GREGOR VESELKO, Ph.D.

E-mail: gregor.veselko@intereuropa.si Intereuropa Ltd.

Vojkovo nabrežje 32, SI-6000 Koper, Republic of Slovenia IGOR JAKOMIN, Ph.D.

E-mail: igor.jakomin@fpp.uni-lj.si

University of Ljubljana,

Faculty of Maritime Studies and Transportation

Pot pomorščakov 4, SI-6320 Portorož, Republic of Slovenia

Traffic Management Review Accepted: May 30, 2006 Approved: Mar. 13, 2008

# COORDINATING SUPPLY CHAIN MANAGEMENT STRATEGY WITH CORPORATE STRATEGY

#### ABSTRACT

The background of the paper is the substantial development in international business with special regard to globalization and business internationalization going on over the past few years. The latest has put many companies facing big challenges and devised methods for their sustainable incorporation in global supply chains. The purpose of the paper is to help out the reader and explain the major effects the globalization and business internationalization have on business strategy formation and its implementation. Coordinating business strategy has become one of the key elements for international competitive attractiveness. The final goal of the paper is to make a logical connection between supply chain management strategy and corporate strategy. The results of the paper confirm the basic implication that the supply chain management strategy and corporate strategy must be coordinated and implemented according to certain requirements, considering that the sustainable corporate strategy is the logical consequence of a thoroughly examined and properly understood supply chain management strategy.

### KEY WORDS

globalization, corporate strategy, supply chains, supply chain strategy, strategy coordination

### 1. INTRODUCTION

Today's research in the field of supply chain management highlights the advantages resulting from achieving operational efficiency through improvement and integration of individual supply chain processes. Despite the fact that understanding the problematic issues and addressing them in such a way fully complies with the idea and requirements of modern business, the question on how to integrate this approach in the corporate strategy is still topical.

The essence of supply chain management lies in the strategic management of activities that provide added value to a product or service in the process of satisfying the consumer's requirements [6]. A cross-wise coordination of business processes among the supply chain participants is of vital importance for cost reduction, quality improvement, increasing the transparency, and promoting the business operations. However, such coordination demands strategic guidance through the entire chain, which means steering all the operative and tactical strategies of individual links involved towards the same goal. Therefore, the long-term aspect adds cohesion to the supply chain management and makes it focus on all the complementary goals in common.

Thanks to the coordination of the corporate strategy and the supply chain management strategy, we can avoid – or cut down the number of doubled interfaces in the supply chain, reduce the incidence of inconsistency, and end up with fewer errors. As a result, any inadequate interactions are eliminated from the business process, and what is most important, inefficiency of individual supply chain links is diminished.

For the management of the enterprise, as well as for the entire supply chain, such coordination as referred to above is a very demanding task. It is necessary to set restrictions and find responses to numerous questions. The underlying question is how to define the priorities in the formulation of the business strategy. How to define the business strategy so that it will best represent the core task of a certain supply chain? It has to be explained here that either the corporate strategy is designed first and then the strategy of the supply chain management can be defined, or the problematic issues are approached in the reverse sequence.

It frequently happens that focusing on the internal strategic aspects only, without taking a wider view on the external environment of an enterprise and on the requirements of entire supply chain can result in an extraordinary restriction: numerous internally acquired priorities die away when the enterprise turns to external business environment. Therefore, the corporate strategy has to be made in accordance with internal and external operating factors. The needs of the entire supply chain have to be properly synchronised and positioned into the internal operations of the enterprise. This is the only way that yields synergy effects.

# 2. STRATEGY AND SUPPLY CHAIN MANAGEMENT

If the management of supply chains has been presented as the key element of long-term entrepreneurial competitiveness, we need to explain how it relates to the strategic theoretical issues and related concepts. Although the scope of research required to define the particular strategy is very extensive and at times even confusing, the supply chain management as a strategic tool has to be analysed thoroughly in view of the more recent theories [9] that are based on commercial resources [1] [2]. The focus is laid on the internal potential and capabilities for adjusting to changeable external business environment. Mintzberg [9] says that the strategy is a part of process that requires from an enterprise much flexibility and adaptability to the market, as well as to technological and other changes in the business environment. That definitely affects the course of implementing the business strategy, as the finally implemented strategy may not be the same as the planned

A successful supply chain management has to be capable of coping with uncertainty. That is why it is viewed as an organizational process or function, which assumes the key importance for strategic success in the implementation of the corporate mission [8]. The need for adaptability in view of transaction costs, and primarily the corporate strategic focus on the synergy among various theories, points to the relevance of a constantly active supply chain management in order to optimise all business processes in an enterprise.

