Analysis of Profit Model of a Medical Beauty Company from the Perspective of Value Chain

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ABSTRACT

With the rapid development of China's economy, people's income has significantly increased, forming a three-dimensional and multi-level consumption structure. The medical beauty industry is facing development opportunities. The profit model is closely linked with the core competitiveness of enterprises, serving as a basic method guiding the production and operation of all aspects of the company. This paper objectively analyzes the profit model of a medical beauty company from the perspective of the value chain, summarizes the existing flaws in the profit model, and proposes optimization strategies to broaden the company's development space through the analysis of the profit model.

KEYWORDS

Medical beauty industry; Profit model; Value chain

1. INTRODUCTION

In recent years, the domestic beauty industry has welcomed development opportunities, with rapid expansion in skincare, beauty selfies, body shaping, and medical beauty sectors. The medical beauty industry has expanded its scale and achieved high profits, closely tied to its profit model. The profit model is an organic system composed of strategic positioning, business structure, financial structure, customer relationships, and internal transaction costs. Essentially, it is a value chain system, with the profit process being a value creation process equivalent to the value chain. As a leading enterprise in the medical beauty industry, the profit model of Company A has garnered significant attention. Therefore, this paper starts from the activities in the value chain to analyze and optimize the profit model of Company A, ensuring its sustainable development, and providing practical reference value.

2. RELEVANT CONCEPTS

2.1. Value Chain

The value chain refers to a dynamic business system composed of a series of different but interconnected production and business activities that create value for the company. In other words, the value chain is a combination of activities through which a company realizes value. The value chain can be divided into internal and external value chains.

In the relationship of the value chain, the internal value chain consists of business activities spontaneously conducted by the company, representing the intrinsic value within financial activities. The external value chain includes both horizontal and vertical value chains, collectively forming the value chain system.
2.2. Profit Model

The profit model primarily refers to the effective adjustment of a company's income and expense structure based on its stakeholders, determining the company's profit objectives. By establishing a profit model, a company can manage and control various aspects of its business process and predict the value of its business outcomes. By controlling production and business processes, companies can identify operational issues, recognize opportunities for profit enhancement, and clarify profit sources, thereby improving profitability.

3. CURRENT PROFIT MODEL OF COMPANY A

3.1. Business Structure

Company A primarily operates in the medical device industry, generating a revenue of 1.936 billion yuan in 2022, accounting for 99.87% of the company's total revenue. Other industries have negligible impact on the company’s total assets. In terms of product structure, Company A has four business operations. The main sources of income are liquid injectable products and gel injectable products, together accounting for 99.59%. Although Company A holds a significant market share in the medical beauty industry, its business scope is relatively narrow, with a single source of income, which may impact its profitability.

<table>
<thead>
<tr>
<th>Business Name</th>
<th>Revenue (Yuan)</th>
<th>Income Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>By Industry</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medical Device Industry</td>
<td>1.936 billion</td>
<td>99.87%</td>
</tr>
<tr>
<td>Other Industries</td>
<td>2.5726 million</td>
<td>0.13%</td>
</tr>
<tr>
<td>By Product</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liquid Injectable Products</td>
<td>1.293 billion</td>
<td>66.68%</td>
</tr>
<tr>
<td>Gel Injectable Products</td>
<td>638 million</td>
<td>32.91%</td>
</tr>
<tr>
<td>Facial Implant Lines</td>
<td>5.3784 million</td>
<td>0.28%</td>
</tr>
<tr>
<td>Cosmetics</td>
<td>2.5726 million</td>
<td>0.13%</td>
</tr>
</tbody>
</table>

4. COMPONENTS OF THE PROFIT MODEL

4.1. Profit Points

Profit points refer to services or products provided by the company to meet consumer needs with the intent to generate profits. Company A's profit points mainly include medical beauty services and a few medical beauty products. As shown in Table 2, Company A's operating profit has been increasing annually from 2020 to 2022, with a growth of 195.82% in 2022 compared to 2020. This growth is primarily due to the strong development momentum of the medical beauty industry in recent years, with consumers eagerly pursuing cosmetic procedures. The compound annual growth rate of the Chinese medical beauty market is 17.5%, with increasing demand for medical beauty.

Company A holds leading sodium hyaluronate filling technology and polylactic acid filling technology. Polylactic acid fillers are the largest profit source, with Company A acting as both a supplier of fillers and a medical beauty operator, having two profit points. In the past three years, sales of liquid injectable products have continuously increased. Due to the high gross profit of these products, the company's operating profit has also shown a significant upward trend. However, facial implant lines, a small profit point, exhibited a reverse trend in 2022, mainly due to increased competition, reducing the company's profits from this technology. Nonetheless, the operating profit
of gel injectable products increased significantly, mainly because of the rising demand for sodium hyaluronate filling, which is less technically challenging and poses lower treatment risks, making it an important profit point for the company.

