**

Dupont analysis method is a common way to analyze financial statements, showing the internal relationship of various financial indicators, objectively reflecting the financial situation of enterprises, revealing potential internal problems of enterprises, and indicating the direction of future development of enterprises. Its index system is shown in the figure.

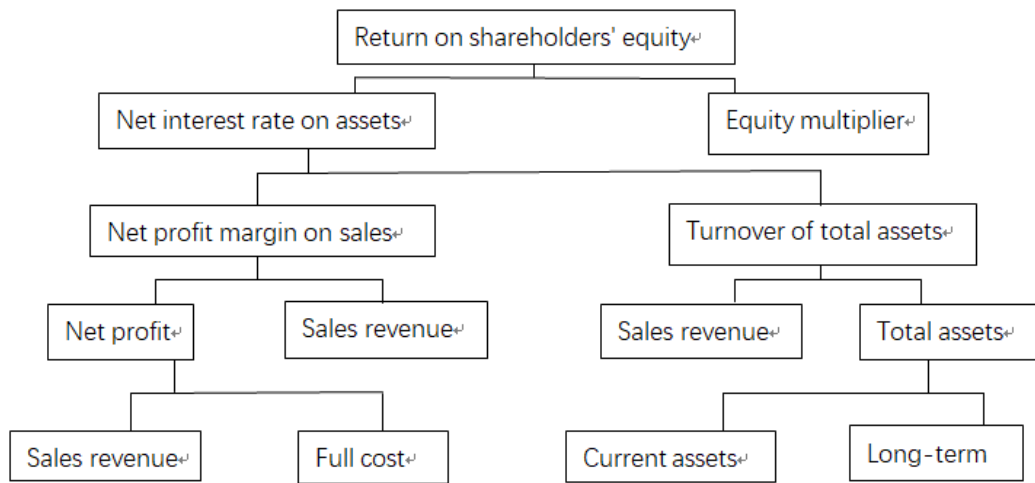


Figure 1: DuPont analysis system diagram.

As shown in Figure 1, return on shareholders' equity reflects the efficiency of financing, investment, operation and other aspects of the enterprise and the size of the enterprise's profitability. Profitability is mainly expressed through the net interest rate on assets. Therefore, this paper uses the net interest rate of assets to analyze Tencent's profitability from two perspectives of sales and asset turnover.

**2.2. Data analysis**

Tencent is an Internet technology company with various services such as communications, payment and entertainment. In recent years, Tencent has adopted a diversified strategy, deeply integrated with various industries, constantly entered new business areas, and achieved outstanding achievements.

As can be seen from Figure 2, Tencent's operating income has shown an overall upward trend in recent ten years, but it will slightly decline in 2022. Despite this, Tencent's operating income has remained at a high level. The online game business and social platforms are an important part of the revenue, followed by online advertising and e-commerce transactions. Compared with operating income, As shown in Figure 3, the annual trend of net profit margin is relatively stable, with slight fluctuations at first, and more stable in recent years, remaining at a low level. On the one hand, this shows that Tencent's profitability is stable and the scale of related businesses is maintained well, but too stable also indicates that the company may fall into a bottleneck period of development, and it needs to find a breakthrough to increase innovation to increase revenue, reduce operating costs, and improve net profit margin. To sum up, Tencent's development ability is better, but the net profit margin has not changed simultaneously.

### Operating income

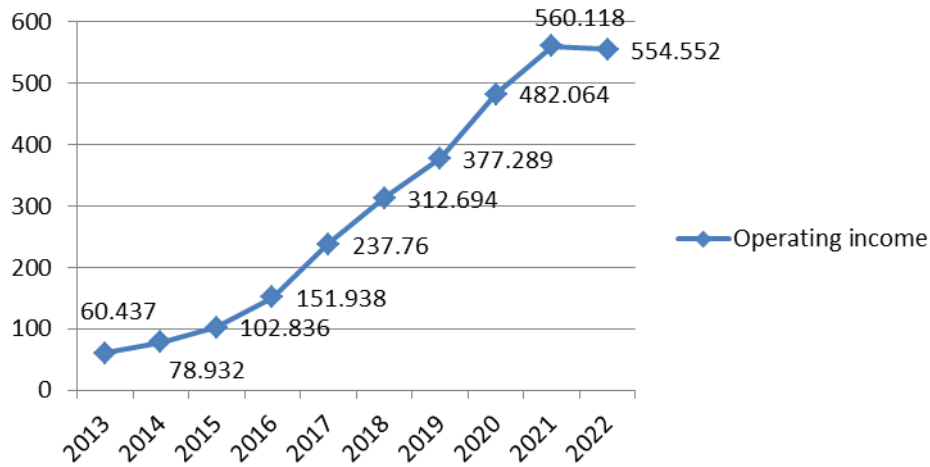


Figure 2: Tencent operating revenue trend chart.

