

Optimal management of company procurement process from the perspective of supply chain

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Abstract. In order to solve the problem of the company's procurement process, the author proposes an optimization management from the perspective of supply chain. With the formation and development of the integration of the times, the company can be said to have both opportunities and challenges in the process of participating in market competition, if the company wants to continuously improve its competitiveness, it needs to strengthen the management of each link based on updating the management concept. In this process, the importance of procurement management has gradually become prominent, and based on the supply chain management model, the company needs to realize the optimization and transformation of the corresponding procurement process, reduce product costs with a systematic and complete procurement process, and improve its own economic benefits and competitiveness. The author conducts a comparative study on procurement methods and traditional procurement methods in the supply chain environment, the improved procurement process, and the effective path to enhance procurement capabilities lie in changing concepts, accelerate the development of informatization, improve the operating efficiency of workflow, the flow of funds, and better understand and meet customer needs.

Keywords: Supply Chain; Procurement Process; Process Improvement.

1. Introduction

In the context of China's entry into the WTO, the internationalization of the market has prompted Chinese companies to participate in the process of market competition, gradually aware of the importance of procurement management, in order to further strengthen their own competitiveness, the company needs to be based on the supply chain management concept and management model, realize the optimization and improvement of the company's procurement process, and then strengthen the communication between the company and its suppliers, so as to reduce product costs and gain competitive advantages. Based on the buyer's market conditions, the company needs to make a timely response to the changes in market demand, and then use this information to ensure the smooth development of the enterprise's production and operation, therefore, in the process of optimizing the company's procurement process, it is necessary to strengthen the company's ability to respond to the market.

2. Literature review

The goals of optimizing the company's procurement process are: First, shorten the procurement cycle. By optimizing the company's procurement process, the speed and effectiveness of each procurement process can be improved, and then based on reducing the procurement cycle, it can lay a foundation for meeting the company's actual production needs and avoiding inventory risks; Second, improve the quality of purchased raw materials. For the economic benefits and market competitiveness of the company's products, it is necessary to take good care of the production of raw materials and improve the quality of products; third, reduce the total cost of running the procurement process. In the face of the current fierce competition in the market, if the company wants to improve

its competitiveness, it needs to ensure the quality of its products, reduce production costs, and reducing the overall operating cost of the procurement process can provide a guarantee for the company to gain a competitive advantage [1].

3. Company procurement process optimization from the perspective of supply chain

3.1. The basic conditions that the company's procurement process should have under the optimization of supply chain management

First, the corresponding competent authorities are required to give full support. It is necessary to realize the construction of a corresponding organizational team according to the needs of optimizing the content of the procurement process, and strengthen the emphasis on this work, solve the problems encountered in a timely manner, and implement effective guidance.

Second, strengthen publicity and training [2-3]. In the operation of the entire procurement process, the company's procurement department is required to achieve effective communication and cooperation with suppliers, therefore, it is necessary to carry out strong and effective publicity and training work, implement the goal of optimizing the procurement process, lay the foundation for coordinating various work contents and improving overall work performance.

Third, realize the optimization and adjustment of the organizational structure. This work is mainly carried out by the procurement department, the corresponding procurement team needs to strengthen the teamwork ability, solve problems in time to optimize the procurement process, and realize the perfect design of the procurement process, at the same time, clarify the responsibilities and build an incentive mechanism to ensure the optimization and adjustment of the organizational structure; Fourth, build a corresponding management system [4].

For the optimization of the procurement process, a sound system has been formulated, to ensure the continuous optimization of the procurement process through the constraint mechanism, competition mechanism and incentive mechanism, etc., in order to meet the actual development needs of enterprises. Fifth, realize the construction of a professional procurement practice guidance framework, to ensure the smooth and efficient development of various procurement processes based on supply chain management, it will lay a foundation for reducing the cost of enterprises and improving the company's economic benefits and competitiveness. In the actual implementation process, the company needs to grasp the design points, as follows: Achieve the optimal combination of business, implement the people-oriented management concept, and implement various work processes, it is necessary to implement step by step, simplify procedures and clearly implement responsibilities, thereby laying the foundation for the improvement, optimization, and transformation of the company's procurement process [5-6].

3.2. Importance of procurement in the context of supply chain management

Efficient procurement is essential for a company to optimize operations, control costs, improve quality and sustain profitability. With the integration of the global market and the arrival of the information age, professional production can play a greater role, resulting in a substantial increase in the proportion of corporate procurement, and the role of procurement and its management has been elevated to a new level [7-8].

