

Construction Of Enterprise Competitive Advantage from Perspective of Supply Chain Synergy

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Abstract. The construction of competitive advantage of enterprises is discussed in this paper from the perspective of supply chain coordination, because the increasingly fierce global competition and rapid changes in the market environment make the competition between enterprises is no longer limited to the confrontation between individual enterprises, but the competition between supply chains. This paper firstly expounds the concept and characteristics of supply chain synergy and its significance in modern enterprise management, and then explores the mechanism of supply chain synergy affecting the construction of enterprise competitive advantage through literature review and case analysis. The results show that effective supply chain synergy can help enterprises to improve operation efficiency, cut costs, strengthen innovation ability and speed up market response to build sustainable competitive advantage. Moreover, this paper also analyzes the major challenges faced by the realization of supply chain synergy, such as information sharing obstacles, interest distribution contradictions, organizational culture differences and so on. For these challenges, the corresponding countermeasures and suggestions are given, such as establishing information sharing platform, designing reasonable incentive mechanism and cultivating collaborative culture. Finally, this paper summarizes the key elements and implementation paths of building enterprise competitive advantage based on the perspective of supply chain collaboration, which provides theoretical guidance and practical inspiration for enterprises to enhance their core competitiveness in the complex and changing competitive environment.

Keywords: Supply chain synergy; Competitive advantage; Business management; Information sharing; Ability to innovate.

1. Introduction

Under the background of global economy, the competition between enterprises is becoming increasingly fierce and the market environment is changeable. The traditional competition mode of a single enterprise is difficult to adapt to the modern business environment. Therefore, the competition between enterprises gradually becomes the competition between supply chains, and the new management concept and practice of supply chain coordination is becoming more and more critical for enterprises to build competitive advantages. Data from China Federation of Logistics and Purchasing show that the total amount of social logistics in China reached 300.1 trillion yuan in 2020, up 3.5% over the previous year, and further increased to 335.2 trillion yuan in 2021, up 9.2% over the same period last year. This data reflects the importance of supply chain management in China's economic development and the potential role of supply chain coordination in enhancing the competitiveness of enterprises.

The purpose of this study is to explore the construction of enterprises' competitive advantage from the perspective of supply chain synergy. This paper will deeply analyze the concept and characteristics of supply chain synergy and its relationship with enterprises' competitive advantage, so as to reveal the impact of supply chain synergy on enterprises' development and operation efficiency, cost control, innovation ability and market response speed. This study will also discuss the challenges faced by the realization of effective supply chain synergy, such as information sharing obstacles, benefit distribution conflicts, organizational culture differences and so on, and put forward corresponding countermeasures.

In recent years, with the rapid development and wide application of information technology, the practice of supply chain collaboration in various industries has been deepened. Statistics show that the market size of China's supply chain management software will reach 5.98 billion yuan in 2022,

and is expected to exceed 10 billion yuan by 2025, which reflects those enterprises are paying more and more attention to enhance their competitiveness through supply chain collaboration. The purpose of this study is to provide theoretical guidance and practical inspiration for enterprises to build sustainable competitive advantage in the complex and changeable competitive environment, and to help enterprises better cope with the challenges of global competition to achieve long-term sustainable development.

2. Theoretical basis of supply chain synergy

2.1. Concept and characteristics of supply chain synergy

The so-called supply chain collaboration is a management mode in which the member enterprises of the supply chain achieve the maximization of overall interests by means of information sharing, resource integration and cooperative decision-making. This mode focuses on the close cooperation and coordination among the supply chain members to cope with the uncertainty and complexity of market demand. The core of this model is to break down the information barriers between enterprises, so that the resources can be optimally allocated and the capabilities can be complementary, so as to improve the operation efficiency and competitiveness of the whole supply chain.

