Research on the Cost Control Problem of Biological Companies—Taking Tianjin Meili as an Example

Teng Fei¹, Yufei Lu¹, Yongfang Ma²

¹School of Economics and Management, Harbin Cambridge University, Harbin, Heilongjiang, 150030, China
²Public Administration and Law School, Northeastern Agricultural University, Harbin, Heilongjiang, 150030, China

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Abstract: With the rapid development of social economy and the continuous progress of science and technology, small and medium-sized enterprises are playing an increasingly important role in China's national economy. Manufacturing industry as an important element in China's economic development, its development is widely concerned by the community. The original cost control concept has been unable to adapt to the development of modern manufacturing enterprises. To break the original, single, fragmented cost control system, effectively obtain cost information, promote the development of enterprises, it is necessary to improve enterprise management methods and control system. Therefore, optimizing the internal management of enterprises, strengthening cost control and constructing a scientific and systematic cost control system have become the key points for the survival and development of manufacturing enterprises. Based on the above background, it is of great significance to study how manufacturing enterprises explore the cost control system suitable for their own development under the fierce market competition and limited resources.

1. Introduction

1.1. Research Background

With the gradual saturation of the market size and the impact of the global public health emergency, the development of manufacturing enterprises has also been affected, and how to give full play to the competitive advantages of manufacturing enterprises and maintain the development momentum is particularly important. If we do not pay attention to how enterprises achieve long-term cost control and other issues, so that the cost control of some enterprises falls into a strange circle of cost reduction simply for the sake of cost reduction, so that cost control means will appear short-term behavior and care for one or the other, can not achieve medium and long-term contribution to profits, it is difficult to achieve value creation for enterprises.

Taking Tianjin Beauty Covenant Biological Company as the research object, this paper sorts out the problems existing in the value chain links such as capital, procurement, production and sales of
Tianjin Beauty Covenant Biological Company one by one from the perspective of comprehensive cost management, deeply analyzes the reasons for the existence of the problems, and puts forward the optimal management plan of cost control of each link with the goal of systematically and fundamentally solving problems while building long-term competitive advantages of enterprises. This study hopes to bring inspiration and reference to other manufacturing enterprises in terms of reducing costs and improving capital status of Tianjin Meizhiyo Biotechnology.

1.2. Research Purpose and Significance

1.2.1. Research Purpose

Enterprise cost control is a series of prevention and adjustment measures taken by the cost control entity within its scope of authority to ensure the realization of cost management objectives according to the cost management objectives established in advance by the enterprise in a certain period of time, before the production consumption occurs and in the process of cost control, so as to ensure the realization of cost management objectives. How to effectively reduce the cost of various operation and management links of enterprises and comprehensively control costs under the premise of enhancing the comprehensive competitiveness of enterprises is the new direction of enterprise operation and management.

Cost and benefit are not simple opposites, the correct cost-benefit concept should be to pursue the maximization of cost-benefit ratio, and combine current benefits with long-term benefits to maximize long-term benefits. Tianjin Meizhiyo Biotechnology has serious problems in cost control, which restrict, hinder or even affect the company's operating efficiency and comprehensive competitiveness. Based on this, from the perspective of comprehensive cost management, the problems existing in the company's capital, procurement, production, sales and other value chain links are sorted out one by one, the reasons for the problems are deeply analyzed, and the optimal management plan of cost control of each link is proposed with the goal of systematically and fundamentally solving problems while building long-term competitive advantages of enterprises.

1.2.2. Research Significance

(1) It will help to improve the shortcomings of Tianjin Beauty Covenant Biotechnology in cost control.

Combined with the relevant theories of comprehensive cost control, this paper analyzes the cost control status of Tianjin Meizhiyo Biologics and puts forward the problems in cost control. Putting forward improvement measures and suggestions based on the problems existing in the enterprise will help Tianjin Meizhiyo Biotechnology Company to give full play to its own advantages and increase the competitiveness of the industry. At the same time, it is also conducive to Tianjin Meizhiyo Biological Company to enhance the quality of cost control and ensure business efficiency.

