

Application of Harvard Analytical Framework to O2O Platforms of Generation Z: Take Meituan as an Example

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Abstract: The development of O2O platforms has led to changes in people's lifestyles, in which Generation Z is gradually becoming the main consumer in the market, which has a profound impact on O2O platforms. Given the advantages of the Harvard analytical framework, this paper aims to explore the application of the Harvard analytical framework in the O2O platform of Generation Z, taking Meituan, a leading O2O company in China, as an example. Using the Harvard analytical framework, this paper analyzes Meituan's financial data from four aspects: strategy, accounting, finance, and prospect, identifies problems, and gives corresponding optimization suggestions. The analysis finds that Meituan has problems such as business homogenization, limited profitability of the existing business, negative net profit, declining inventory turnover, increasing competitors, and changing consumer demand. In this regard, recommendations were made to launch new products and services, explore new business areas, optimize marketing and R&D expenditures, optimize inventory management, and gain a deeper understanding of the needs of Generation Z consumers.

Keywords: Harvard Analytical Framework, Generation Z, O2O platform, Meituan.

1. Introduction

As digital technology continues to develop [1-2] and global consumption patterns shift, Online to Offline (O2O hereafter) platforms are playing an increasingly important role in the business world, and the growth of Generation Z has made it possible for them to become the main consumer force and have an increasingly significant impact on O2O platforms. Generation Z, typically defined as the population born between 1996 and 2010, accounts for nearly one-fifth of the total population in China and is one of the main consumer groups in China in the next decade [3].

China, as one of the world's largest Internet markets, the O2O model has penetrated various fields, including the fresh food field [4], the hotel field [5], the travel field [6], the catering takeaway field [7] and so on.

Meituan is a leading enterprise in China's O2O industry, and in the context of Generation Z, its development status and strategic layout have important reference value for the development trend of the whole industry. Therefore, this research selects Meituan as the research object and adopts the analysis method of Harvard analytical framework [8] to explore and analyze the development status of Meituan in Generation Z, hoping to provide strategic references for the sustainable development of Meituan or other O2O enterprises.

2. Harvard Analytical Framework

The Harvard Analytical Framework, proposed by three scholars from Harvard University, K.G. Palepu, P.M. Healy and V.L. Bernard, is a comprehensive financial analysis method based on a strategic perspective to analyze various financial data of enterprises [9]. It mainly includes four aspects: strategic analysis, accounting analysis, financial

analysis, and prospect analysis.

Firstly, strategic analysis analyzes the current development strategy by combining the company's internal and external environment [10]; accounting analysis analyzes the company's key accounting policies and accounting indicators by identifying and evaluating key items [11]; financial analysis analyzes the company's financial status based on the previous two analyses to analyze the company's operating status by conducting trend analysis and comparative analysis [12]; and lastly, prospect analysis analyzes the company's future through the analysis of the above three dimensions development trend is judged [13].

The four interrelated aspects of the Harvard Analytical Framework provide a systematic analytical and decision-making framework that combines strategy, prospect, and other factors to deeply analyze corporate financial information [14].

3. The Case Study of Meituan Based on Harvard Analytical Framework

3.1. Introduction of Meituan

Meituan is a technology retail company, founded in 2010, and has more than 10 years of development history. In 2021, the company's strategy was upgraded from "Food + Platform" to "Retail + Technology" (<https://www.meituan.com/>), with a new strategy to fulfill the company's mission of "helping people eat better and live better". Through development, Meituan has gradually formed three major businesses centered on local services such as takeaway, travel, and transportation, and has gradually formed a scale advantage and become a leading enterprise in China's O2O industry.

Table 1. Meituan - company history

Time	Event
2011	Meituan App Released
2013	Meituan Launches Hotel Reservation and Dining Delivery Service
2015	Meituan and Dianping announce strategic partnership and form new company
2018	Meituan listed on Hong Kong Stock Exchange
2023	Meituan announces the official launch of its new takeaway brand KeeTa in Hong Kong

3.2. Introduction of Meituan

3.2.1. PEST analysis

1. Political environment

In 2018, China introduced the E-Commerce Law, which is the basic law for the e-commerce industry, and provides detailed provisions on e-commerce dispute resolution, e-commerce promotion, and legal liability. The e-commerce industry continues to innovate and progress in the process of development, and the O2O model is one of the e-commerce models, that focuses more on attracting online customer flows to offline consumption through the operation of the platform (<https://baike.baidu.hk/item/o2o%E6%A8%A1%E5%BC%8F/10532551>). At present, the O2O model has been involved in various fields such as food, tourism, culture, and entertainment. The law's promulgation provides a theoretical foundation for the healthy development of China's e-commerce industry.

