Financial Analysis of NetEase Company Based on the Harvard Analysis Framework

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Abstract: This article examines NetEase's strategic layout and analyzes its macro environment. It reviews key accounting items from NetEase's 2018-2022financial statements to assess the authenticity of its financial information. It also predicts NetEase's future prospects and offers suggestions, such as adjusting prices and enhancing innovation, to boost competitiveness and market share. These insights can also serve as a reference for other companies in the industry.

Keywords: Harvard Analytical Framework; NetEase Corporation; financial analysis

1. Introduction

1.1 Company background

This paper selects netease company, which was established in 1997 and listed in 2000. Its main e-commerce, online games, software applications and other Internet companies are ahead of the same type of Internet companies in China, which not only benefits from the vast market, but also relies on its own strong strength, so that in the 26 years since its establishment, netease has always been the benchmark of the industry. At present, netease's four main business revenue is: online games, advertising, e-commerce and innovative value-added services.

1.2 Literature review

Early financial analysis methods focused on traditional metrics. Gilman (1924) used horizontal and vertical comparisons to analyze profit, financial status, and cash flow trends, emphasizing dynamic data to reflect business efficiency[1]. However, Ji Young Lim and Won Jung Noh (2015) argued that traditional methods are limited and proposed a six-aspect approach for more accurate decision-making[2]. Kreusbq (2018) highlighted that enterprise value, viewed through the value chain, is reflected in capability growth. Financial analysis should thus cover debt, profitability, growth rates, and trends, with shareholder value maximization requiring enhanced creativity[3]. Ken B. Cyree and Travis R. (2019) emphasized that stakeholders can understand business conditions through meticulous financial analysis to predict future trends[4]. Kamiah Ahmad and Shafie Mohamed Zabri (2017) found non-financial indicators significant in performance evaluation[5], while Mihaela Gadoiu (2014) stressed the importance of selecting appropriate ratios for effective analysis[6].

In China, Huang Shizhong (2017) introduced the Harvard Analytical Framework, adapting it to the local context and applying it to enterprise analysis[7]. Liu Gang and Cao Zhipeng (2015) argued that financial statement analysis should consider not only financial data but also factors like corporate strategy and industry environment, making reasonable judgments on operational status and profitability, and forecasting prospects based on external conditions[8]. Zhan Qian (2017) suggested broadening the range of financial analysis ratios to reduce limitations, improve decision-making accuracy, and provide better suggestions for future development[9].

The Harvard Analysis Framework improves traditional financial analysis by integrating strategic analysis. Analysts should not only focus on financial indicators like debt repayment, operational efficiency, and profitability but also identify risks based on changing environments. Companies must then adjust strategies accordingly.

1.3 Study Methods

1.3.1 Literature review method

After selecting the topic of the paper, the author read a large number of existing relevant literature, searched the Internet for the financial data published in recent years, and had a preliminary understanding of the operating status of the enterprise. Through reading and comparing related articles, in-depth analysis and summary, I repeatedly thought about my doubts in the process of reading, and used the Internet to search for relevant information to expand my research ideas.

1.3.2 Case study method

In this paper — netease company, a highly representative enterprise in the Internet industry, was selected as an example to collect the financial data and non-financial information of the company in the past five years by means of collecting information and sorting out data. And use the Harvard analysis framework to combine this information to analyze the netease company.

2. Strategic Analysis

2.1 The PEST analysis

2.1.1 Political and legal environment

As the electronic information industry has been strongly supported by the state in recent years, and as the most cutting-edge Internet technology in the information field plays a key role in the era of industry 2.0. Advanced science and technology such as the Internet of Things and cloud computing have been applied in the traditional fields under the background of "Internet +", which makes the traditional manufacturing industry and the Internet innovation platform closely combined together.

2.1.2 Economic environment

According to the survey, the per capita annual consumption of urban residents increased from 311 yuan in 1978 to 30,400 yuan in 2022, an increase of about 98 times. After the reform and opening up, China's economy has developed rapidly thanks to the manufacturing industry. With the continuous enhancement of the overall economic strength and the improvement of the per capita income level, people's own consumption demand has also increased, and various consumption patterns have flooded into thousands of households. Under such a background, the development of the Internet industry has been promoted.