There are several main characteristics that can reflect the characteristics of supply chain collaboration. One is information transparency, that is, collaborative supply chain requires member enterprises to share information including inventory level, production plan, sales forecast and other key data in real time and the transmission should be transparent. The second is goal consistency, that is, supply chain collaboration requires member enterprises not only to pay attention to their own interests, but also to pay attention to the interests of the whole supply chain to achieve common development goals. The third is operation coordination. Collaborative supply chain focuses on the close cooperation of all links and efficient cooperation according to unified standards and procedures. The last is the risk sharing. In the collaborative supply chain, the member enterprises should not only share the benefits but also bear the risks together, so as to enhance the ability and stability of the supply chain to resist risks.

2.2. Relationship between supply chain synergy and enterprise competitive advantage

Enterprise competitive advantage and supply chain synergy are closely related, and the establishment and maintenance of sustainable competitive advantage cannot be separated from effective supply chain synergy. First of all, the operation efficiency of enterprises can be improved by supply chain collaboration, because information sharing and collaborative decision-making enable enterprises to predict market demand more accurately and optimize inventory management, thus reducing resource waste, reducing operating costs and improving profit margins. According to McKinsey's research report, enterprises implementing supply chain collaboration can shorten inventory turnover days by 20-30% on average. And operating costs can be reduced by 10-15%.

Secondly, the innovation ability of enterprises can be enhanced by supply chain collaboration. Because enterprises work closely with supply chain partners, they can obtain market information and technology trends faster and promote the exchange of knowledge and experience, thus accelerating product innovation and process improvement. Just like in the automobile industry, the collaborative innovation between vehicle manufacturers and parts suppliers has become a key factor to enhance product competitiveness.

When the market environment changes rapidly, if the supply chain is coordinated, it will be more flexible in adjusting production and distribution plans and can quickly respond to changes in customer demand, thus improving customer satisfaction and increasing market share. With the help of supply chain collaboration, enterprises can also establish long-term and stable cooperative relations, build competition barriers that are difficult to be imitated, and strengthen^[3] their long-term competitive advantages.

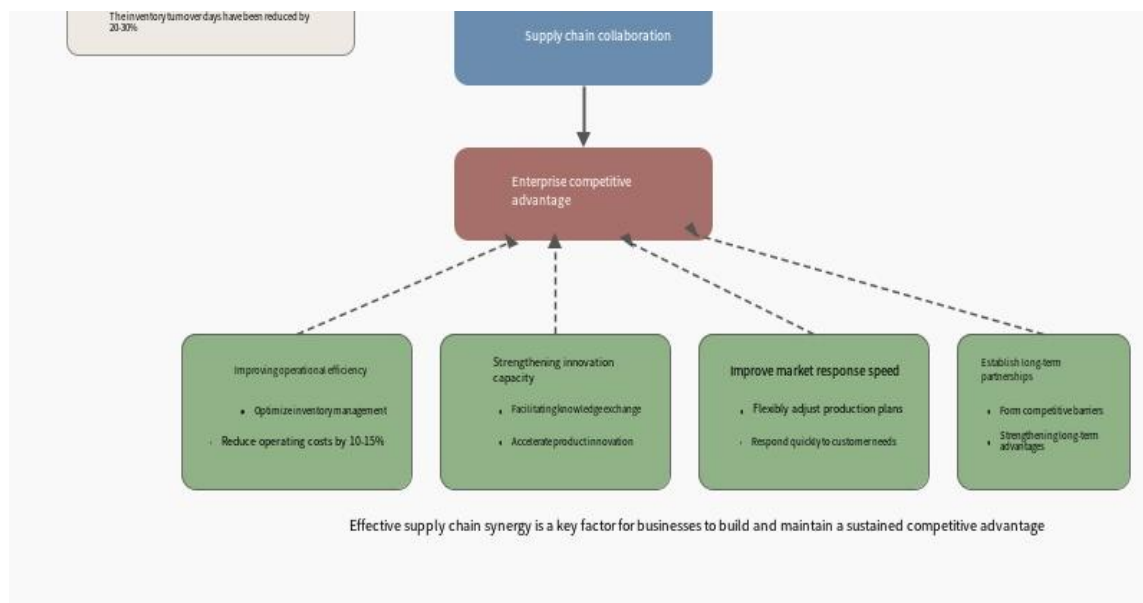


Figure 1 Relationship between supply chain synergy and enterprises' competitive advantage

