Research on the Profit Model of Midea Group in the Context of Digital and Intelligent Transformation

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Abstract: This paper first expounds the concepts related to digital transformation and the concept of profit model, and then takes the digital transformation of Midea Group as an example to analyze the positive role played by its digital transformation in the profit model and some problems, and then puts forward some suggestions.

Keywords: Digital Transformation; Profit Model; Countermeasures

1. Related Concepts

1.1 Digital Transformation

Digital transformation is a process in which enterprises deeply integrate data and business from their own operational perspectives with the help of advanced technologies such as digital tools, cloud computing, and the Internet of Things to address business challenges. At its core is a comprehensive change driven by information technology, covering multiple aspects such as strategic reshaping, cloud technology, Internet of Things, management reform and business model innovation. In this process, enterprises continue to innovate their own value creation systems, improve operating efficiency, effectively achieve cost control, and continue to generate new value and growth momentum.

1.2 Profit Model

The profit model refers to the business structure of an enterprise or organization to achieve value creation and profit through its business activities, including the revenue structure, cost structure and corresponding target profit of the enterprise.

The profit model is inseparable from five key elements, namely profit points, profit objects, profit sources, profit leverage and profit barriers. A scientific and effective profit model needs to be built around five aspects: positioning, profit sources, key resources and skills, business system and cash flow structure.

2. Analysis of Midea Group's Profit Model in the Context of Digital Transformation

2.1 Basic Information about the Company

Midea Group is a company mainly engaged in the research and development, production and sales of household appliances, commercial air conditioners, HVAC, lighting, smart home and other fields. Up to now, Midea Group has become one of the world's leading home appliance manufacturers.

Midea Group has embarked on a journey of digital transformation since 2013, actively embracing changes to adapt to the new market environment and customer needs. It has been 12 years of development, and in 2015, it entered the second stage of digital transformation, and the intelligence has been significantly improved.

2.2 The Profit Model Advantages of Midea Group After Digital Transformation

2.2.1 Diversified Profit Points

Personalized customization services. Midea Group's personalized customization service is a comprehensive smart home solution, which is committed to creating an unprecedented and highly personalized life experience for users through the deep integration of the two core technologies of whole-house smart air and active whole-house intelligence. This service is not only a simple control of the home environment, but also a lifestyle innovation and improvement.

Intelligent product strategy. Improve product quality and competitiveness through technological innovation, thereby increasing product gross profit margin.

2.2.2 Refine the Profit Object

In the composition of Midea Group's profit model, Midea Group comprehensively considers multiple dimensions such consumers' as geographical location, demographic characteristics, psychological characteristics and behavioral characteristics, accurately and thoroughly segments consumer groups, and tailors unique and high-value products and

services for each segment.

2.2.3 Enrich Profit Leverage

Midea Group used digital means to creatively launch the "T+3" sales and procurement model. Under this model, Midea Group has formed a close strategic alliance with Andezhi Logistics, profoundly innovated the existing logistics system, and built an efficient collaborative warehouse mechanism. The most significant result is that the goods can be efficiently delivered directly from the warehouse to consumers, significantly reducing the delivery time, which in turn drives the steady growth of sales and achieves mutual benefit and win-win results with dealers and other parties.

2.2.4 Establish Profit Barriers

Innovative research and development. By 2024, Midea Group's R&D team has grown to more than 23,000 professionals, and the number of authorized patents has reached more than 80,000. This series of data fully demonstrates Midea Group's strong strength and unremitting investment in the field of technology research and development, and provides solid support and guarantee for its digital transformation.

Channel optimization. The channel network coverage is relatively comprehensive, and e-commerce sales have accounted for nearly 50%, so as to meet the needs of consumers in different channels, and promote the increase in offline store sales through the online Meiyun sales platform, based on a professional digital platform, and at the same time sell some ecological products in offline stores, which can not only quickly reduce inventory, but also improve the delivery speed of products.

3. The Implementation Effect and Problems of Midea Group's Profit Model in the Context of Digital Transformation

3.1 The Implementation Effect of Midea Group's Profit Model

3.1.1 Profitability Analysis

a: Net profit margin and gross profit margin.

From Figure 1, we can see the overall changes in Midea Group's net profit margin and gross profit margin since its digital transformation from 2015 to 2023, with amortization expenses of up to 200 million yuan incurred in 2017 due to mergers and acquisitions, and in 2020, due to the impact of the epidemic, the indicators have decreased, and the two indicators have shown an increasing trend from 2022 to 2023.