2. Economic environment

In 2023, China's gross domestic product (GDP) exceeded RMB 126 trillion, an increase of 5.2% over the previous year, of which online retail sales amounted to RMB 15.42 trillion, an increase of 11%, making China the world's largest e-tailing market for the 11th consecutive year; among which, the share of online retail sales of physical commodities increased to a record high of 27.6%; the combined sales of online tourism, online recreation and entertainment, and online food and beverage contributed 23.5% to the growth rate of online retail sales. The combined sales of online tourism, online entertainment, and online catering contributed 23.5% to the growth of e-tailing, of which online tourism sales increased by 237.5% and online entertainment sales increased by 102.2% [15]. This provides broader market space and more business opportunities for Meituan and fits in with Meituan's core business segments, but at the same time requires Meituan to continue to innovate and improve its capabilities to adapt to the changes in the market and the challenges of competition.

3. Social environment

In 2020, China's Generation Z population will total 253 million, accounting for 17.6% of the total population. The total population of Generation Z is large, and most of them are still in the student stage [3]. More than half of China's Generation Z have reached adulthood, and more than 3/4 are in middle school or college [16]. 2020 Internet penetration rate of China's underage Internet users (mostly Generation Z) will reach 94.9% [3], and the consumption potential of Generation Z consumers will be unleashed as they grow older. This group has a greater impact on O2O platforms, and Meituan needs to cater to the needs of Generation Z consumers.

4. Technical environment

5G, big data [17], artificial intelligence [18], and other

technologies are constantly developing, and the application of these new technologies plays an important role in the optimization of the O2O model. New technologies enable enterprises to obtain consumers' shopping wishes and related information more quickly and efficiently. Through this information, enterprises can improve the quality of service, improve the mode of operation, and provide consumers with better service and shopping experience. Meituan needs to utilize new technologies to adapt to the changes in the market and maintain its competitive advantage.

3.2.2. PEST analysis

1. Strengths

Meituan has a good market position and competitive advantages in the O2O field. Firstly, Meituan covers a wide range of businesses in the field of living services and has a huge user base. Secondly, Meituan has strong brand influence and user recognition and has a leading market share in the takeaway field [18].

2. Weaknesses

The profit model of Meituan mainly relies on commission income and advertising revenue. The profitability of Meituan's existing business is limited, and the takeaway business accounts for more than half of Meituan's revenue, but the profitability of takeaway is limited. In addition, due to the fierce competition in the market, Meituan needs to subsidize to attract and retain users and merchants, which leads to larger losses [18].

3. Opportunities

Firstly, the large scale of China's local living services market provides a solid foundation for Meituan's business development. With the popularization of the Internet and the trend of consumption upgrading, Generation Z users' demand for local services and spending power is growing, providing Meituan with a broad space for development [3]. Also, Meituan has a wealth of partners and resources relying on the three platforms of Meituan Takeout, Meituan and Dianping. In addition, by continuously investing in research and development and innovation, Meituan can utilize the latest technology, such as drone delivery, to improve the quality and efficiency of its services and create more value and advantages.

4. Threats

In recent years, Meituan has expanded its business to catering, tourism, sharing, and other fields, and has continued to explore new businesses. However, its business faces competitors from several fields and industries, in particular, Alibaba has constructed businesses such as Hungry, Flying Pig, Ticketmaster, and Harrow Bicycle, which are in direct competition with Meituan's business and pose a threat to Meituan's market share and profits.

Table 2. SWOT analysis of Meituan

Strengths Meituan has a good market position and competitive advantage in the O2O sector.	Weaknesses Meituan's profit model relies heavily on commission revenue and advertising revenue.
Opportunities China's local living services market is large. Generation Z Users Provide Wide Space for Meituan to Grow.	Threats More competitors for Meituan-related businesses

3.3. Accounting analysis

3.3.1. Asset Project Analysis

Table 3. Assets project related data (unit: 100 million yuan)

Course/Year	2022	2021	2020	2019	2018
Inventory	11.63	6.871	4.665	2.752	4.002
Accounts receivable	20.53	17.93	10.31	6.768	4.663
Cash	201.6	325.1	170.9	134	170.4

(Source: EastMoney.com, Meituan 2018-2022 Annual Report.)

