

# ***Research on Working Capital Management of Nhwa Pharmaceutical Co., Ltd. Based on Value Chain***

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**Abstract:** Working capital management is an important part of financial management, which can affect the survival and development of enterprises. Traditional working capital management is difficult to adapt to the development environment with fierce competition. In this article, the value chain theory is applied to working capital management to strengthen management from a strategic perspective. First of all, this article introduces the basic situation of Nhwa Pharmaceutical Co., Ltd. Then, it analyzes the present situation of the working capital management, and points out the possible problems in its internal and external value chains. Finally, some possible countermeasures are put forward to improve the working capital management.

## **1. Introduction**

The pharmaceutical industry is an important part of the national economy. In recent years, the concentration of domestic pharmaceutical industry has increased, and pharmaceutical enterprises need to continuously improve their operational efficiency and ability to resist risks in order to survive in the fierce competition environment. Traditional working capital management indicators are lagging and out of touch with business processes, which only reflect the operational efficiency of working capital of a single enterprise and neglect the circulation of working capital in external activities. Pharmaceutical enterprises need to change the traditional working capital management mode to meet the development needs.

## **2. Basic Information of Nhwa Pharmaceutical Co., Ltd**

### **2.1 The Company Profile**

Jiangsu Nhwa Pharmaceutical Co., Ltd. (Hereinafter referred to as “Nhwa Pharmaceutical”) was founded in 1978 and listed on Shenzhen Stock Exchange in 2008, is a pharmaceutical enterprise integrating science, industry and trade. It is the first batch of innovative enterprises in Jiangsu Province, with well-known trademarks in China. The company is mainly engaged in the development, production and sales of central nervous system drugs, mainly including anesthesia, psychiatry and neurology. Through years of unremitting efforts in product development, production

and service, it has established a series of products and marketing network of central nervous system drugs, striving to become an important manufacturer and seller of central nervous system drugs.

## 2.2 Analysis of Working Capital

This part analyzes Nhwa Pharmaceutical from two aspects of scale and specific working capital projects, which provides a basis for the following analysis based on value chain.

### 2.2.1 Analysis of Working Capital Scale

*Table 1 Statement of Current Assets and Current Liabilities of Nhwa Pharmaceutical*

Project/Year	2016	2017	2018	2019	2020
Current assets	201739.65	225793.01	291148.87	300344.63	331958.04
Current liabilities	81589.7	74207.91	98362.14	51591.51	57494.55
Total assets	297488.99	330156.95	403016.53	420150.19	474844.03
Net working capital	120150	151585.1	192786.7	248753.1	274463.5

Note: The units in the table are all ten thousand yuan.

According to the table, the current assets have increased year by year in the last five years, steadily rising from 2,017,396,500 yuan to 3,319,580,400 yuan, with an increase rate of 64.55%. Current assets account for about 70% of total assets, showing a trend of rising first and then falling. Current assets are an important subject in the daily operation of Nhwa Pharmaceutical, and its turnover is in good condition. However, the current liabilities are generally declining, but in 2018 they reached the maximum value in recent five years. The proportion of current liabilities to total assets also shows a downward trend year by year, but the proportion is relatively low, which shows that the pressure of enterprise assets to repay short-term debts is not great. In addition, the scale of net working capital of Nhwa Pharmaceutical is also increasing year by year, which shows that the enterprise has obtained good income and sufficient working capital for turnover.

### 2.2.2 Analysis of Specific Projects of Working Capital

Companies should find a balance between specific projects of working capital. The following analyzes the turnover rate of inventory, accounts receivable and accounts payable.

*Table 2 Turnover Rate Of Working Capital Projects*

Project/Year	2016	2017	2018	2019	2020
Receivables turnover ratio	4.57%	4.97%	5.11%	5.88%	5.90%
Inventory turnover ratio	5.73%	5.36%	4.38%	4.10%	2.11%
Accounts payable turnover ratio	7.25%	7.41%	6.72%	8.14%	6.00%

It can be seen from the above table that the turnover rate of accounts receivable of Nhwa Pharmaceutical is relatively low, showing a slight upward trend. The long turnover period of accounts receivable shows that Nhwa Pharmaceutical has a slow recovery rate. It can be seen that the accounts receivable policy is not perfect and the implementation level needs to be improved. The turnover rate of inventory dropped from 5.73% to 2.11%, with a large drop. At the same time, the turnover days of inventory increased sharply, indicating that the liquidity of the inventory of Nhwa Pharmaceutical was weakened, which easily caused the backlog of inventory. The turnover rate of accounts payable fluctuated obviously in recent years, reaching the highest value in recent years in 2019, and then dropped sharply in 2020. This leads to a longer turnover period of accounts payable, which shows that the phenomenon that Nhwa Pharmaceutical occupies the funds of suppliers is intensified. If the enterprise fails to manage it in time, it may cause credit loss and be not conducive to stabilizing the relationship with suppliers.

