

Integration-Optimization of Supply Chain and Promotion of Regional Competitiveness

¹Wang Qing and ²LI Liang,

¹School of Marxism, Shandong University of Technology, Zibo, Shandong, China

²School of Economics, Shandong University of Technology, Zibo, Shandong, China

Abstract: As an integrated management mode and competitive strategy, supply chain management plays an important role in promoting the development of industrial clusters and regional competitiveness. The region must take measures according to the local conditions, construct the modern industrial system, integrate the supply chain, make the regional economy obtain the division benefit in the open division system, create the regional competitive advantage, and realize the regional economic benefit maximization.

Keywords: Supply Chain Strategy; Regional Economy; Industrial Structure

I. INTRODUCTION

Regional competitiveness and regional economic development is a topic worthy of in-depth discussion. The key of regional economic development lies in the cultivation of competitiveness. A certain industry in a specific region, the relative concentration of industrial clusters will produce regional competitiveness because of the agglomeration effect. Implementing industrial cluster development strategy is not only an important measure to enhance regional competitiveness, but also an effective way to optimize regional economic structure and transform economic growth mode. There is a supply chain network integrating enterprise resources and core competitiveness in industrial cluster. Core business and upstream and downstream enterprises to form strategic cooperation alliance, obtain their own professional advantages, for cooperative management. The integration and optimization of supply chain make the competitiveness of industrial cluster which is constituted by supply chain network evolve and upgrade continuously. If there is not an efficient, agile and collaborative supply chain, it is impossible to form the competitive advantage of cluster, let alone the regional economic competitiveness. Today, the competition among enterprises is not only the competition between individual enterprises, but also the competition between their respective industrial clusters and supply chains. With the integration of global economy, the competition between industrial cluster and supply chain becomes more and more mainstream. An industry within a region may have a complete supply chain, or one or more chains in a global supply chain. This paper mainly analyzes the regional supply chain, which is also a key member of the supply chain, located in a specific scope, that is, the supply chain construction within the cluster. The quality of an enterprise's supply chain will determine its success or failure in the market competition. Similarly, the quality of a regional supply chain will determine its position in the global division of labor.

II. COMPETITIVE ADVANTAGES OF REGIONAL SUPPLY CHAIN

Regional industrial clusters attract professional suppliers, distributors and professionals, gather professional information,

and form a professional market. This resource aggregation affects the division of labor and cooperation among enterprises and is conducive to the core enterprises to choose supply chain partners. The geographical proximity of enterprises is also easy to increase the cultural identity among enterprises, so that the organization of the regional supply chain has a strong cohesion. The adaptability and flexibility are the keys for enterprises to respond quickly to competition. In regional supply chain, the more accurate and timely information is, the faster the flow speed will be. Although the use of modern communication technology has greatly reduced the cost of long-distance communication, it still cannot replace face-to-face communication between people, which may facilitate the diffusion and sharing of new technologies, processes and ideas throughout the supply chain. The sharing of regional infrastructure makes the internal resources of the supply chain more efficient, and the sharing of regional brand supply chain greatly enhances the comparative advantage of the whole supply chain. Because regional supply chain carries out active cooperation within the region and makes contribution to the development of regional economy, it may get relevant policy support from the government.

III. CORE BUSINESS IS THE SUBJECT OF SUPPLY CHAIN MANAGEMENT

In the supply chain, the core business has the advantages of technology, channel and brand, undertakes the functions of planning, organization, coordination and monitoring, and is the main body of supply chain management. These core businesses can be large manufacturing companies or full-fledged logistics companies. Core business and suppliers, distributors and other upstream and downstream enterprises to form a strategic partnership of mutual dependence and benefit sharing. Through the integration point, raw materials purchasing, r&d, manufacturing, sales, customer credit management, service and support throughout the supply chain, optimizing the logistics, information flow, capital and technology of supply chain, the core coordination of oil and gas upstream and downstream enterprises, make the whole supply chain system cost is the best, the biggest meet customer demand, so as to improve the competitiveness of the whole supply chain, lead to the development of regional economy.