Any manufacturing company must obtain raw materials from the outside world to meet the needs of production in a timely manner [9]. From the perspective of the enterprise, procurement is the starting point of the product value-added process of the enterprise and the starting point of the company's core business process. Further understanding, procurement is not simply going to the market to buy the required raw materials, but extending an organization's manufacturing capabilities to external resources, namely suppliers [10]. Therefore, we can understand procurement as "the management of external manufacturing". From the perspective of supply chain, procurement is at the

connection interface between enterprises and suppliers, and it is between enterprises in the supply chain, build a bridge for the production cooperation and exchange of raw materials, semi-finished products and finished products, and communicate the connection between production demand and material supply [11]. It is a key link to realize the seamless connection of the supply chain system and improve the synchronous operation efficiency of the company in the supply chain [12]. As shown in Figure 1:

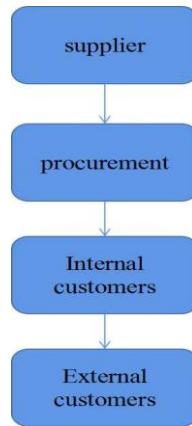


Fig 1. The position of procurement in the supply chain (self-painted).

3.3. Procurement and Procurement Management

Purchasing management is the company's production or sales plan in order to achieve, under the conditions of ensuring the appropriate quality, from the appropriate supplier, at the right time, at an appropriate price, all administrative activities undertaken to purchase goods or services in required quantities.

Purchasing is the starting point of all business activities of the company, this link plays a very important role in improving the efficiency of the company's overall business activities, in a certain sense, it is the source of cost, quality and efficiency of the company, and will also become the source of innovation for the company. In practice, on the one hand, purchasing managers must respond quickly to the needs of internal customers, on the other hand, it is necessary to maintain a mutually beneficial relationship with suppliers. In recent years, the dual role of procurement management has been gradually realized as an extremely complex task in the process of internal and external integration and upstream and downstream integration of the supply chain.

Procurement has gone from being an internal management function to becoming an important link in supply chain management. Operationally, internal, and external supply chain member's work together to achieve the company's strategic goals. The best option is based on lean supply, implement procurement as a value-added service in the supply chain. The process of purchasing management is shown in Figure 2.

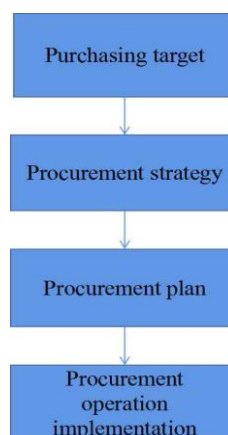


Fig 2. The process of purchasing management (self-painted).

3.4. Purchasing in Supply Chain Management

In order for buyers and suppliers to achieve continuous improvements in reliability, rapid response to the market, etc., a greater degree of integration and cooperation between suppliers, purchasing organizations, and other corporate functions is required. Currently, many procurement-oriented organizations are seen as achieving the best supply market management, they centralize the functions of procurement, it extends its scope to the acquisition of products, services, raw materials, bills, and logistics. At this time, procurement has also been promoted to the level of "strategic procurement" in supply chain management. Therefore, modern procurement should become a basic link of industrial system supply chain management [13-14]. The integration of internal and external transactions through a purchasing/supply organization is shown in Figure 3. The corresponding functions are:

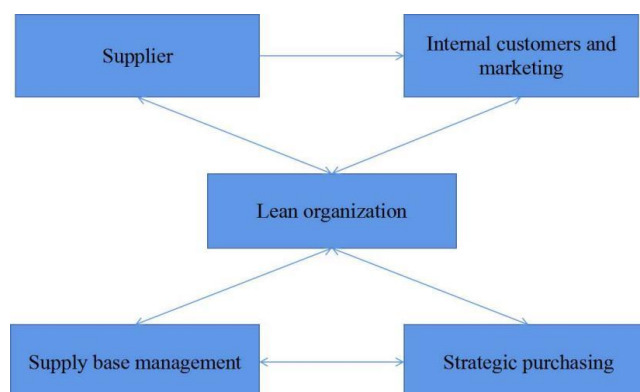


Fig 3. Procurement in a supply chain environment (self-painted).

4. Differences between procurement methods and traditional procurement methods in the supply chain environment

From a general buyer-seller relationship to a long-term partnership. Abandon the traditional procurement method of desperately pressing down prices, no longer do everything possible to force suppliers to make concessions or find multiple suppliers and adopt a divide and conquer method [15].

In the supply chain environment, the two parties establish a collaborative partnership, share inventory data to reduce inventory costs, jointly solve product quality and cost issues, and reduce procurement costs. Some companies even reduce the development cost and time of new products by establishing technology alliances with suppliers.