In addition, close cooperation and a concerted action of all the links in the supply chain is called for. The higher the integration and complexity of connections/relations between the customer and supplier, the bigger is the need for close cooperation. Moreover, this fact stands in close correlation to the theories relying on commercial resources as promoters of the strategic competitive advantage. The quality of all business relations strongly depends on the following elements with a decisive impact, such as the time component, development, trust, the communications structure and capacity for integration [5]. The business connections between the customer and supplier,

efficient and responsive to the complex and flexible inter-organizational relations, can vouch for a long-term source of competitive advantage. The future potential for achieving competitive position and organizational growth will depend on the capability of all participants in a supply chain to adapt to the situation and support close relations. For that purpose, these relationships have to be properly embedded in the corporate structure and in the context of supply chain management. An appropriate strategic address to both of these sides is a logical and prerequisite step towards setting up effective grounds of operation.

# 3. CONCEPTUAL FRAMEWORK FOR THE SUPPLY CHAIN MANAGEMENT

The coordination of the supply chain management demands full understanding of the underlying concept and features defining the supply chain. Lambert et al [7] point to the cohesive nature of the management and the need for gradual planning, designing and implementation of business processes within the concrete supply chain. The conceptual framework can be formed from three interrelated, closely connected elements:

- network structure of the supply chain,
- business processes in the supply chains,
- management of the supply chain components.

Figure 1 shows how the three basic elements of the supply chain management framework are interrelated. The interaction of the integration level of business processes, of the supply chain key components, and of the key business processes generate main decisions which then direct the operations of the entire supply chain.

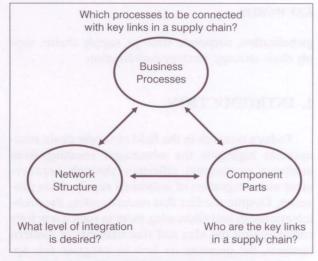


Figure 1 - Conceptual framework of the supply chain management

Source [6

### 3.1 Network structure of the supply chain

In general, the network structure of the supply chain is defined as the operating network of elements of a particular supply chain, including the number and form of business ties among these elements. Stock and Lambert [10] have defined the network structure of a supply chain as an interplay of three primary structural elements, as follows: the participants, the structural dimensions, and various types of process ties in a supply chain.

The form of the supply chain is determined by three structural dimensions: the horizontal structure, the vertical structure, and the horizontal positioning of the leading enterprise. The horizontal structure determines the number of horizontal orders throughout the supply chain, and the vertical structure defines the number of customers in each horizontal order. The third dimension, i. e. the horizontal positioning of the leading enterprise, shows the actual position of the leading enterprise, functioning as the chain principal, in the supply chain. It can be located near the beginning of the chain - at the suppliers' suppliers, or at the end of the chain, i. e. at the buyers' end buyers [3].

The above mentioned structural form is clearly outlined by the corporate strategy, which also provides directions for the implementation of the supply chain management. Having defined such a structure, the organization is now able to optimize the number of participants in the chain and define which process links need guidance and control. In fact, it concerns the task to define what part of the supply chain, and to what extent, is subject to a particular type of management, and the coordination of the structure with the entrepreneurial capacity and strategic directions.

To illustrate this situation, let us have a look at a company which decides to reduce the number of suppliers, which in turn results in a contraction of the supply chain. Likewise, the supply chain and the positioning of the leading enterprise can affect the decisions on the production, marketing, "outsourcing" and similar.

### 3.2 Business processes in the supply chain

Successful management of the supply chain demands a transition from an individual management style to the integrated coordination of activities of all the key processes in the supply chain. An individualistic view on the company's operation and dealing with the problematic issues within the organizational unit belongs to the past. The given situation in business and an increasingly extroverted view demand a global, comprehensive approach to the implementation of entrepreneurial goals globally. Hereof we can identify eight key processes in a supply chain:

- the customer management process,
- the supplier management process,
- the customer service management process,
- the demand-side management process,
- the process of order execution,
- the production flow management process,
- the product development and commercialization process,
- the complaint management process.

The customer management process comprises all the relations, either commercial or service-related, that an enterprise has towards its customer base. Included are the methodology of work, software (computer programs) and capabilities that support an organization in the management of customer relations.

The supplier management process is understood as the management of the information flow between the suppliers and organizations that are purchasing. It concerns the integration of information on the suppliers into the purchase process.