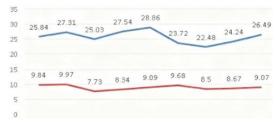


Figure 1. Changes in Net Profit Margin and Gross Profit Margin of Midea Group from 2015 to 2023

b: Return on total assets and return on net assets. Figure 2 shows the changes in Midea Group's return on total assets and return on net assets from 2015 to 2023, it can be seen that the return on net assets reached the highest value in 2018, and then showed a downward trend after 2019, with the return on total assets falling from 10.94% in 2015 to 7.43% in 2023, showing an overall downward trend, because Midea Group's assets are increasing, so it also leads to a continuous decline in its return on total assets. Overall, the fluctuations are not very large, which is mainly due to the stability and efficiency of Midea Group's operations. The company can rationally allocate resources, optimize the asset structure, and ensure the effective use of assets, thereby offsetting the downward pressure on yields caused by asset growth to a certain extent.



Figure 2. Changes in Midea Group's Return on Total Assets and Return on Net Assets from 2015 to 2023

3.1.2 Solvency Analysis

1) Current ratio and quick ratio. See Figure 3:

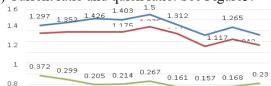


Figure 3. Changes in Midea Group's Solvency from 2015 to 2023

As shown in Figure3, after the digital transformation of Midea Group's profit model, its current ratio and quick ratio showed a very obvious growth trend in the next few years. The core driving force of this significant growth stems from Midea Group's product innovation and optimization of omni-channel marketing strategies, which have greatly helped Midea Group reach nearly 70 billion yuan in total online

sales in 2019, achieving a year-on-year increase of more than 30%. Of particular note is the 154% year-on-year increase in monetary funds in its liquid assets, a significant increase that directly drove a significant jump in current ratios and quick ratios. Although the growth rate has corrected during this period from 2020 to 2021, Midea Group has still successfully exerted the effect of increasing profits with its unique "T+3" production and sales model and digital marketing strategy. This strategy not only significantly improved the Group's inventory management capabilities, but also significantly strengthened the liquidity of its assets, which in turn drove a steady increase in short-term debt solvency.

2) Cash flow ratio. From the statistical results in Figure 4.3, it can be seen that its value is decreasing overall, below 0.5, indicating that the liquidation ability of its current assets is declining, which may affect its subsequent debt repayment problems.

3.1.3 Operational Capability Analysis

- 1) Total asset turnover. As shown in Figure4, Midea Group's total asset turnover efficiency has changed relatively stable, mainly due to the combined effect of two factors. On the one hand, Midea Group's acquisition strategy has significantly increased its asset size; On the other hand, the in-depth implementation of digital transformation has promoted the innovation of profit models, greatly improving operating income and sales performance. The synergy between the two ensures the stable performance of Midea Group's total asset turnover efficiency.
- 2) Inventory turnover rate and accounts receivable turnover rate



Figure 4. Changes in Midea Group's Operating Capacity from 2015 to 2023

From the statistical results of Figure4, it can be seen that from 2015 to 2023, the inventory turnover rate value has increased from 8.062% to 5.366%, indicating that its inventory turnover rate has shown a downward trend, and it can be seen that its ability to destocking is decreasing, but its accounts receivable turnover rate has increased from 5.569% to 10.42% in 2023, indicating that its ability to recover accounts has been significantly improved, indicating that its cycle is constantly shortening, the speed of account

recovery has increased significantly, and digital transformation has played a role in profit leverage.

3.1.4 Growth Capacity Analysis

- 1) Operating income growth rate. From Figure 4.5, it can be clearly observed that the growth rate of its operating income fluctuates greatly, first, in 2017, the e-commerce channel developed rapidly, Midea also became the largest company in online sales, so the operating income increased significantly, in 2018 due to the impact of the acquisition, so the operating income decreased rapidly, in 2022 due to the impact of the external environment led to a rapid decrease in operating income, and then Midea Group began to continuously optimize sales channels, and the sales volume gradually increased. The growth rate of operating income has also increased significantly.
- 2) Net profit growth rate. From the statistical results of Figure5, it can be seen that the net profit growth rate has also fluctuated greatly, showing a downward trend from 2019 to 2022, but it has improved in 2023, and it can be seen that it has been continuously improving in terms of intelligence, improving the problems in 2022, and improving the cost management ability, so that the net profit has increased significantly.