3. Influence mechanism of supply chain synergy on enterprise competitive advantage construction

3.1. Information sharing and collaborative decision-making

Supply chain collaboration is based on information sharing, and the construction of enterprise competitive advantage cannot be separated from this key link. In the supply chain, key data such as demand forecast, inventory level, production plan and logistics status are the main contents of information sharing. With the establishment of a unified information platform, supply chain members can exchange data in real time to reduce the "bullwhip effect" caused by information asymmetry and improve the operation efficiency of the whole supply chain. For example, Walmart realizes real-time information sharing with suppliers through the famous "retail link" system, which greatly improves the inventory turnover rate and shelf replenitization efficiency.

Information sharing the extended collaborative decision-making, which makes the supply chain members to joint planning and decision making based on sharing of information, the collaborative decision-making mechanism will help enterprises to better respond to market fluctuations and optimize the allocation of resources, as in joint demand forecasting, manufacturers can provide the retailer of the sales data and market trend information combined with more accurate production plan, In the case of joint demand forecasting, manufacturers can combine sales data provided by retailers with market trend information to make more accurate production plans and reduce the risk of overstocking or stockout. Information sharing and collaborative decision-making can improve the accuracy of forecasting, reduce inventory costs and speed up the response to market changes, thus strengthening the overall competitive advantage of enterprises.

3.2. Resource integration and capability improvement

Got the supply chain coordination in promoting enterprise build competitive advantage resources integration and strong support, improve the capacity in the member enterprises in the supply chain collaboration to achieve optimal allocation of resources and complementary utilization, such as manufacturers, suppliers can be applied to the professional technical ability, retailers can rely on logistics providers distribution network and then concentrate on developing their core competences, This kind of resource integration not only can make enterprises to reduce operating costs, to enhance resource use efficiency and can make the whole supply chain competitiveness enhancement.

Resource integration will inevitably lead to the improvement of capabilities, because enterprises can learn from partners and absorb advanced management experience and professional and technical knowledge in the process of supply chain collaboration to continuously improve their core capabilities. Just like the collaborative innovation between manufacturers and suppliers in the development of new products can bring products to market faster and with better quality. In addition, customer-oriented collaboration is also conducive to enterprises to better grasp the market demand and improve the product design and service level. In this continuous process of ability improvement, enterprises can always take the lead in the fierce market competition and establish long-term competitive advantages [9].

3.3. Establish risk sharing and trust

In supply chain coordination, the establishment of risk sharing mechanism is of great significance to enhance the competitive advantage of enterprises, because under the traditional supply chain relationship, a single enterprise usually bears the risk, which not only increases the operating pressure of enterprises, but also limits the development of the whole supply chain. After the establishment of a risk sharing mechanism, supply chain members can jointly face risks such as market fluctuations and demand changes, thus improving the anti-risk ability of the whole supply chain. For example, in the supply chain of agricultural products, farmers, processing enterprises and retailers share market risks in the way of commercial order agriculture, which can not only guarantee the benefits of farmers, but also make the supply of raw materials stable for enterprises.

Effective supply chain coordination based on trust, long-term cooperation and good communication can make the supply chain members to establish mutual trust relationship, to reduce transaction costs and improve cooperation efficiency, like Japan Toyota company has a long-term, stable relations of cooperation with suppliers and has a profound basis of mutual trust, this trust exist in daily operation is also embodied in the new technical development, cost control and other aspects of cooperation, If enterprises can and build trust of Shared sacrifice can build a stronger alliance of supply chain, enhance the overall competitive advantage to better cope with the challenge of the market.