2.1.3 Social and cultural environment

Present-day social competition is intense, and the industry landscape is highly competitive. People, whether at work or after studying, need entertainment to relieve their physical and mental fatigue. Some online entertainment products have gradually gained popularity due to their flexibility and convenience. Despite their busy schedules, people use these online entertainment products to relax. Recognizing this significant demand, platform-based enterprises have seized the opportunity by aligning with the internet development trend and dedicating resources to innovate and grow.

2.1.4 Technical environment

The high-tech industry has been strongly supported by the state, and the construction of network infrastructure is increasingly perfect. The continuous strengthening and application of these advanced technologies has not only accelerated the development of the Internet industry, but also gave birth to new business models and innovative industries. As an Internet company, netease company, from the perspective of its development, these measures of the country undoubtedly create a good environment for the company, and become a perfect catalyst for the high-quality development of the company.

3. Accounting Analysis

3.1 Assets and Liabilities

3.1.1 Asset quality

According to Table 1, NetEase's total assets have risen from 86.968 billion yuan in 2018 to 172.761

billion yuan in 2022, an increase of 85.8 billion yuan. This growth is largely due to increases in current assets, which make up 70%–80% of total assets, indicating strong liquidity. Cash and cash equivalents surged by 71.959 billion yuan over five years, with a growth rate of 189.96%. Accounts receivable and notes receivable grew in the first four years but decreased by 505 million yuan in the fifth year. Inventory decreased from 1.066 billion yuan in 2018 to 621 million yuan in 2020 due to COVID-19, but rebounded to 994 million yuan in 2021–2022. Overall, NetEase has expanded steadily with strong asset liquidity and low financial risks.

Table 1 Asset Structure Analysis Table of netease Company in 2018-2022

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item	2022	2021	2020	2019	2018
Cash and cash equivalents	1,098.37	852.53	801.97	567.33	378.78
Inventory	9.94	9.65	6.21	6.51	10.66
Total current assets	1,316.03	1,131.20	1,078.31	851.05	687.16
Total of non-current assets	411.58	405.24	340.44	270.19	182.52
General assets	1,727.61	1,536.44	1,418.75	1,121.24	869.68
Total indebtedness	638.88	542.20	480.81	390.83	355.56

3.1.2 Liabilities

Like its total assets, NetEase's liabilities have also increased year by year, rising from 35.556 billion yuan in 2018 to 63.888 billion yuan in 2022. Over the five-year period, the total liabilities have increased by approximately 28 billion yuan, representing a growth of about 80%. Since excessive liabilities may increase financial risks, the company should pay close attention and take measures to guard against them. It can also be seen from Table 1 that, overall, the growth of current liabilities has been stable and continuous. Excessive current liabilities can lead to increased short-term debt repayment pressure for the company.

3.2 Profitability situation

Table 2 Profit Statement of Netease in 2018-2022 (brief statement)

Unit: 100 million yuan

item	2022	2021	2020	2019	2018
operation revenue	964.96	876.06	736.67	592.41	511.79
cost of marketing	437.30	406.35	346.84	276.86	238.32
gross profit	527.66	469.71	389.83	315.55	273.46
research and development expenditure	150.39	140.76	103.69	84.13	73.78
Administrative, sales, and distribution costs	180.99	164.78	140.76	93.51	99.90
profit before tax	242.50	211.04	153.72	163.83	110.77

According to Table 2, netease's operating revenue continued to grow to 96.496 billion yuan, an increase of about 88.55%, and the revenue mainly came from the main business revenue including e-commerce, online games, advertising revenue and value-added services. At the same time, although the cost of sales is also increasing year after year, their increase is generally smaller than the income, so the increase of income is more effective. In addition, the pre-tax profit increased by 13.173 billion yuan, and the gross profit also increased by 25.42 billion yuan in the past five years, indicating that netease's profitability has increased year by year.

3.3 Cash flow

Table 3 Cash Flow Statement of netease from 2018 to 2022 (Brief Statement)

Unit: 100 million vuan

item	2022	2021	2020	2019	2018
Net cash flow generated from operating activities	277.09	249.27	248.88	172.16	134.16
Net cash flow generated from investment activities	-73.70	-70.78	-291.92	-221.37	-135.70
Net cash flow generated from financing activities	-102.38	-125.86	99.13	10.83	15.87

As shown in Table 3, the cash flow generated by netease's operating activities has increased year by year in the past five years, increasing by about 14.3 billion yuan, most of which the cash flow is attributed to the game segment, one of the main businesses.