JIT's order-driven procurement. In the traditional purchasing model, the purpose of purchasing is to replenish inventory, that is, inventory purchasing. In the context of supply chain management, procurement activities are carried out in an order-driven manner, and the demand for manufacturing orders is driven by the user's demand orders. This JIT (just-in-time production) order-driven method enables purchased materials to enter the manufacturing department directly, reducing the inventory occupation and related expenses of the purchasing department, and the supply chain system can respond to the needs of users in a timely manner, at the same time, the inventory cost is reduced.

The transition from procurement management to external resource management. The shortcomings of traditional procurement management are the lack of cooperation with suppliers, the lack of flexibility and the ability to respond quickly to demand [16]. JIT procurement brings new challenges to the procurement management of enterprises, enterprises need to change the traditional management mode of "purchasing for inventory", improve flexibility and market responsiveness, increase the information contact and mutual cooperation with suppliers, establish a new cooperation model, for example, by providing information feedback and education and training, promoting supplier quality improvement and quality assurance, participating in the supplier's product design and product quality control process, changing post-event control to real-time control, etc. First, specifically, the differences between procurement in a supply chain environment and traditional procurement are shown in Table 1:

Table 1. Comparison of procurement and traditional procurement in the supply chain environment (Learned through a questionnaire).

| project | traditional purchasing | Purchasing in the Supply Chain |
|---------------------|--|--|
| Purchase lot | Large quantities, low delivery frequency | Small batch, high delivery rate |
| relationship | short-term cooperation | Long-term cooperation |
| Supply evaluation | emphasis on price | Multi-standard thinking |
| quality inspection | Check after the fact | Buyer participation in real-time control |
| Negotiation content | get the lowest price | Common control of cost, quality |
| information | General Requirements, Information | Fast, reliable, information |
| exchange | Proprietary | sharing |

4.1. Procurement process under traditional management mode.

The company's procurement, especially the procurement of manufacturing enterprises, is a complex activity, which includes the entire process from production planning to formulating bills of materials, submitting purchase requisitions, sending and confirming purchase orders, checking inventory, and paying for goods, in addition to the specialized procurement department, the intervention and cooperation of other departments are also required, these departments not only include the company's internal technology department, manufacturing planning department, quality assurance department, financial department, inventory management department, etc., also includes suppliers outside the company [17].

In this process, tasks at different stages must be completed by personnel from different departments, these personnel include procurement, technology, production planning, quality inspection, finance, warehousing, etc., only the active cooperation of these personnel can ensure the smooth completion of the procurement process. The traditional procurement process starts with approved procurement needs, select products and suppliers [18]. The purchaser conducts back-and-forth negotiation between multiple suppliers, such as quotation, inquiry, counteroffer, etc., and finally takes price as the most important consideration, and chooses the supplier with the lowest price to sign the contract.

At this stage, buyers tend to keep private information to be able to select the best supplier from multiple competing suppliers. Because if the more information is provided to the supplier, the greater the supplier's competitive bargaining chip, which is not good for the buyer; Suppliers are also concealing their information in competition with other suppliers. After the order is confirmed, the buyer waits for the supplier to deliver the goods, accept the goods, and make payment. If the order changes, another round of haggling awaits the buyer. If there is a quality problem with the product, the supplier will be notified for exchange, return or claim. At the same time, to prevent production stoppage caused by out-of-stock, according to the theory of order point, the warehouse needs to maintain a high inventory. In theory, people call it a "vertically integrated" procurement management model [19-20].

5. Conclusion

Efficient procurement of goods and services is conducive to generating an organization's competitive advantage. The procurement link connects all members of the supply chain and ensure the quality of suppliers in the supply chain. The quality of input materials and services affects the quality of the finished product, which in turn affects customer satisfaction and the bottom line of the company. Input costs for many companies are the bulk of the total cost. Procurement as a determinant of benefits, costs and supply chain relationships is of great importance.

The efficiency of the procurement business process has a direct impact on the competitiveness of the company. The traditional procurement process is that after the production management personnel formulate the production plan, the material procurement department prepares the procurement plan, and it has to go through layers of review before placing an order to the supplier. Due to the long process and the many departments that flow through it, disconnection, repetition, and inefficiency often occur, cause a business to take more time to complete. This kind of process is no longer a

requirement for efficient operation of modern enterprises, especially in today's environment of supply chain management. Enterprises should study on the premise of meeting their own overall strategic requirements, use certain information technology as a support platform, and continuously improve the efficiency of procurement operations through the reorganization of procurement operations.

The procurement process is an ongoing process, enterprises must have a full understanding of this and the determination to continuously improve. The effective way to improve the procurement process and enhance the procurement capacity is to change the concept, speed up the development of informatization, improve the operating efficiency of the workflow, the flow of funds, and better understand and meet customer needs faster.

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