4. Enterprise competitive advantage construction strategy based on supply chain collaboration

4.1. Construction of collaborative information platform

In today's digital era, the key foundation to realize supply chain collaboration lies in the construction of collaborative information platform, because efficient collaborative information platform can break the information island, make all links of the supply chain to achieve real-time data sharing and business collaboration, so as to greatly improve the operation efficiency and competitive advantage of the whole supply chain. According to the data of China E-commerce Research Center, the market size of collaborative management software for Chinese enterprises will reach 29.56 billion in 2022, up 15.8% compared with the previous year, and is expected to exceed 50 billion by 2025, which shows the rapid growth^[6] of enterprises' demand for collaborative information platforms.

The construction of collaborative information platform should follow these principles: The platform should have good compatibility and openness to achieve seamless connection with the existing information systems of all parties in the supply chain, provide end-to-end business process visualization to achieve transparent management of the whole process of order delivery, and have strong data analysis ability to conduct real-time monitoring and predictive analysis of supply chain operations with the help of big data and artificial intelligence technology. Also attaches great importance to information security and establish strict access management and data encryption mechanism to protect the security of the enterprise core data, build the cooperative information

platform enterprise supply chain agility and speed of response will improve and build a sustainable competitive advantage for its to lay a solid technical foundation.

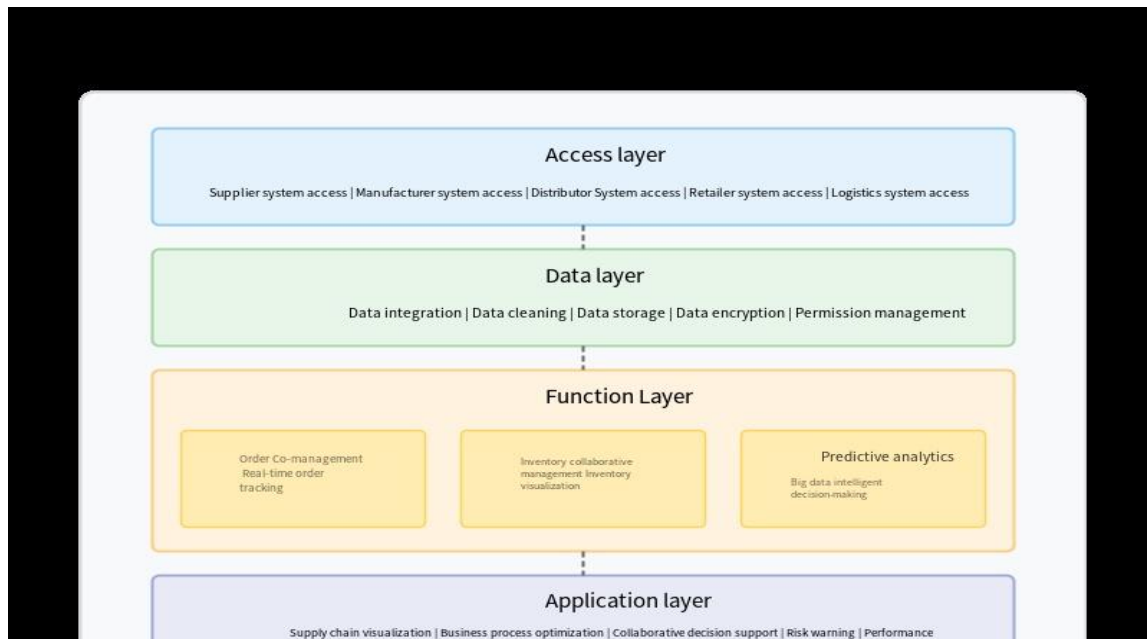


Figure 2 Architecture diagram of supply chain collaborative information platform

4.2. Optimize the supply chain network structure

Another important strategy to build an enterprise's competitive advantage is to optimize the supply chain network structure. Under the background of globalization, enterprises have to establish a more flexible and efficient supply chain network to cope with the rapid change and uncertainty of market demand. And the report of McKinsey Global Institute shows that by 2025, if enterprises optimize the supply chain network structure well, they can reduce the inventory cost by 15-25% on average and improve the on-time delivery rate by 20-30%.