### Net profit margin

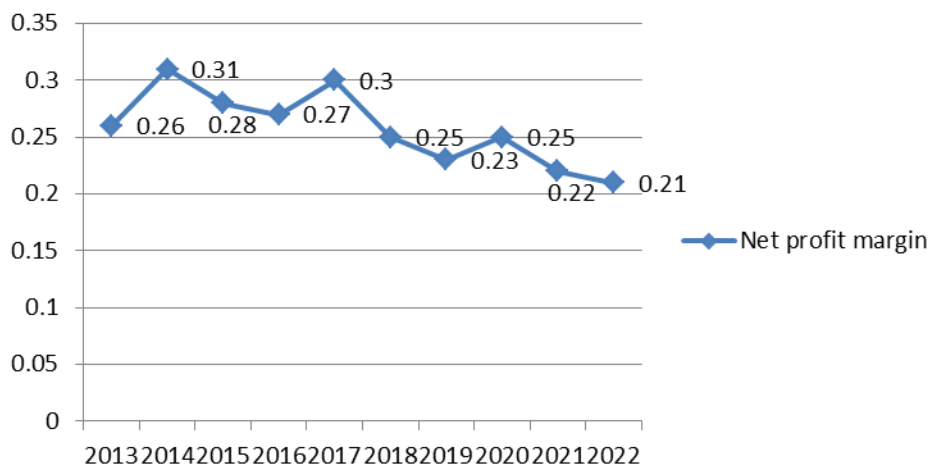


Figure 3: Tencent net interest rate trend chart.

The sales net profit rate reflects the proportion of net profit in the enterprise revenue, which can best reflect the profitability of the enterprise. The higher the index, the stronger the profitability. The relationship between net profit and sales revenue is as follows. When analyzing sales net profit rate, we should not only focus on income, but also pay attention to the cost of the enterprise, and make a comprehensive analysis. The following is Tencent's profit indicators.

Table 1: Earnings indicators of Tencent in recent ten years.

Year	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Inco-me	60.43	78.93	102.83	151.93	237.76	312.69	377.28	482.06	560.11	554.55
cost	27.778	30.873	41.631	67.439	120.835	170.574	209.756	260.532	314.174	331.5806
gross profit margi-n	0.54	0.60	0.59	0.57	0.49	0.45	0.44	0.46	0.44	0.43
Net profit margi-n	0.26	0.31	0.28	0.27	0.3	0.25	0.23	0.25	0.22	0.21

As can be seen from the above chart, Tencent's revenue and cost have been increasing in the past ten years, with slight fluctuations. Revenue, gross margin and net margin all declined in 2022. The following is an analysis of Tencent's revenue and cost to explore its impact on profitability.

Table 1 shows that Tencent's revenue grows annually, but the growth rate varies. It increased

significantly in 2016 and 2017, declined in 2018 and 2019, and slightly rebounded in 2020, remaining at a low level. In 2013, China's mobile Internet boom intensified competition, pressuring Tencent's revenue growth, though it remained positive. QQ and WeChat user overlap, along with increased user engagement in online games and social networks, drove growth, but value-added services underperformed. Online advertising and e-commerce also contributed, though Sogou's merger impacted search advertising revenue. Growth slowed in 2014 and 2015, with e-commerce revenue declining due to JD.com's strategic partnership. Revenue surged in 2016 and 2017, driven by PC and mobile games, news services, online videos, and digital music. Post-2018, growth slowed again due to declining video payment and online advertising revenue amid heightened competition. In 2022, Tencent exited non-core businesses, reduced marketing and operating expenses, and faced revenue declines in gaming due to juvenile protection measures and reduced user spending. Overall, while Tencent's revenue grows annually, external competition and market expansion challenges have weakened growth, though it remains a dominant player.