Since the beginning of the 21st century, economic globalization has accelerated significantly, market competition has become more intense, consumer demand tends to be personalized, diversified and low-carbon, and product life cycle has shortened. Products from mass production to mass customization. The strategic introduction of supply chain management technology, the use of supply chain management platform, from the terminal to obtain timely and accurate demand information, and through the real-time sharing of information, the core enterprises cooperate with oil and gas upstream and downstream companies to produce mass

customized products, timely meet the individual, diversified needs of consumers. Consumers' requirements for quality are getting higher and higher, which are no longer limited to the final product, but extend to the production process, including production safety, production environment, whether infringe social and public interests and many other factors. This requires understanding not only the flow of products within the enterprise, but also each step from the source of the product to its final delivery to the consumer. For example, on carbon emissions, individual companies' efforts may not be ideal. And the supply chain platform can be used to calculate the carbon footprint of the whole life cycle of products, including raw material procurement, production, inventory, transportation, and waste recycling. From the perspective of the whole supply chain, core enterprises and their supply chain partners should find out the key links that can achieve the best emission reduction effect and cooperate with them to reduce emission, which can often achieve twice the result with half the effort.

With the development and wide application of information network technology, the flow of resources, services, information and skills is more agile, which promotes the fast, efficient, convenient and low-cost cooperation between enterprises. The core enterprises relying on information technology maintain a high degree of coordination among supply chain enterprises, so that the supply chain with strong innovation ability and market adaptability can quickly and effectively respond to the change of market demand.

IV. COUNTERMEASURES FOR REGIONAL INTEGRATION AND SUPPLY CHAIN OPTIMIZATION

According to the status quo of regional supply chain, the integration and optimization of supply chain should be carried out from the following aspects:

A. Improve the Coordination Level of Supply Chain

The synergistic effect of nodal enterprises in supply chain is the key to build competitive advantage of supply chain. The core enterprise must play a leading role in the supply chain and improve the organization, management and coordination ability of the supply chain. Within the supply chain, the effective division of labor is implemented, the enterprises cooperate closely, their core business and development direction are clear, and their advantages are given full play. The effective integration of trade, logistics, cash and information flows organically unifies these processes, thereby reducing repetitive, inefficient and worthless activities. It is essential to make full use of network technologies, e-commerce technologies and modern communication tools and management systems to operate supply chains effectively.

B. Establish a Process-centered Supply Chain Management Organization

When the process of each link in the supply chain network is coordinated and matched, the whole supply chain process can be optimized and added value. The traditional enterprise organization structure can not adapt to the requirements of supply chain process management, so it is necessary to carry out a thorough organizational reform and establish a process-centered organization. Although the organization is still divided into marketing, manufacturing, finance, sales, human resources and other departments, as a traditional mission-oriented organization, these departments should be restructured according to the needs of supply chain process

management. Each person has to run multiple capabilities and can easily participate from one process to another. Each employee has the ability to execute multiple processes across departments and across the enterprise and with a spirit of cooperation, so at any time it may be easy to participate in the process from one to another, the only way can reduce the overall cost of supply chain management and improve operational efficiency.

C. Enhance Innovation Capability

The change of current market demand requires enterprises to have a strong learning ability, to continuously carry out technological innovation according to the requirements of the environment and the situation, and to improve the competitiveness of enterprises themselves and the whole supply chain. If core enterprises share design data, technology, information and resources with supply chain partners, it will greatly accelerate the speed of introducing new technologies to the market and enable supply chain enterprises to share the rich returns brought by the rapid growth of supply chain. Supply chain enterprises should take the market as the guidance, apply information technology to product design, production, marketing and other links, improve the technological innovation ability. We should pay attention to brand innovation and realize brand revaluation with innovative thinking.

V. SERVICES TO BE PROVIDED BY REGIONAL GOVERNMENTS

A region must be planned, guided, coordinated and understood by the regional government according to the regional resources and market conditions, integrating regional resources, building a modern regional industrial system, integrating supply chains. As one economic entity, a region must be planning, command, coordinate by local government according to the region's resources and the market situation, identify regional advantages, integration of regional resources and the supply chain, build a modern industrial system in the area, therefore, the regional economy can obtain department division of labor interests in an open system, creating regional competitive advantage and economic benefit maximization.