(2) Contribute to standardizing the implementation standards and internal systems of Tianjin Beauty Covenant Biotechnology.

The use of comprehensive cost control system is helpful to standardize the implementation standards and internal system of Tianjin Meizhiyo Biotechnology, and ensure that the company's cost control can play a greater role in daily production and operation.

(3) Provide reference experience for other enterprises of the same type to solve similar problems of cost control.

The cost control system of Tianjin Meizhiyo Biotechnology can provide reference experience for other enterprises of the same type to solve similar problems of cost control, and provide an entry point for them to improve the disadvantages of enterprise cost control system construction and
improve the standardization of cost control.

1.3. Research Status at Home and Abroad

1.3.1. Foreign Research Status

Foreign scholars have realized the importance of cost advantage to enterprise competition earlier, and most of the researches on cost control focus on the effectiveness of cost control and how to improve the efficiency of cost control through scientific management.

Soitani (2018) used different management accounting tools as variables to study the impact of various variables on corporate performance and found that comprehensive budget, product pricing strategy and investment decision are most closely related to performance\(^1\).

Anthonia and Chiaka (2018) study the inventory control and pricing ability of smes and believe that smes generally lack cost control skills and need to be improved\(^2\).

Abhishek Raj (2020) believes that total cost management is a systematic and structured approach to understand the costs of an organization. Its purpose is to provide a comprehensive framework to control, reduce and eliminate costs. It is a philosophy, attitude and technology to create more value at a lower cost. Comprehensive cost management is an opportunity for enterprises to stand out in competition\(^3\).

Joao AC Santos (2020) pointed out that banks can significantly reduce the cost of funds by controlling borrowing costs\(^4\).

Sanggyun Na (2020) believes that company policies will affect the workplace environment, and then affect the cost control effect\(^5\).

In summary, the research of cost control theory has always been centered on the actual problems existing in the operation of enterprises, and has continued to develop with the changes in technology and economic environment, which is a powerful helper for enterprises to solve business problems and improve economic efficiency.

1.3.2. Domestic Research Status

Most of the relevant scholars in China focus on theoretical analysis of the direction of enterprise cost control, and the current theoretical research on cost control of enterprises in China is through learning and borrowing from foreign advanced theories, through import, digestion and relocalization, forming a cost control theory research system with localized characteristics.

Luo Yujin (2020), starting from inside the enterprise, considered the establishment of a cost operation mechanism that could follow the value chain management, and built the idea based on the value chain\(^6\).

Wu Chao, Zhang Xinyue (2020) With different industrial characteristics, the influencing factors and specific effects of industrial structure optimization are different\(^7\).

Wu Beibei (2021) conducted a study on Chinese manufacturing enterprises and found that most of them do not pay enough attention to cost control and lack a feasible cost control system\(^8\).

Fu Suhua (2021) To improve the operating efficiency of enterprises, it is necessary to reduce the consumption of ineffective costs, increase capital liquidity and reduce unnecessary resource occupation\(^9\).

Zhang Hui (2022) High-quality budget management is the key to achieve cost management optimization\(^10\).

Chen Xiujuan (2022) studied manufacturing enterprises. In order to effectively control costs, manufacturing enterprises should first strengthen cost control in each process and link of operation management and implement comprehensive cost control\(^11\).
Zhang Liang (2022) believes that total cost management plays a leading, controlling and correcting role in the process of an enterprise completing its strategic goals. "People-oriented" in comprehensive cost management has become the basic management concept of most enterprises at present. It is necessary to improve the management skills of the personnel department, strengthen internal assessment and evaluation by means of labor competition, technical competition, publicity and promotion, select reasonable and pure assessment indicators, improve the enthusiasm of staff, and promote the substantial reduction of internal costs.[12]

Yang Shiboshi (2022) believes that controlling production costs through cost accounting is an important part of enterprise internal control.[13]