### 3. Based on the Value Chain Analysis of the Working Capital Management of Nhwa Pharmaceutical

#### 3.1 Analysis of Working Capital Management Based on Internal Value Chain

This part combines the situation of Hengrui Medicine Co., Ltd. and the average situation of the industry with Nhwa Pharmaceutical, and analyzes it from the aspects of procurement, production and marketing respectively.

##### 3.1.1 Analysis of Working Capital Management in Procurement

Purchasing is the first step to start production and operation activities, which mainly involves enterprises to screen suppliers and establish cooperative relations, purchase raw materials and other supporting logistics services.

*Table 3 Turnover Period Of Working Capital in Procurement*

Project/Year	2016	2017	2018	2019	2020
Nhwa Pharmaceutical	-26.74	-26.22	-18.87	0.24	-5.20
Hengrui Medicine	-7.79	-8.00	-11.81	-2.82	-3.86
Industry average	7.25	3.07	1.50	0.70	0.53

It can be seen from the above table that except for 2019, the working capital turnover period of Nhwa Pharmaceutical in the procurement process is negative, which indicates that capital investment is the main factor in the procurement process, and the working capital operation may be achieved through external funds. Although the average working capital turnover period of the industry is decreasing, it is still significantly higher than that of Nhwa Pharmaceutical. All these indicate that the working capital management of Nhwa Pharmaceutical is generally good. However, in 2019, the turnover period of working capital increased sharply and turned negative to positive. By analyzing the financial statements, it was found that the accounts payable and notes payable in that year dropped sharply, which was conducive to stabilizing the cooperative relationship with suppliers. On the other hand, it also reflected that Nhwa Pharmaceutical failed to seize the opportunity and use working capital to improve the turnover efficiency of working capital.

##### 3.1.2 Analysis of Working Capital Management in Production

Production is the most important link to realize enterprise value. As a bridge between purchasing and marketing, production takes up more funds and is more complicated.

*Table 4 Turnover Period Of Working Capital in Production*

Project/Year	2016	2017	2018	2019	2020
Nhwa Pharmaceutical	-3.45	-0.61	-9.84	-10.67	-12.61
Hengrui Medicine	3.97	-5.79	8.04	5.00	-11.70
Industry average	-4.15	6.50	5.29	4.78	3.93

It can be seen from the table that the capital turnover period in the production of Nhwa Pharmaceutical has been negative all the time, with the exception of 2016, showing a continuous downward trend as a whole, which is significantly lower than the industry average. However, the working capital turnover period of Hengrui Medicine fluctuated greatly, even higher than the industry average in 2016, 2018 and 2019, which was not as stable as that of Nhwa Pharmaceutical. It can be seen that Nhwa Pharmaceutical has strengthened the fund management of production in recent years, and the turnover rate of funds is constantly improving. After studying the financial statements, it is found that the main reason for the improvement of working capital in the

production process of Nhwa Pharmaceutical is the gradual decrease of other receivables and the gradual increase of other payables, which occupy suppliers' funds and reduce financing costs.

### 3.1.3 Analysis of Working Capital Management in Marketing

Marketing is the terminal link to realize value. Enterprises withdraw funds and use them for a new round of production and operation to achieve sustainable development of enterprises.

*Table 5 Turnover Period Of Working Capital in Marketing*

Project/Year	2016	2017	2018	2019	2020
Nhwa Pharmaceutical	100.20	92.15	100.60	57.68	77.47
Hengrui Medicine	113.05	104.41	97.79	91.52	71.62
Industry average	66.16	78.91	80.84	80.96	78.89

It can be seen from the table that the working capital turnover period of Nhwa Pharmaceutical is all positive, indicating that it uses its own funds to realize value increment. The turnover period of Nhwa Pharmaceutical fluctuated greatly and showed a downward trend on the whole. Although the turnover period of Hengrui Medicine is occasionally higher than Nhwa Pharmaceutical, it is relatively stable and declining year by year. During 2016-2018, the turnover period of Nhwa Pharmaceutical and Hengrui Medicine was higher than the industry average. However, in 2020, the turnover period of the two companies is lower than the industry average, indicating that the working capital management in the marketing is getting better. As mentioned above, the inventory turnover days of Nhwa Pharmaceutical are increasing, and it occupies a large proportion of working capital. At the same time, the accounts receivable and bills receivable have not been greatly improved, which may be due to the increase of provision for bad debts, resulting in the decrease of book balance.

### 3.2 Analysis of Working Capital Management Based on External Value Chain

It is the beginning of business activities for enterprises to purchase raw materials from suppliers, so they should establish good cooperative relations with suppliers and do a good job in purchasing and payment management. Downstream customer management requires enterprises to establish good cooperative relations with downstream customers and distributors, do a good job in the management of goods delivery and payment recovery, and maintain good customer relations. This part compares the relevant data of Nhwa Pharmaceutical with Hengrui Medicine.