Optimizing the supply chain network structure mainly involves the following aspects: Enterprises should rationally allocate the number and location of production bases and distribution centers according to product characteristics and market demand to achieve the global layout of supply chain network, establish a multi-level and multi-channel supplier system to reduce the risk of dependence on a single supplier and improve the flexibility and anti-risk ability of supply chain, and promote the vertical integration of supply chain. Through mergers and acquisitions or strategic cooperation and other forms of integration of upstream and downstream core resources to strengthen the control of the supply chain, at the same time cannot ignore the digital transformation of the supply chain and use the Internet of things, blockchain and other emerging technologies to make the management of each link of the supply chain become intelligent and automatic. After optimizing the supply chain network structure from multiple dimensions, the efficiency and flexibility of the supply chain will be greatly improved and the enterprise can build a stronger competitive advantage^[8].

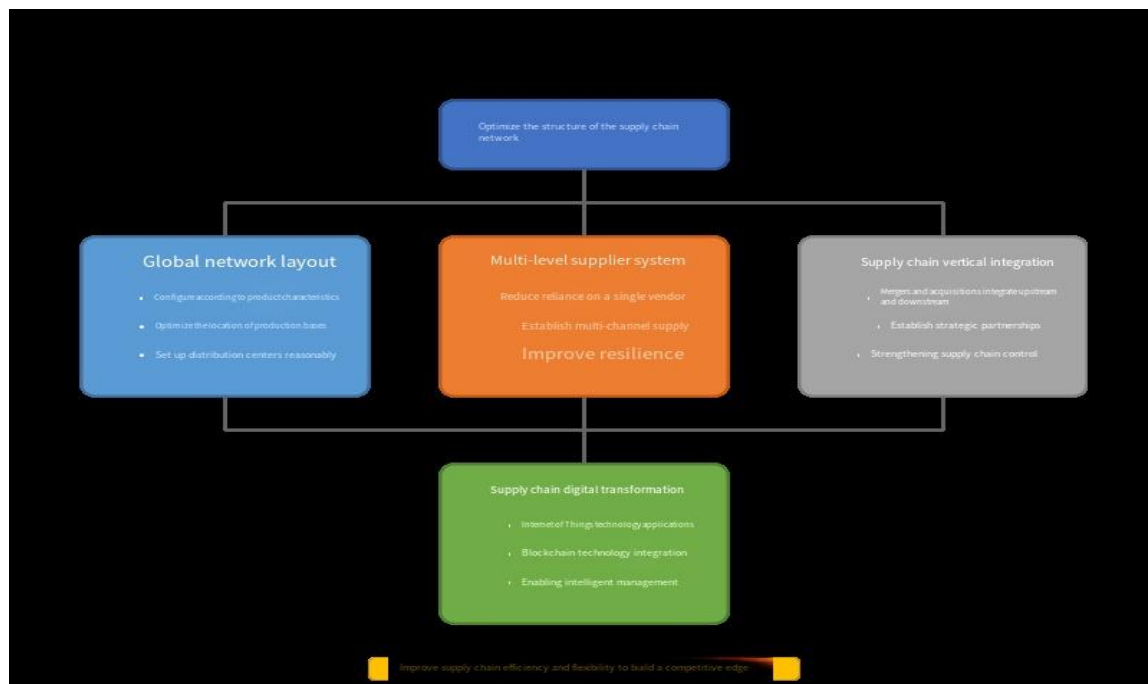


Figure 3 Strategies for optimizing supply chain network structure

4.3. Fostering collaborative cultural atmosphere

An important soft power to realize supply chain synergy lies in cultivating collaborative culture, because a good collaborative culture can promote trust and cooperation among all parties in the supply chain, thus reducing information asymmetry and opportunistic behavior, and improving the operation efficiency and competitiveness of the whole supply chain. According to the research report of Deloitte Consulting, enterprises with a strong collaborative culture, Employees on average 22% increased efficiency, innovation ability is increased by 17% and 10% increase customer satisfaction.