Meituan's total assets grew from 120.7 billion yuan in 2018 to 244.5 billion yuan in 2022, a two-fold increase, with a CAGR of 18.74% (Table 3). This reflects that Meituan's business continues to grow, and its total assets are steadily increasing. Also, inventory shows a clear growth trend, due to the adjustment of Meituan's strategy, inventory management has changed, and inventory has increased to support the retail strategy. In addition, from the growth of current assets in the table above, the liquidity of Meituan's assets is increasing, having enough liquidity to support daily operations and help the company to better cope with unforeseen circumstances or make investments.

3.3.2. Asset project analysis

Table 4. Liability project related data (unit: 100 million yuan)

Course/Year	2022	2021	2020	2019	2018
Accounts payable	173.8	151.7	119.7	67.66	53.41
Current liabilities	764.3	685.9	511.5	365.9	318.3
Non-current liabilities	393.5	465.0	177.9	33.66	23.27

(Source: EastMoney.com, Meituan 2018-2022 Annual Report.)

The company's total liabilities grew from \$34.15 billion in 2018 to \$115.8 billion in 2022, an increase of 3.39 times with an average annual growth rate of 50.50% (Table 4). Current and non-current liabilities generally maintain the same growth trend as total liabilities, with an average annual growth rate of 78.13% and 8.54%, respectively (Table 4). In 2022, the total liabilities of Meituan increased by 0.59% compared to the end of 2021. Among them, current liabilities increased by 11.43% and non-current liabilities decreased by 15.39% (Table 4). The growth rate of short-term debt is higher than the growth rate of long-term debt, which will increase the company's debt-servicing pressure, and it needs to pay attention to the growth of the debt scale and ensure short-term debt-servicing capacity and financial stability.

3.3.3. Earnings program analysis

Table 5. Earnings project related data (unit: 100 million yuan)

Course/Year	2022	2021	2020	2019	2018
Operating income	2200	1791	1148	975.3	652.3
Operating cost	1582	1367	807.4	652.1	501.2
Operating profit	617.5	424.7	340.5	323.2	151

(Source: EastMoney.com, Meituan 2018-2022 Annual Report.)

Corporate revenues have been trending up year-on-year, with a significant increase in 2021. 114.8 billion dollars in 2020 and 179.1 billion dollars in 2021, an increase of 56.01% year-on-year (Table 5). Corporate net profit has been negative, but the overall trend is in the positive direction. Meituan's operating costs have increased from 50.12 billion yuan in 2018 to 158.2 billion yuan in 2022 (Table 5), which is due to the large-scale increase in Meituan's investment in technology and innovation, which has led to a continuous increase in operating costs (<https://www.meituan.com/>). Meituan has achieved significant growth in operating revenue and operating profit over the past five years, but its net profit performance has been unstable.

3.4. Financial analysis

3.4.1. Operating capacity analysis

Table 6. Meituan's operating capacity indicators

Financial indicators	2022	2021	2020	2019	2018
Accounts receivable turnover (times)	114.39	126.86	134.44	170.64	145.14
Inventory turnover ratio	171.54	238.03	217.72	193.07	205.16
Current asset turnover	1.51	1.52	1.35	1.26	1.02

(Source: EastMoney.com, Meituan 2018-2022 Annual Report.)

Meituan's total asset turnover ratio was 0.64 times/year in 2018 and rises to 0.91 times/year in 2022 (Table 6), generally showing an upward trend, Meituan's capital turnover speed is fast, the operating effect is good, and the operating ability is better. Also, the number of accounts receivable turnover continues to decline significantly from 2018-2022, indicating that Meituan's accounts receivable circulation speed is accelerated, and the speed of liquidation rises. In addition, from the point of view of the inventory turnover ratio, the overall inventory turnover ratio has been above 150, showing a downward trend overall.

3.4.2. Debt-servicing Capacity Analysis

Table 7. Meituan 2018-2022 solvency capacity indicator

Financial indicators	2022	2021	2020	2019	2018
Capitalization ratio (%)	0.90	0.92	0.71	0.43	0.39
Current ratio	1.87	2.16	1.73	2.24	2.30
Asset-liability ratio	47.36	47.83	41.39	30.27	28.30

(Source: EastMoney.com, Meituan 2018-2022 Annual Report.)