The cash flow generated by investment activities increased in the first three years, indicating that netease was in the expansion stage at that time and did not focus too much on short-term earnings, but focused on long-term returns. In the next two years, the cash flow of investment activities decreased year by year, indicating that the expansion trend of netease decreased and it paid more attention to the main business.

The net cash flow of netease's financing activities in the first three years was positive and fluctuated greatly, possibly due to netease Youdao, which was listed in the United States at the end of 2018. The value in the following two years was negative, indicating that most of the financing activities were completed, and that the cash flow required for daily production and operation was also satisfied by the cash flow of the operating activities.

4. Financial Analysis

4.1 Solvency

2022 2021 2020 2019 2018 2.32 2.24 2.31 2.23 1.96 2.22 2.29 1.93 2.30 2.21 35.29 34.86 asset-liability ratio(%) 36.98 33.89 40.88

0.59

1.51

0.64

1.54

Table 4 solvency indicator table of netease in 2018-2022

0.57

1.55

0.61

1.59

equity multiplier 4.1.1 Short-term solvency

item current ratio

quick ratio

equity ratio

In Table 4, it can be seen that over the past five years, NetEase's current ratio has generally increased, peaking at 2.32 in 2022. A ratio above 2 indicates strong short-term debt repayment ability, which NetEase maintained in four of the five years (except 2018). Similarly, its quick ratio has risen steadily, rebounding to 1.61 in 2022 after a slight dip in 2021. A quick ratio near 1 suggests sufficient liquid assets to cover short-term debts. Both ratios have remained stable around 2, reflecting NetEase's strong short-term financial health and ability to meet obligations.

4.1.2 Long-term solvency

NetEase's debt-to-asset ratio has stayed low (33%-41%) over the past five years, peaking at 36.98% in 2022. Its equity multiplier remained stable around 1.5, with minimal fluctuations, indicating strong long-term debt repayment capability. The low debt-to-asset ratio and moderate equity-to-debt ratio suggest limited reliance on debt and a healthy financial structure. These metrics demonstrate NetEase's ability to manage long-term liabilities effectively, reflecting its robust financial stability.

4.2 Operating capacity

Table 5 Operating capacity Index table of netease Company in 2018-2022

Unit: times / year

0.79

1.69

item	2022	2021	2020	2019	2018
inventory turnover ratio	44.66	51.24	54.54	32.26	23.25
fixed asset turnover	16.39	17.54	16.05	12.75	12.54
turnover of total capital	0.59	0.59	0.58	0.60	0.65

According to Table 5, from 2018-2020, NetEase's inventory turnover rose yearly, staying above 40 despite a slight decline later, reflecting strong inventory management and liquidity. Fixed asset turnover remained stable (12-17), indicating efficient utilization. Total asset turnover stayed around 0.6, showing stability but room for improvement in asset efficiency and capital flow.

4.3 Profitability

Table 6 Profitability Index table of netease Company in 2018-2022

unit:%

item	2022	2021	2020	2019	2018
gross profit margin	54.68	53.62	52.92	53.27	53.43
Net interest rate on sales	20.56	19.38	16.74	36.18	12.66
Return on equity	20.33	19.00	16.80	39.81	13.53

4.3.1 Analysis of sales gross profit margin

According to the data in Table 6, from 2018-2020, NetEase's gross profit margin slightly declined but rebounded in 2021, averaging around 53%. Early declines were due to COVID-19's impact on consumer spending, though NetEase, as an internet company, was less affected than traditional industries, with only a 0.51 percentage point drop over three years. Post-pandemic, NetEase capitalized on economic recovery, raising its gross profit margin to 54.68% by 2022.If profit growth is driven by core business, it reflects strong profitability and stable profit structure. Reliance on non-recurring activities, however, indicates less stable profitability and weaker growth sustainability.

4.3.2 Analysis of net sales interest rate

In 2018, NetEase's net profit margin was only 12.66%, which may have been due to the expansion of the market scale leading to increased costs and, consequently, a negative growth in the company's net profit. Over the following four years, the net profit margin first increased to 36.18% in 2019, then decreased to 16.76% in 2020, and finally rebounded to 20.56% in the last two years. Although there were fluctuations, the overall amplitude was small, and the values were not significantly high.