Figure 5. Changes in Growth Capacity Indicators from 2015 to 2023

3.2 Problems in Midea Group's Profit Model in the Context of Digital Transformation

3.2.1 The digitalization of sales channels needs to be improved

Although Midea Group has established an omni-channel marketing strategy, due to the lack of advanced digital sales management, Midea Group needs to invest more resources and energy in channel expansion and maintenance. Although it is obvious from Figure5 that Midea Group's operating income has increased significantly. However, Midea's sales expenses have also continued to increase, and the proportion of expenses during the occupation period has also continued to increase. Midea Group's sales expenses mainly come from advertising fees, after-sales, installation, storage and freight, accounting for about 80%, and the main reasons

for sales expenses are its high installation costs, high after-sales costs, and promotional expenses. It can be seen that Midea Group's digital application in sales is still obviously insufficient, and the consumption of promotion and after-sales is high, indicating that it has not fully played the role of digital transformation in profitability. Through the fluctuation of gross profit margin, it can also be seen that although there are many types of products, not every product can be refined, because the digitalization of sales channels needs to be improved, and sales can only be increased by reducing prices.

3.2.2 Brand differentiation is insufficient

In the process of digital transformation, when we compare Midea Group with Gree Electric Appliances and Haier Smart Home, it is not difficult to find the lack of Midea in brand characteristics. When it comes to air conditioners, the first thing consumers think of is Gree Electric Appliances; When it comes to refrigerators and washing machines, we think more of Haier. However, when it comes to Midea, it is difficult for consumers to find an exclusive and iconic product to correspond to. This lack of brand awareness of a single product makes Midea Group's products more easily replaced by other brands when facing competition homogeneous products in the market.

3.2.3 Poor ability to respond to emergencies

Although the innovative business brought about by digital transformation has led to an increase in overall profitability, after 2019, due to the impact of the epidemic, people's consumption power has decreased, which has also affected the main business of Midea Group, resulting in a downward trend in its profitability in home appliances.

5. Suggestions for Optimizing Midea Group's Profit Model

5.1 Strengthen the Construction and Upgrading of Digital Sales

5.1.1 Digital training of sales personnel

Providing salespeople with a comprehensive, real-time updated digital knowledge base is the first step in improving their digital capabilities. This knowledge base should cover product knowledge, market trends, service skills, and other aspects to ensure that salespeople can quickly obtain the information they need.

During the training process, sales staff should be encouraged to actively share their experience and skills to form a good atmosphere of learning and helping each other. Salespeople can stimulate their enthusiasm and creativity by holding experience sharing sessions, skills competitions and other activities. Sales teams can also be established across multiple departments or regions to enhance communication and collaboration among sales team members. Midea Group should build a long-term mechanism for continuous learning and development, and provide continuous learning opportunities and resources for salespeople.

5.1.2 Digital precision marketing upgrade

Using big data to analyze consumer behavior is the key to Midea Group's precision marketing. Advanced data analysis platforms should be continuously built and updated to collect and analyze multi-dimensional data such as consumers' purchase records, browsing behavior, and search keywords. Through in-depth mining of this data, we can gain more accurate insights into consumer needs and preferences, so as to formulate marketing strategies that are more in line with consumer psychological expectations.

5.2 Brand Differentiation Strategy Construction

Through comprehensive market research and meticulous consumer demand analysis, we can discover and meet those unmet market needs, and then transform these needs into product functions and designs with distinct differentiated characteristics. Midea Group should pay attention to brand building, enhance brand awareness and reputation through advertising, public relations activities, social welfare, etc., and establish a good brand image of the enterprise.

In terms of product design, Midea Group should continue to emphasize the uniqueness and innovation of products, actively introduce new design concepts and technology applications, create benchmark products that can lead industry trends, and bring consumers an unprecedented user experience.

5.3 Strengthen the Response to Emergencies

Midea Group should establish a comprehensive information monitoring system. Through big data analysis and artificial intelligence technology, Midea can more accurately grasp market dynamics and predict changes in consumer demand, so as to adjust production plans and marketing strategies in advance to adapt to market changes and bring advantages to its own

operations.

In terms of financial management, Midea Group should reduce unnecessary investment and labor expenditure, and give priority to the core and most direct cash flow generating businesses.

In terms of supply chain management, Midea Group should actively look for alternative products and materials to reduce dependence on specific suppliers or regions. Through diversified procurement and inventory management strategies, Midea can ensure the smooth and stable supply chain. It is also necessary to establish long-term and stable cooperative relations with suppliers to jointly respond to market changes.

6. Conclusion

This paper evaluates the actual effects of these profit models on Midea Group from four different capability dimensions: profitability, solvency, operating ability and growth ability. Digital transformation has enhanced the competitiveness and profitability of Midea Group, and has also provided useful reference and enlightenment for the entire home appliance manufacturing industry.

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