The change of net interest rate is not only affected by income, but also has a great relationship with the cost, and the analysis of Tencent's cost and expense situation can better understand the reason for the change of net interest rate.

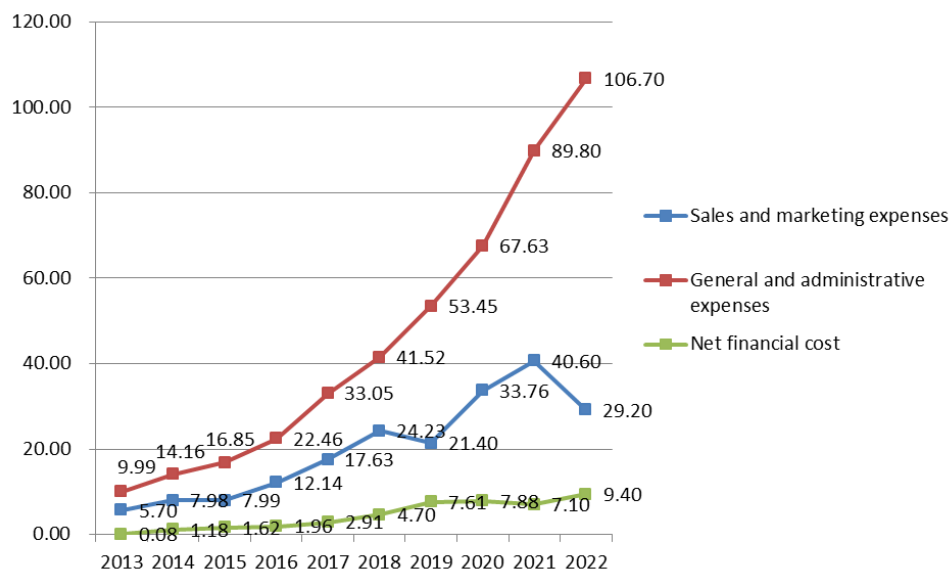


Figure 4: Main cost trend chart of Tencent in recent ten years.

The figure 4 shows that Tencent's total revenue is rising, while costs increased steadily from 2013 to 2018, dipped in 2019, and then rose again. Significant cost spikes in 2013, 2017, and 2018 were driven by online game and mobile app promotions, employee and R&D expenses, e-commerce transaction volumes, and WeChat's rapid growth, which caused a 120% year-on-year increase in sales costs in 2013. Post-2015, operating costs rose annually, with content, employee, marketing, traffic acquisition, cloud services, and mobile game channel costs increasing. General and administrative expenses, primarily employee costs, are the largest cost category, followed by sales and marketing, and net financial costs. Tencent's employee count reached nearly 90,000 in 2021, necessitating higher expenses. Sales and marketing costs, including online game promotions, WeChat transactions, and advertising, have grown due to intensified competition and the scale of free services like WeChat red packets, which saw over 5 billion transactions during the 2022 Spring Festival. Rising costs and their increasing revenue share highlight Tencent's challenges in cost control, contributing to declining net profit margins. To address these issues, Tencent must implement cost-reduction measures. Analysis of revenue and costs reveals areas for improvement, which will be further explored in the context of total asset turnover.

The total assets turnover ratio includes sales revenue and the average total assets, which reflects the asset utilization ability of an enterprise. Low asset turnover indicates that the enterprise's utilization capacity of assets is insufficient, which will have a negative effect on profitability. The following is the relevant financial data of Tencent's total production turnover rate.

Table 2: Analysis of influencing factors of Tencent's total assets turnover.

Year	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Sales revenue	604.37	789.32	1028.63	1519.38	2377.6	3126.94	3772.89	4820.64	5601.18	5545.52
Total assets	1072.35	1711.66	3608.18	3958.99	5546.72	7235.21	9539.86	13334.25	16123.64	15781.31
Turnover of total assets	0.67	0.56	0.42	0.42	0.51	0.48	0.45	0.43	0.35	0.35