Dong Wenna (2022) Enterprises should change the previous cost control methods, actively develop new cost control ideas, realize more effective management, improve the advantages of enterprises in market competition, and enhance the stability of enterprise development.[14]

Yang Yuwei (2022) Lean management is the main way for manufacturing companies to improve production system and reduce manufacturing costs, as well as the key thrust for manufacturing companies to enhance market competitiveness.[15]

Ying Wang (2022) There are mainly two ways to maintain an enterprise's cost advantage. One is to develop the enterprise's lasting cost advantage, expand on the stable cost advantage, and increase the advantage of cost control. The second is the competition barrier of current solid enterprises to prevent being suppressed by competitors. When necessary, it can also seek policy support or franchise to enhance the cost potential.[16]

Leiming (2022) enterprise products are gradually losing price competitive advantage, research and development, production and other fields will be gradually market-oriented. Only when the quality, cycle and other factors are satisfied, can the future be won by adhering to cost control and establishing cost advantages.[17]

To sum up, Chinese enterprises and academic circles all believe that in the current complex and changeable economic environment and enterprise operation status, the cost management level of manufacturing enterprises is particularly important for the formation of comprehensive competitiveness of enterprises and to stand out in the competition. Comprehensive cost management expands the perspective of traditional cost management, injects new vitality into traditional cost management, is more suitable for the current environment, is an effective method of cost management in modern enterprises.

1.4. Research Methods

(1) Literature research method. In the process of writing, the author makes full use of the school's literature books and electronic literature materials on professional academic websites at home and abroad, sorts out and summarizes the research content and research ideas of relevant literature at home and abroad, thus basically forming his own research ideas, and constantly reading the literature to enrich and adjust.

(2) Case study method. This paper selects Tianjin Meizhiyo Biotechnology Company among manufacturing enterprises as the case study object, analyzes the cost control of Tianjin Meizhiyo Biotechnology, and analyses its existing problems.

1.5. This Paper Intends to Solve the Problem

Based on the research on Tianjin Beauty Covenant Biotechnology, this paper analyzes the problems existing in the cost control of each link by studying the cost control status of Tianjin Beauty Covenant Biological Company, and puts forward problems such as higher capital cost than expected, lack of long-term procurement cost mechanism, unreasonable production workshop
control system, and lack of linkage in sales links.

2. Theories Related to Cost Control

2.1. Definition of Cost Control

Cost control refers to a series of management activities and processes that take cost as a means of control, and achieve the purpose of effective control of economic activities by formulating the overall cost level index value, the cost reduction rate of comparable products and the responsibility of the cost center to control the cost.

Cost control refers to the control of the whole process of cost formation in the process of production and operation, including each cost item of the supply process, production process and sales process.

2.2. Basic Principles of Cost Control

(1) Integration principle: cost management should be based on the enterprise business model, and cost management should be embedded in all fields, levels and links of the business, so as to achieve cost management responsibility to people, control in place, strict assessment and target implementation.

(2) Adaptability principle: cost management should be compatible with the characteristics and goals of enterprise production and operation, especially with enterprise development strategy or competitive strategy.

(3) Cost-effectiveness principle: When applying relevant tools and methods for cost management, it should weigh the benefits and costs it brings to the enterprise, and avoid that the benefits obtained are less than the cost of its input.

(4) Materiality principle: Cost management should focus on projects that have a significant impact on costs, and projects that are not important can be appropriately simplified.

2.3. Main Methods of Cost Control

(1) Target cost method: This method first determines how much the customer can pay for the service/product, and then designs the corresponding product/service and operational process to achieve the expected profit.

(2) Standard cost method: refers to a product cost calculation method based on pre-formulated standard cost, comparing standard cost with actual cost, accounting and analyzing cost differences, and also a cost control system to strengthen cost control and evaluate economic performance.

(3) Activity costing method: refers to the cost management method of tracing or assigning resource costs to various operations according to resource drivers, calculating activity costs, and then tracing or assigning activity costs to various cost objects according to the activity drivers, and finally completing cost calculation.