Table 2. Company Operating Profit Details

<table>
<thead>
<tr>
<th>Operating Profit Details</th>
<th>2022</th>
<th>2021</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Profit (Billion Yuan)</td>
<td>1.488</td>
<td>1.127</td>
<td>0.503</td>
</tr>
<tr>
<td>Cosmetics (Million Yuan)</td>
<td>7.225</td>
<td>6.628</td>
<td>4.3559</td>
</tr>
<tr>
<td>Liquid Injectable Products (Million Yuan)</td>
<td>1218.442</td>
<td>981.373</td>
<td>414.9907</td>
</tr>
<tr>
<td>Gel Injectable Products (Million Yuan)</td>
<td>615.8184</td>
<td>364.0126</td>
<td>232.5184</td>
</tr>
<tr>
<td>Facial Implant Lines (Million Yuan)</td>
<td>4.057</td>
<td>4.1139</td>
<td>1.347</td>
</tr>
</tbody>
</table>

4.2. Profit Sources

Profit sources are the origins of the company's profits, referring to the customers for the products and services provided by the company. The primary profit source of Company A is non-surgical medical beauty. Statistics show that Company A holds a 21.3% market share in the domestic skin filler market based on sodium hyaluronate, ranking first among domestic manufacturers. Company A has an evident first-mover advantage and leading position in the medical beauty industry. The main customer base comes from the eastern region of China, with a revenue of 877 million yuan in 2022, primarily generated by customers in Shanghai, Jiangsu, and Zhejiang. This region comprises first-tier cities with relatively high per capita consumption levels and advanced technology, making it the primary customer base for Company A.

4.3. Profit Objects

Profit objects determine the purchasers and users of the company's goods or services, focusing on which customers the value is provided to. The main profit objects of the company are Shanghai Kangru Medical Device Co., Ltd., Beijing Boya Liren Trading Co., Ltd., and Beijing Yemeiren Medical Beauty Clinic Co., Ltd. As a supplier, Company A provides the most products to Shanghai Kangru Medical Device Co., Ltd., accounting for 5.85% of annual sales, making it the most important profit object for the company.

4.4. Profit Leverage

Profit leverage aims to obtain value through a series of value-added activities, bridging value realization for both customers and the company. The primary profit leverage adopted by the company is increasing R&D investment. The company already possesses advanced facial injection technology and leading medical beauty products and continues to increase R&D expenditure, emphasizing product innovation. Last year, the company established a new R&D center in Changping, covering an area of 6,000 square meters, with an innovation research platform for medical devices and biotechnologies. The research areas include medical devices, biopharmaceuticals, and cosmetics. The continuous increase in R&D investment deepens the cooperation between the company and its major customers.

Table 3. Company R&D Investment Details

<table>
<thead>
<tr>
<th>R&amp;D Investment Details</th>
<th>2022</th>
<th>2021</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>R&amp;D Expenses (Billion Yuan)</td>
<td>1.73</td>
<td>1.02</td>
<td>0.61804</td>
</tr>
<tr>
<td>R&amp;D Investment as a Proportion of Revenue</td>
<td>8.93%</td>
<td>7.07%</td>
<td>8.71%</td>
</tr>
<tr>
<td>Proportion of R&amp;D Personnel</td>
<td>25.39%</td>
<td>23.08%</td>
<td>2.31%</td>
</tr>
</tbody>
</table>
4.5. Profit Barriers

Profit barriers are measures taken to prevent competitors from seizing the company's profits. The company's profit barriers include its core medical beauty technologies and products. Currently, the company holds 49 patented technologies and 25 patented products, forming long-term technical barriers against competitors with core technologies like gradient interpenetrating crosslinking technology, tissue fluid bionic technology, hydrophilic microbead suspension preparation technology, and amphiphilic microbead suspension dispersion technology.

Additionally, the company highly values the safety, reliability, and stability of its products. The company's production base in Pinggu is equipped with advanced production machinery and facilities, with increasing levels of automation. All products are certified by quality management systems, including ISO19001 and ISO13485 medical device quality management system certifications. The Pinggu production base, with robust and scalable production capacity and strict, standardized quality systems, serves as a significant profit barrier against competitors.

5. VALUE CHAIN CONSTRUCTION OF COMPANY A'S PROFIT MODEL

5.1. Internal Value Chain

The internal value chain encompasses the entire process of a company utilizing all internal resources for value-added profit, including production, operation, logistics, procurement, sales, after-sales, R&D technology, human resources, and fixed assets. Each part is indispensable for the company to achieve value addition. The direct value activities of Company A include raw material procurement, production operation, product sales, and marketing. For procurement, the company has a procurement center and a materials procurement department, with the procurement center supervising the procurement process and the materials procurement department executing it. The company adopts a combined sales model of direct sales and distribution, as shown in Table 4, with marketing activities mainly through direct sales and supplemented by distribution. Additionally, the company keeps pace with the times by increasing online e-commerce platform live broadcasts, adopting a multi-channel marketing strategy. The company collaborates with third-party logistics for product transportation, ensuring logistics timeliness.