Therefore, in the future, NetEase should be more cautious about expansion. The company should also improve its management and operational models, and develop more refined and efficient business strategies to enhance profitability and achieve sustainable growth.

4.3.3 Analysis of return on equity

NetEase's ROA rose to 12.54% in 2019 from 7.79% in 2018, driven by revenue growth despite higher marketing costs, reflecting strong profitability that year. Although NetEase's return on total assets decreased by 4% in 2020, it gradually increased from 2021 to 2022, with a total increase of 2.96 percentage points. Although the growth was modest, it shows that NetEase made correct decisions in a timely manner during crises, thereby enhancing its profitability.

4.4 Growth ability

Table 7 Growth ability indicators of netease Company in 2018-2022

item	2022	2021	2020	2019	2018
operating receipt	964.96	876.06	736.67	592.41	511.79
increase rate of business revenue(%)	10.15	18.92	24.35	15.75	15.17
general assets	1,727.61	1,536.44	1,418.75	1,121.24	869.68
Total asset growth rate(%)	12.44	8.30	26.53	28.93	22.44

Based on Table 7, enterprise growth analysis should first analyze the growth ability of sales revenue. The netease's income has shown a steady growth trend in the past five years, indicating that the enterprise is undergoing small-scale asset expansion. Under the corresponding asset scale, the growth rate of income and the growth rate of asset change in the same direction, indicating that the efficiency of sales growth is low. The expansion of asset scale cannot bring a significant increase in income, but the efficiency is increasing year by year, and the sustainable growth of enterprises in sales needs to be enhanced.

5. Prospect Analysis

5.1 Negative factors for future development

In order to expand the large-scale market, Netease has increased its investment. However, this

expansion is accompanied by an increased cost risk. The company's current adoption of a diversified development strategy has also led to increasing operating costs. The emergence of new internet companies, both large and small, has further intensified industry competition. Blindly expanding business operations is highly irrational. For undeveloped market areas, investing significant funds may severely reduce the company's profits, leading to financial risks. Large-scale market development also faces certain cost-related risks.

5.2 Favorable factors for future development

Through the strategic analysis, accounting analysis and financial analysis of netease, we can draw the conclusion that netease has advantages in both market share and resource share, and it is a leading enterprise in the industry. As a very important part of the Internet, big data technology has also been repeatedly mentioned in the national policies in recent years. In this situation, netease needs to meet the development situation of the era of big data and develop service products to promote social progress based on innovative knowledge.

6. Conclusions and Suggestions

6.1 Conclusions

Based on the Harvard analysis framework, this paper makes an analysis of netease company, and obtains some shortcomings.

First, the profitability needs to be strengthened. Specifically reflected in the larger increase of sales cost, in the future financial risk is greater. Secondly, the net interest rate on sales and return on equity are low, and have fluctuated in recent years, not stable.

Second, the growth efficiency is low. Netease has been in the stage of expansion in the past five years, but the expansion of the scale has not brought the corresponding expansion of income. It shows that netease did not fully consider the rationality of the expansion when expanding the scale. In the future, enterprises should adjust their strategies in time to make their resource utilization more reasonable.

6.2 Relevant suggestions

6.2.1 Adjust commodity prices and improve profitability

Looking at today's major Internet enterprises, we can see that the cost-effective commodity model has become the main operation mode of Internet companies in the future. By adjusting commodity prices, netease can achieve the following benefits. First of all, it can attract more users, expand the user base, and enhance the brand influence and market share. Secondly, high cost performance can reduce the entry threshold, promote users to trial and experience products, and improve user engagement and retention rate.

6.2.2 Strengthen innovation ability and improve growth ability

NetEase's revenue is largely dependent on its online games. However, some of NetEase's online games are imitations or adaptations of products from other gaming companies. NetEase should strengthen its innovation capabilities and place greater emphasis on product originality. This will help avoid issues such as product copyright disputes, which could prevent the games from entering the market and negatively impact the company's economic profits.

To sum up, netease is in the rising period, and it needs to make use of its own advantages, formulate precise strategies, timely adjust the development direction, and timely prevent capital outflow and waste.

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