From 2018 to 2020 Meituan's current ratio has been fluctuating around 2 but the overall decline in the current ratio, especially in 2022 is below 2, and short-term solvency needs to be improved. In addition, from 2018 to 2022, the capitalization ratio shows a rising trend, the capitalization ratio in 2022 is 0.90, slightly lower than 0.92 in 2021 (Table 7). Both the capitalization ratio and gearing ratio show an

increasing trend, indicating that Meituan adopts a more aggressive strategy in terms of expansion and investment, and tends to support its growth through debt financing.

3.4.3. Profitability analysis

Table 8. Meituan 2018-2022 profitability indicator

Financial indicators	2022	2021	2020	2019	2018
Gross profit ratio (%)	28.08	23.71	29.66	33.14	23.16
Net profit ratio	-3.04	-13.14	4.10	2.29	-177.07
Net interest rate of the total assets	-2.76	-11.56	3.15	1.77	-113.05
Average net return on assets	-5.26	-21.08	4.96	2.51	-502.67

(Source: EastMoney.com, Meituan 2018-2022 Annual Report.)

Meituan's gross profit margin increased from 23.16% in 2018 to 28.08% in 2022 (Table 8), Meituan's cost control and profitability in selling goods or providing services improved. From 2019 to 2022, Meituan's net profit margin improved, although the net profit margin in 2022 is still -3.04% (Table 8), the company's net profit loss, but it performed better compared to 2018. Meituan's net margin on total assets decreased from -113.05% in 2018 to -2.76% in 2022 (Table 8). The company's asset utilization efficiency improved. Average net assets decreased from -502.67% in 2018 to -5.26% in 2022 (Table 8), and the company's asset utilization efficiency and profitability improved.

The profitability of Meituan increased from 2018-2022, but the net profit margin, total net asset margin, and average net return on assets remain negative, and the company still faces challenges in profitability.

3.5. Prospect analysis

3.5.1. Industry prospect

The O2O industry has a better development prospect, which can be expanded to all areas of people's lives. The development prospect of O2O is mainly manifested in the fact that this mode perfectly transforms online user traffic, and consumers can preview products online and enjoy the personal experience in the physical store, which provides users and merchants with more direct contact and communication opportunities [19]. Meanwhile, the O2O model can work with other forms of e-commerce to attract potential customers and thus increase sales.

3.5.2. Company prospect

In 2021, Meituan's strategy officially upgraded from "Food + Platform" to "Retail + Technology", since then Meituan's image has been established as a technology retail company. With the establishment of this strategy, Meituan will usher in a broader development prospect. Instead of limiting itself to a food delivery platform, Meituan will expand into the retail space. By offering a wider range of retail products and services, the company will be able to diversify into different areas.

In addition, Meituan has made technology a strategic priority, with R&D spending to a record high of 20.7 billion yuan in 2022, which will provide a strong impetus to its business

Growth. (<https://www.meituan.com/news/NN230407001056474>). By investing in R&D and innovation and utilizing artificial intelligence, big data analysis, and other technological means to improve the quality and efficiency of

its products and services, user satisfaction, and market competitiveness, it can further consolidate its leading position in the industry.

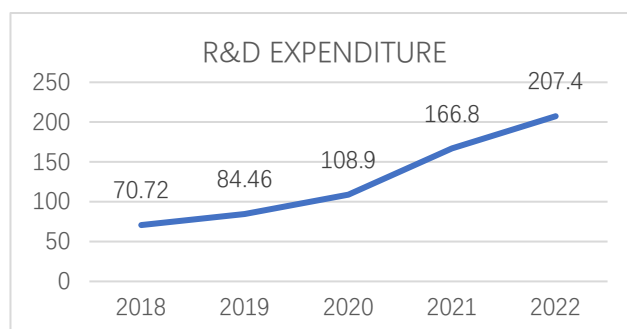


Figure 1. Trend of meituan's R&D expenditure (unit: 100 million yuan)

(Source: EastMoney.com, Meituan 2018-2022 Annual Report.)