#### 3.2.1 Analysis of Upstream Supplier Management of Nhwa Pharmaceutical

*Table 6 Proportion of Top Five Suppliers*

Company /Year	2016	2017	2018	2019	2020
Nhwa Pharmaceutical	21.98%	14.89%	17.92%	14.13%	21.84%
Hengrui Medicine	28.15%	29.25%	31.63%	33.91%	26.21%

It can be seen from the above table that the proportion of the top five suppliers of Nhwa Pharmaceutical is smaller than that of Hengrui Medicine. On the one hand, it shows that Nhwa Pharmaceutical has established cooperative relations with many enterprises, not relying too much on a certain supplier, which reduces the procurement risk. On the other hand, it also shows that Nhwa Pharmaceutical's suppliers are relatively scattered, and it has not established stable cooperative relations with core suppliers. At the same time, as mentioned above, the amount and proportion of accounts payable of Nhwa Pharmaceutical are also relatively high. Therefore, in order to maintain the relationship with suppliers, enterprises should properly occupy the funds of suppliers and establish good commercial credit with them.

### 3.2.2 Analysis of Downstream Customer Management of Nhwa Pharmaceutical

Table 7 Proportion of Top Five Customers

Company /Year	2016	2017	2018	2019	2020
Nhwa Pharmaceutical	11.67%	9.77%	12.48%	8.87%	11.42%
Hengrui Medicine	12.90%	12.13%	11.26%	10.98%	11.70%

It can be seen from the table that the proportion of top five customers of Nhwa Pharmaceutical is almost smaller than that of Hengrui Medicine. On the one hand, this shows that Nhwa Pharmaceutical has not relied too much on a certain customer in sales, which reduces the sales risk of enterprises. On the other hand, it also shows that Nhwa Pharmaceutical has not established a stable and long-term cooperative relationship with its core customers. In addition, in order to promote sales, Nhwa Pharmaceutical relaxed its account receivable policy. This leads to a large proportion of accounts receivable, and the rate of payment is low, which easily leads to bad debts.

## 4. Problems in Working Capital Management of Nhwa Pharmaceutical

### 4.1 Accounts Payable Account for a Relatively Large Proportion

Among the current liabilities of Nhwa Pharmaceutical, the amount of accounts payable is relatively large, and the working capital in the procurement process is negative, which indicates that enterprises occupy more suppliers' funds in the procurement process. In a certain period of time, the company can solve the problem of capital turnover. However, the long-term occupation of suppliers' funds will inevitably affect the cooperation between the two parties.

### 4.2 The Ability to Collect Accounts Receivable is Not Strong

When Nhwa Pharmaceutical sells on credit, the credit evaluation of customers is not in place, and the ability to collect accounts is not strong, which increases the burden of working capital. Although the relaxation of the accounts receivable policy can improve the company's sales performance in the short term, if it cannot be recovered in time, it will increase the risk of bad debts.

### 4.3 Lack of Stable Supplier and Quality Core Customers

Nhwa Pharmaceutical has no fixed supply sources, and lack of long-term stable cooperation with upstream suppliers. This may increase the purchasing cost of enterprises. When an urgent order is encountered, it may not be easy to quickly find a supplier to cooperate. In addition, Nhwa Pharmaceutical may not have close cooperation with customers, and it is difficult to get timely feedback from market demand. This is not conducive to adjusting the product structure, producing marketable products, and easily increasing the turnover of working capital.

## 5. Countermeasures and Suggestions

### 5.1 Reasonable Use of Commercial Credit of Accounts Payable

Nhwa Pharmaceutical can arrange the specialist to analyze the aging of accounts payable once a month, collect the purchasing payment information obtained from various suppliers, and prepare the aging analysis table of accounts payable. In addition, Nhwa Pharmaceutical should establish a set of indicator evaluation system based on the supplier's credit status, and conduct a comprehensive evaluation, so as to determine the best time and credit limit for the company to repay the accounts payable.

## 5.2 Establish an Effective Customer Credit System

Nhwa Pharmaceutical should build a scientific and reasonable commercial credit operation mechanism, improve the customer credit evaluation standards, give credit ratings to customers at all levels, and adopt a differentiated marketing mechanism. For customers with good credit and efficient payment response, enterprises can offer certain discounts. For customers with poor credit, the specific repayment period should be specified, and certain punishment measures should be taken.

## 5.3 Establish Good Cooperative Relationship with Suppliers and Customers

Nhwa Pharmaceutical needs to evaluate suppliers reasonably, establish a long-term and stable cooperative relationship with them, and enjoy a small number of purchases in batches to avoid the risk of overstocking raw materials. It also can support suppliers with development potential and provide financial and technical assistance at an appropriate time. It is conducive to improving the quality of purchased materials, thereby improving the product quality of enterprises. In addition, Nhwa Pharmaceutical should establish close cooperative relationships with excellent credit customers, and use the information platform to understand their needs in time, continuously expand the market business, broaden the sales channels and enhance the market share of its products. These are conducive to consolidating its dominant position in the market competition.

## 6. Conclusion

Based on the value chain perspective, this article selects relevant financial data to evaluate the working capital management of Nhwa Pharmaceutical in the process of purchasing, production and marketing. On the whole, the working capital management of Nhwa Pharmaceutical is good, but there are also some problems that need to be paid attention to. It is necessary for Nhwa Pharmaceutical to continuously optimize the working capital management and control business based on the value chain to enhance the efficiency of enterprise capital operation.

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