3. Analysis of Cost Control Problems of Tianjin Meilizhiyo Biological Company

3.1. Organization Structure of Tianjin Meilizhiyo Biological Company

Tianjin Meizhiyo Biological Co., Ltd. was established on May 05, 2015, registered at No. 19, Yunjing Road, Shangmatai Town, Wuqing District, Tianjin, and the legal representative is Yang Shuwang. The business scope includes general projects: technical services, technology development,
technical consultation, technology exchange, technology transfer, technology promotion and other services, the company has 15 cosmetics patents, more than 98% of peers. Tianjin Meizhiyo Biotechnology has more than 50 employees, 56% of which are front-line employees, and the organizational structure is shown in Figure 1.

Figure 1: Organization structure of Tianjin Meizhiyo Biological Company

3.2. Value Chain Structure of Tianjin Meizhiyo Biological Company

The production of Tianjin Meizhiyo Biotechnology needs to go through four main stages: R&D, procurement, production and sales, which are combined to form a complete internal value chain system. The internal value chain of an enterprise is shown in Figure 2.

Figure 2: Production flow chart of Tianjin Meizhiyo Biological Company

3.3. Cost Control Status of Tianjin Beauty Covenant Biotechnology

3.3.1. Current Situation of Capital Cost Control of Tianjin Meizhiyo Biological Company

At present, the fund sources of the company are shareholder investment, shareholder loan, bank loan and sales income. The asset-liability ratio is 63%, and the short-term shareholder loan interest rate is 4.5%. Part of the company's sales revenue is settled in US dollars. The dollar savings at the end of the period is not subject to exchange rate management, and can only be converted into US dollars when RMB is insufficient. Through the analysis of the composition of financial expenses in the past five years, as shown in Table 1, the proportion of financial expenses in the total cost of the company is as high as 2.35%, that is to say, 2.35% of the total cost is unrelated to production, sales and other interest and exchange gains and losses.

The company is now using all short-term borrowing to meet the funding gap. In the daily capital management requirements are more relaxed, are based on the accuracy of accounting, financial statements as financial personnel assessment indicators, lack of strict asset management objectives. Tianjin Meizhiyo Biological company financial person is not a senior financial personnel, seniority is not yet, according to the actual situation of Tianjin Meizhiyo biological company to develop a
more detailed fund management system.

### Table 1: Composition of financial expenses

<table>
<thead>
<tr>
<th>Year Expense items</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest</td>
<td>96%</td>
<td>130.8%</td>
<td>118.5%</td>
<td>85.8%</td>
<td>260%</td>
</tr>
<tr>
<td>Handling fee</td>
<td>0.8%</td>
<td>0.6%</td>
<td>1.3%</td>
<td>0.8%</td>
<td>2.7%</td>
</tr>
<tr>
<td>Exchange</td>
<td>3.2%</td>
<td>-31.4%</td>
<td>-19.8%</td>
<td>13.4%</td>
<td>-126.7%</td>
</tr>
</tbody>
</table>

#### 3.3.2. Current Situation of Purchasing Cost Control of Tianjin Meilizhiyo Biological Company

As a cosmetic manufacturer, Tianjin Meilizhiyo Biological Co., LTD has high requirements on storage temperature and aseptic environment, as well as certain timeliness, due to the particularity of cosmetic materials. Therefore, the cost of transportation and storage has a greater impact on the overall procurement cost. In addition, the quality of raw materials from different suppliers varies greatly, so enterprises will give priority to companies with long-term cooperation as suppliers, so the cost of materials shortage will increase accordingly. The purchasing cost composition of the company from 2018 to 2022 is shown in Table 2. According to the data analysis, the total purchasing cost of Tianjin Meilizhiyo Biological Company has a small fluctuation range, and the cost of goods and materials shortage accounts for a large proportion, and the proportion of goods and materials shortage cost in the purchasing cost in 2022 is higher than that of other enterprises in the same industry. The reason is that the delayed delivery of goods by suppliers sometimes causes the enterprise to fail to meet the needs of customers in time according to the contract, resulting in additional costs. In addition to the reasons of suppliers, the warehousing cost accounts for a large proportion of enterprises, therefore, in the cost control of the procurement link, it is necessary to effectively control the cost of these links.