4. Problems with the Development of Meituan in the Harvard Analytical Framework

4.1. Strategic analytical aspects

From the analysis of Table 2, the homogenization of Meituan's current existing business is more serious. With the development of the O2O field, more and more companies choose to enter the O2O field. Meituan's major businesses in takeaway, online accommodation, and travel are like the services provided by its industry competitors. In addition, Meituan's existing business has limited profitability. Meituan's takeaway business accounts for most of its earnings revenue and its profitability space is limited due to the nature of the takeaway business.

4.2. Accounting analytical aspects

Table 9. Data related to meituan's income statement (unit: 100 million yuan)

Course/Year	2022	2021	2020	2019	2018
Sales and marketing expenses	397.5	406.8	208.8	188.2	158.7
General and administrative expenses	97.72	86.13	55.94	43.39	55.46
R&D expenditures	207.4	166.8	108.9	84.46	70.72
Finance expenses	16.29	11.31	3.700	1.910	0.4473

(Source: EastMoney.com, Meituan 2018-2022 Annual Report.)

The performance of Meituan's net profit is unstable, with a negative net profit for the last two years (Table 5). As shown in Table 9, the biggest impact on Meituan's net profit is sales and marketing expenses. In the past five years, Meituan's sales and marketing expenses were high. Due to the fierce competition in the market, Meituan needs to subsidize to attract and retain users and merchants, resulting in high selling and marketing expenses. In addition, Meituan's research and development expenses continued to increase due to changes in the company's strategy. In addition, general and administrative expenses and finance costs have also been increasing in recent years, requiring further attention to profitability and financial health.

4.3. Financial analytical aspects

Meituan's inventory turnover ratio declined from 205.16

times/year in 2018 to 171.54 times/year in 2022 (Table 6). Although this ratio is still relatively high, the downward trend indicates that there is a backlog of inventory and a slowdown in inventory sales. Secondly, Meituan's current ratio declined from 2021 to 1.87 in 2022 (Table 7), which is below the safe level of 2:1, indicating that Meituan's short-term solvency has weakened.

4.4. Prospect analytical aspects

Meituan has upgraded its strategy to "retail + technology", and as Meituan enters the retail field, it will face more fierce competition. It will not only compete with traditional retailers but also with other Internet retailers, such as Alibaba and Jingdong. In addition, the needs of consumers are constantly changing. Among them is the gradual increase in the age of Generation Z, which will make Generation Z become the main consumer group in China's consumption. If Meituan is unable to accurately grasp the changing trend of consumer demand, it may affect the company's market position.

5. Optimization Proposals for The Development of Meituan Under the Harvard Analytical Framework

5.1. Strategic analytical aspects

Firstly, Meituan can continuously introduce new products and services to provide a unique user experience. For example, developing features with differentiation in the takeaway ordering application to meet the needs of different consumers. Secondly, Meituan can explore new business areas, such as health and education, to find new growth points. In addition, Meituan can develop value-added services based on its existing business, such as providing data analytics services for merchants, to create new sources of revenue for Meituan.

5.2. Accounting analytical aspects

To improve Meituan's net profit position, sales and marketing expenditures have the greatest impact on net profit and data analysis can be taken to identify the most effective marketing activities and reduce ineffective or inefficient marketing expenditures. Secondly, research and development expenses also have a large impact on net profit, and Meituan can prioritize its research and development projects to ensure that resources are invested in the projects with the most potential and return. Also, in general, administrative expenses and financial management, optimize processes to reduce unnecessary expenses.

5.3. Financial analytical aspects

In the inventory backlog issue, Meituan can adopt a product life cycle management approach [20] by maintaining appropriate inventory for high-turnover products and reducing inventory or taking promotional measures for low-turnover products. In short-term solvency, Meituan can improve the management of accounts receivable, for example, it can strengthen the management of customer credit or provide discounts to customers who pay on time. It can also increase current asset turnover, for example, by optimizing supply chain management and reducing inventory backlogs to accelerate cash inflows.

5.4. Prospect analytical aspects

Meituan needs to strengthen its brand image. Meituan needs to clarify its positioning in the retail market and enhance its

brand awareness and influence in the retail sector through marketing campaigns and public relations strategies. It also needs to develop a flexible strategic plan to quickly adapt to market changes in the retail market and changes in consumer demand. In addition, Meituan needs to have a deeper understanding of Generation Z. Conduct in-depth market research to understand the consumption habits, values, and preferences of Generation Z, and cater to the consumption needs of Generation Z, to better meet the consumption wave of the future.

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