Table 4. Company Marketing Model

<table>
<thead>
<tr>
<th>Marketing Model</th>
<th>Amount (yuan)</th>
<th>Proportion of Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Sales</td>
<td>1,248,524,228.32</td>
<td>64.40%</td>
</tr>
<tr>
<td>Distribution</td>
<td>690,314,135.38</td>
<td>35.60%</td>
</tr>
</tbody>
</table>

The auxiliary value activities of Company A include basic functional management, human resources management, research and development, and procurement. Basic functional management activities encompass overall operational management, financial management, and legal management. Research and development reflect the company’s core capabilities, with applications of sodium hyaluronate in medicine, skincare, and food. The company has an internationally experienced, dedicated, and visionary management team that formulates forward-looking technology and product development strategies, laying a foundation for the company's first-mover advantage and future sustainable development.

5.2. External Value Chain

Company A’s upstream is the supplier value chain, and the downstream is the customer value chain. The company has successfully industrialized a series of skin fillers based on sodium hyaluronate, skin fillers based on polylactic acid, and facial implant lines based on polydioxanone. Positioned
midstream in the medical beauty value chain, the upstream consists of suppliers producing raw materials for medical beauty products, and the downstream includes medical beauty institutions, such as public hospital plastic surgery and dermatology departments, and non-public medical beauty institutions.

The company is committed to integrating information technology throughout the procurement, production, and usage of raw materials, enhancing transparency and traceability from upstream raw materials, midstream manufacturing, to downstream customer delivery. In line with quality management system requirements, the company has further standardized supplier management and improved supplier service quality.

6. PROBLEMS IN THE PROFIT MODEL FROM THE PERSPECTIVE OF THE VALUE CHAIN

6.1. Internal Value Chain Perspective

After years of development, Company A has established a solid position and significant market share in the medical beauty industry, with sodium hyaluronate fillers accounting for 39.2% of the market share, demonstrating strong market competitiveness and brand recognition. However, an analysis of profit points reveals that the company's existing product structure is relatively single, with operating income overly dependent on a single type of product, most of which are priced at mid-level within the industry, resulting in suboptimal profitability. The single income structure and unreasonable product structure are detrimental to the company's long-term operations and sustainable development. The beauty market is already saturated, and beauty products cannot yet become the company's profit growth point, with the current income structure remaining overly concentrated.

6.2. External Value Chain Perspective

An analysis of the external value chain shows that Company A operates in a wide range of areas, but the revenue achieved in different regions varies significantly, resulting in an uneven distribution of income. As illustrated, most of the company's income is derived from the eastern region, primarily distributed in Shanghai and Jiangsu-Zhejiang areas. The eastern region's revenue is 877 million yuan, accounting for 45.25% of the total revenue, while the combined revenue of the other six regions is 55%. This indicates that the eastern region is the main profit source for Company A, with nationwide markets (excluding the eastern region) having relatively low income distribution, posing serious market development problems and significant financial risk.

![Figure 1. Proportion of Company A’s Revenue by Region in 2022](image-url)
7. OPTIMIZATION STRATEGIES FOR THE PROFIT MODEL FROM THE PERSPECTIVE OF THE VALUE CHAIN

7.1. Diversify Internal Product Structure

The company needs to diversify its product structure and improve its single product strategy. Currently, Company A’s main business is in the medical beauty industry. The company could consider expanding into other related industries, such as increasing investment in the R&D and sales of cosmetics and entering the healthcare products market. This would increase revenue from other industries and enhance the company's core value. Additionally, the company needs to increase R&D investment in existing products to enhance product efficacy, expand the product structure coverage, and broaden the consumer base, thereby achieving absolute competitive advantage. Moreover, while improving the industry chain, the company should further increase the income from cosmetic products. Transforming the main business income from a "single-horse leading" to "three-horse-drawn" model can effectively mitigate the financial risks caused by product crises.

7.2. Improve External Market Development

The company faces serious market development problems, with low-income proportion from regions other than the East China area, indicating low market share outside the East China region and a tendency to confine its operations to a single region. Given the increasingly fierce competition in the medical beauty industry, complacency is inadvisable. The company should actively pursue expansion strategies while consolidating its market share in East China, extending from East China to West China, then nationwide, and eventually globally. For the East China area, the company can open direct flagship stores in major cities, leveraging service quality to attract consumers and capture market share. In other regions of the country, more developed cities should focus on service and product quality, while less developed regions should emphasize cost-effectiveness. For sales channels, besides the existing channels, adopting a widespread model with high sales commissions to attract individual business owners can increase the proportion of distribution channels and optimize the profit model.

8. CONCLUSION

In recent years, with changes in the market economic environment, competition within the cosmetics industry has intensified. To maintain a foothold in the fierce market competition, cosmetics companies need to enhance their profitability. This paper takes Company A as the research object, systematically analyzing the value chain construction and the five basic elements of its profit model, combined with the industry characteristics and the profit model’s features to comprehensively evaluate its value creation capability. Currently, Company A's operating income is concentrated in the East China region, while nationwide market income is significantly lower under the same conditions, resulting in an uneven distribution of profit sources. The company’s profit points are mainly liquid and gel injectables, with other business incomes being relatively low, single profit points, and an unreasonable income structure. This paper proposes optimization strategies for the company’s profit model from both internal and external value chain perspectives to enhance its value creation capability.

REFERENCES