### Turnover of total assets

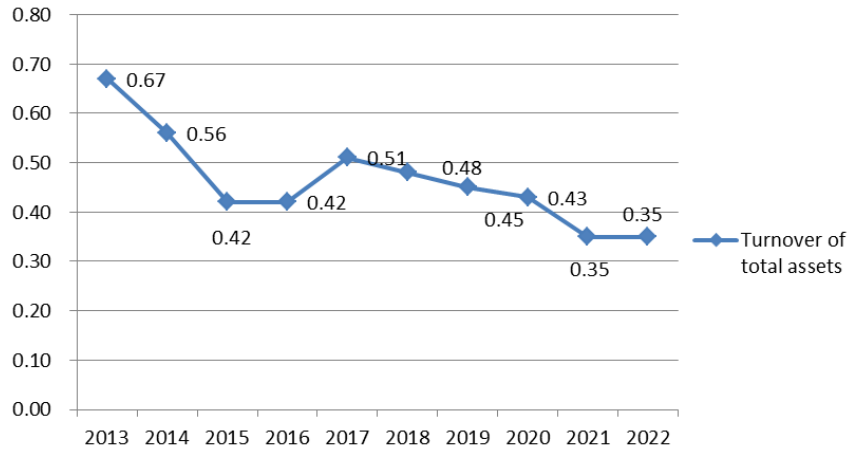


Figure 5: Trend chart of Tencent's total assets turnover ratio.

As can be seen from the Figure 5 and Table 2, Tencent's total asset turnover rate declined year by year from 2013 to 2015, rebounded in 2017, then gradually declined, and reached Xindi in the last two years. This phenomenon shows that in recent years, Tencent's capital operation capacity is reduced, mainly related to the increase of accounts receivable, excessive investment, weak income growth, and higher costs. Tencent needs to find new breakthroughs in the market, improve the growth rate of sales revenue, but also to dispose of excess assets, reduce the cost of capital, appropriate investment, in order to improve the total asset turnover.

### 3. Results and discussion

#### 3.1. Results

Through the analysis of Tencent's profitability based on DuPont analysis, it can be found that the company's profitability has a downward trend. Tencent, as a leader in the Internet industry, has experienced a slight lack of development momentum after its initial stage and development period. Overall, the growth rate is faster, and the operating margin is higher, which is in line with the characteristics of high returns in the Internet industry. However, Tencent's high operating margin has not been successfully converted into high net profit, which shows that Tencent's profit quality still has room for improvement, sustainable profitability is insufficient, and profit margin is shrinking. There are two main problems, the first external Internet competition has accelerated the technological innovation, the internal product innovation is insufficient, it is difficult to find a breakthrough in the market, at the same time in the development costs and sales costs of high investment, resulting in heavy cost burden. Secondly, the capital turnover efficiency is low. Second, Tencent's asset utilization efficiency has become low in recent years, and its operating capacity has declined. The company needs to jointly improve the total asset turnover rate and improve the utilization rate of funds in terms of income and assets. Nevertheless, Tencent still has a good profit base and is in a leading position in the industry.

#### 3.2. Suggestion

In view of the above problems, the following opinions are put forward. First expand the market to

increase revenue. Both the net profit rate of sales and the total asset turnover need to increase the sales revenue, although Tencent's annual revenue will grow, but the growth is weak, the enterprise needs to maintain the existing operating performance based on the development of new business territory, seize the trend of The Times to develop new products, explore new areas to create opportunities, strengthen the integration with the traditional industry, inject fresh blood into the operating income. The second is to reduce costs to improve the net profit margin. From the previous analysis of sales net profit rate, it can be seen that Tencent's costs are growing, sales, management and financial expenses are so, resulting in a decline in profit margin. Therefore, Tencent needs to strengthen the supervision of expenses, improve the expense budget expenditure management system, do a good job of investment capital budget management for each new development business, streamline employees, give full play to the role of talents, and reduce employee costs. This will not only increase the company's net profit, but also increase the asset turnover rate.

#### 4. Conclusion

In summary, through the analysis of three important ratios of Tencent, the problems existing in the company's operation are clarified, and relevant enlightenment is obtained. I hope it will be helpful for Tencent to further tap its development potential and reach a new height of development. This paper only studies an Internet company and builds an analysis framework based on the company's disclosed data. Due to the lack of internal data support and limited knowledge level, the research has limitations and will be further improved in the future. Future research can start from Tencent's development of core business, increasing overseas market share, and reducing administrative expenses and other aspects to find a breakthrough in improving profitability.

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