A. Accelerate Industrial Restructuring

Adjusting and optimizing industrial structure and promoting industrial upgrading are the key to improve regional competitiveness. Industrial connection effect is an important benchmark for selecting regional leading industries. Only when an industry has extensive and close technical and economic ties with other industries can it promote related industries within the region through the effect of cluster effect and multiplier effect, thus stimulating the economic development of the whole region. We should choose the industry with long industrial extension chain and large driving effect as the leading industry, strengthen the orientation of industrial cluster, cultivate supply chain, and make the competition of leading industry cluster and supply chain cooperation form beneficial complementarity.

B. Cultivate Core Business

The strength of core business is directly related to the collaborative competitiveness of industrial cluster supply chain. An area should take measures according to local conditions, cultivate a batch of large-scale leading enterprises, improve their professional cooperation level, and give play to the leading role of core enterprises in promoting the development

of regional industrial clusters. Regional industrial clusters. Industrial enterprises involve supply chain, logistics services, financial services, information services, etc. The government should promote multi-industry association through functional management departments and industry associations to improve the ecological environment of supply chain operation.

C. Accelerate the Construction of a Modern Socialized and Specialized Logistics Service Network System

The so-called modern logistics industry refers to a new service industry that utilizes advanced organizational methods and management techniques to efficiently plan, manage and deliver the entire product supply chain from producer to consumer. Through the integrated management of logistics transportation, storage, packaging, handling, processing, distribution, information processing and other links, it can achieve the purpose of increasing product market share, reducing costs and increasing enterprise profits. Not only the logistics resources within the enterprise need to be integrated, but also the whole industrial chain needs to be integrated to form a socialized logistics system with supply chain management as the core. Areas, logistics integration is the guarantee of regional economic integration, the industrial cluster in the supply chain link must be logistics integration and other related logistics industry cluster was integrated in the region, the establishment of a unified logistics system, comprehensive, all-round, multi-level, efficient, improve the efficiency of the logistics activity, reduce the total logistics cost of society. It is necessary to arrange logistics center reasonably, construct modern logistics infrastructure, establish advanced information network, develop the third party logistics actively, and coordinate and manage the logistics within and between regions.

D. Build a Full e-commerce Platform

The full e-commerce platform can connect the business processes of upstream and downstream enterprises, and realize the coordination of supply chain management and business processes and e-commerce among enterprises in the entire industrial cluster. This will greatly reduce the external transaction costs between enterprises, speed up the response of

industrial clusters to market demand, and shorten the product supply cycle. From the regional point of view, with the help of the full e-commerce platform, realize the seamless docking, full information and business cooperation of multiple enterprises, which is helpful to enhance the overall competitiveness of enterprises. Full e-commerce platform is an effective means for governments at all levels to create regional advantages and industrial cluster competitiveness.

CONCLUSION

The integration of regional supply chain is a management concept. The goal of regional supply chain integration and optimization is to use modern information technology, through comprehensive planning, organization and coordination of recycling materials, information, capital and technology of the supply chain in each regional industrial cluster, improve the overall efficiency of the supply chain and the allocation of resources in the region. Implementing supply chain integration can optimize regional industrial structure and enhance industrial competitiveness.

References

- [1] Wang Zhitai. Modern logistics management. Beijing: Chinese workers Press, 2001.
- [2] Gao Hongshen. Regional Economics. Beijing: Chinese Renmin University Press, 2002.
- [3] Lan Juanli, Lei Hongzhen, Sun Junna. Climbing Value Network of Chinese Industrial Cluster Supply Chain: A Horizontal R&D Cooperative Simulation Perspective. Comparison of Economic and Social System, 2020,(6), 123-135.
- [4] Ding Junfa. Attach importance to the great role of modern logistics on economic construction. Logistics and technology, 1998.(1),3-5.
- [5] Lee, Martin, Hsieh, Yu. Principles of value creation in event tourism: Enhancing the competitiveness of regional clusters. Journal of Global scholars of marketing science, 2020. (4), 437-453.
- [6] Raigul Duiskenova, Karlygash Zhumaxanova. Factors of regional systems competitiveness. Journal of security and sustainability issues, 2020, (3), 877-886.