### Table 2: Components of procurement costs

<table>
<thead>
<tr>
<th>Year Cost items</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freight cost</td>
<td>1991.78</td>
<td>2486.945</td>
<td>2931.77</td>
<td>2382.15</td>
<td>1444.995</td>
</tr>
<tr>
<td>Cost of missing materials</td>
<td>1018.9</td>
<td>1219.71</td>
<td>1789.16</td>
<td>1271.05</td>
<td>879.495</td>
</tr>
<tr>
<td>Warehousing costs</td>
<td>448.27</td>
<td>641.515</td>
<td>1158.4</td>
<td>949.85</td>
<td>547.175</td>
</tr>
<tr>
<td>Other expenses</td>
<td>115.66</td>
<td>92.345</td>
<td>181.35</td>
<td>102.4</td>
<td>48.41</td>
</tr>
<tr>
<td>Total</td>
<td>3574.61</td>
<td>4440.515</td>
<td>6060.68</td>
<td>4705.45</td>
<td>2920.075</td>
</tr>
</tbody>
</table>

From the perspective of comprehensive cost management, although the company's current procurement measures can meet the current business needs, but because of a single supplier, it is in a passive position in procurement activities, which is not conducive to long-term procurement cost control; The lack of inventory management index is not in line with the basic requirements of cost control, is the direct fuse of cost out of control.

#### 3.4. Problems in Cost Control of Tianjin Meilizhiyo Biological Company

##### 3.4.1. Problems in Capital Cost Control

(1) The cost of capital is higher than expected
It is mainly reflected in two aspects: first, the interest actually paid and the interest loss incurred by the increased proportion of readily available funds in response to frequent repayment; The second is the potential cost caused by risk, and the company has fewer sources of funds.
(2) Financial personnel lack cost control awareness and ability
The company's financial personnel only focus on the financial records and accounting work they are responsible for, and their cognition of the work is limited to complying with accounting standards, having a clear and overall understanding, and lacking the awareness and ability of cost control.

4. Tianjin Meizhiyo Biotechnology Company's cost control optimization plan

4.1. Capital Cost Control Optimization Scheme

1) Optimize the financing structure
2) Improve fund evaluation indicators
3) Improve the professional ability of financial personnel

4.2. Procurement Cost Control Optimization Scheme

1) Establish an internal training mechanism for procurement personnel
2) Improve the inventory management system
3) Establish a supplier evaluation system

4.3. Production Cost Control Optimization Scheme

1) Improve assessment indicators
2) Improve the salary structure of production employees

5. Conclusion

This paper starts from the current situation of cost control in the capital, procurement, production and sales links of Tianjin Beauty Covenant Biologics, deeply analyzes the problems in cost control in each link, and puts forward an optimization plan from the perspective of comprehensive cost management, but due to the limitations of writing time and my research ability, although the problems of cost control of Tianjin Beauty Covenant Biological Company are analyzed and the optimization plan is proposed, it is still insufficient, mainly including the following two points:

First, the understanding of cost control from the perspective of comprehensive cost management in this paper is based on the current situation of Tianjin Meiyo Biotechnology, which is only limited to the cosmetics manufacturing industry, which will be different from the cost control from the perspective of comprehensive cost management in the traditional sense, resulting in defects in the research of this paper. Second, this paper only puts forward an optimization plan for the current situation of Tianjin Meizhiyo Biotechnology, and the requirements of "all-staff, comprehensive, and whole-process" of comprehensive cost management are still far away, and many contents such as target cost management and decision support system need to be continuously improved and refined in future work.

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