The cultivation of collaborative culture can be started from the following aspects: If an enterprise wants to cultivate a collaborative culture, it must first establish the concept of collaboration and take supply chain collaboration as an important part of the enterprise strategy, and then use various means to convey the concept to all staff. It is also necessary to establish cross-department and cross-organization collaboration mechanisms to break down traditional department barriers and encourage employees to carry out open communication and knowledge sharing. In addition, enterprises should design a similar incentive mechanism and put collaborative performance into the employee appraisal system, which can stimulate employees' collaborative awareness and behavior. Finally, enterprises should attach importance to building a long-term and stable trust relationship with supply chain partners, and cultivate common values and collaboration habits through regular communication and joint training. In this way, enterprises can lay a solid cultural foundation for supply chain collaboration and build a more lasting competitive advantage^[4] after systematically cultivating collaborative culture atmosphere.

4.4. Establish a benefit distribution mechanism

Guarantee sustainable development of the supply chain coordination, the key is to establish reasonable benefit distribution mechanism, because the interests of the fair and transparent allocation mechanism to mobilize the supply chain parties enthusiasm and promote efficient resource allocation, and enhance the overall competitiveness of supply chain, PWC research shows that the scientific benefit distribution mechanism, supply chain collaboration efficiency can be increased by 30% on average, Pricewaterhousecoopers research shows that after the implementation of the scientific benefit distribution mechanism, the synergy efficiency of the supply chain can be increased by 30% on average, and the cost can be reduced by 15-20%.

Enterprises should consider the following aspects when establishing an effective benefit distribution mechanism: On the one hand, it is necessary to establish a supply chain value contribution evaluation system to objectively measure the input and contribution of all parties in the collaborative process. On the other hand, it is necessary to design flexible profit-sharing models such as proportional sharing and stepwise sharing to adapt to different types of collaborative relationships and business scenarios. In addition, it is also necessary to establish a risk sharing mechanism to reasonably distribute all kinds of risks in supply chain operation without excessive concentration of risks on one party. In addition, it is better to establish a dynamic adjustment mechanism to regularly evaluate and optimize the benefit distribution plan to adapt to the changes of market environment and collaborative relationship. In this way, enterprises can effectively encourage the continuous investment and innovation of all parties in the supply chain and build long-term stable competitive advantage by means of scientific and reasonable interest distribution mechanism.

5. Conclusion

The construction of enterprise competitive advantage is discussed in this study from the perspective of supply chain collaboration. After in-depth analysis of the concept and characteristics of supply chain collaboration and its impact on enterprise competitiveness, this paper puts forward the strategy of building enterprise competitive advantage based on supply chain collaboration. The research shows that effective supply chain synergy can improve the operation efficiency, cut costs, strengthen the innovation ability and market response speed, and then build a sustainable competitive advantage.

Specifically, to achieve supply chain collaboration and build competitive advantage, enterprises can adopt strategies such as building collaborative information platform, optimizing supply chain network structure, cultivating collaborative cultural atmosphere and establishing benefit distribution mechanism. Collaborative information platform provides technical support for supply chain collaboration, optimizing network structure to improve supply chain flexibility and efficiency. Collaborative cultural atmosphere lays the foundation of collaborative soft power, and reasonable benefit distribution mechanism guarantees the sustainability of collaborative. Comprehensive application of these strategies can make enterprises have strong competitive advantages in the complex and changeable market environment.

However, there are still many challenges to achieve supply chain collaboration, such as information sharing obstacles and different organizational cultures. Therefore, future research can further explore how to overcome these problems and how to cleverly integrate supply chain collaboration with lean management, agile manufacturing and other management ideas to enhance the competitiveness of enterprises in a more comprehensive way. How to use artificial intelligence, blockchain and other emerging technologies to promote the development of supply chain collaborative innovation is also worthy of attention and in-depth exploration.

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