The process of customer service management is gaining importance, as the enterprises are aware of the advantages offered by a consistent and efficient support to customers. Business units in charge of servicing the customers are normally organised in the form of call centres or the so-called »help desk« points that provide the entire support to the customers within the supply chain. Developing good customer relations is of key importance for all units, small and bigger departments, in terms of long-term success and business growth of the entire supply-chain.

The demand-side management process is understood as the process of estimating the requirements. The management (control) of all the information relating to the aggregate demand for the pre-materials, semi-manufactured goods and products. The purpose is to satisfy the market requirements, rationalisation and to avoid any surplus inventories.

The order execution management is concerned with the highest possible extent of orders discharged. It measures and controls how a particular order is realised in the process of transfer through the supply chain.

The production flow management process comprises all the activities required for the movement of the product through the manufacturing line. It functions as the coordination of lead times for manufacturing in order to conclude the production tailored to the requirements and reflecting the market needs. In fact, it involves the control, implementation and management of the production flexibility in the supply chain.

The process of product development and its commercialisation is concerned with the information that helps overcome the initial stage in the conception of the product and speeds up the commercialisation. In the fast-growing and intensified competition, new products and services should be launched on the market based on a sound commercial judgement.

The complaint management process is addressing a very critical business concern, i. e. dissatisfied customers. These customers are for some reason dissatisfied with the product or service and wish to return the product or get a refund for the service. If such dealing with returns is a complex, slow and inadequate process, the final dissatisfaction gets even worse, which is a threat to any future cooperation. The management of such relationships in terms of a prompt, correct, fair and satisfactory response to the customer's complaints may turn the matter into a new business opportunity, if it strengthens the trust, loyalty and relationship.

Coordinating the a. m. business processes in an efficient and effective way leads to excellence of the particular supply chain: only excellence assures further existence in the competitive market. Determining the rank of priority for the processes, the approach to coordination and positioning thereof are the functions of the corporate strategy. Therein, individual roles of business processes in the configuration of a supply chain are evaluated and determined.

# 3.3 Management of the supply chain components

The management of supply chain components deals with the level of integration and relations management in all the business processes of a supply chain. The width of this integration is the function of the number of participants and business relations of all levels in a given supply chain [7][4]. Each link in a supply chain demands a focused, professional and technical management that treats a supply chain as one integral whole, aiming at a joint appearance on the market; that comprises synchronisation of business processes of the entire supply chain and utilisation of all its products and services, under the guiding star of achieving operational, tactical and strategic goals.

The activities of the eight a. m. business processes need to be planned. It concerns activities relating to the procurement of raw materials, other pre-materials, semi-manufactured goods, products and services from various suppliers, activities relating to the product manufacturing and production of services, activities supporting the transfer of products/services from the supplier to customer (transport, distribution, storage), and activities relating to the market and sales support.

In general, the management of the supply chain components can be divided in five key elements:

- plan (relating to a common supply-chain strategy that includes the development of measuring and control tools),
- resources (involving the suppliers who provide their products and services underlying for the existence and good performance of the entire supply chain),
- manufacturing (relating to business processes required for the manufacturing, testing and packing of products and services),
- delivery (relating to order acceptance, development of storage facilities network, delivery to the ultimate consumer, invoicing and receiving the payments),
- returns (relating to the processing system for returned merchandise following the complaints and 'dead' products).

# 4. IMPLEMENTING THE SUPPLY CHAIN MANAGEMENT STRATEGY

The aim of a successful strategy of supply chain management, pressed by the need for improved productivity and cost savings, is to reduce the flow of raw materials, other pre-materials, semi-manufactured goods, products and services at each supply chain point. Zejian and Weiwei [11] have defined the critical elements for setting up such strategy as:

- management of investments in inventories within a supply chain (it concerns the so-called management of inventories at the Seller's place: if inventories are kept with the seller, it reduces the inventory and the related risks for the remaining links in the chain; this is important for reducing the (shelf) life cycles of the products which considerably accelerates the turnover of capital; reference is made to the »Just-In-Time« and »Quick Response« concepts),
- establishing ties with suppliers (resulting in strategic partnerships with suppliers, thus reducing the number of suppliers who, in turn, need to satisfy all the stricter standards),
- improving the responsiveness (focusing on the improvement of the product and service quality, achieving higher reliability of deliveries),
- competitive advantage (establishing and maintaining the competitive advantage in a cost-effective way or by product differentiation; readiness to face the global competition between individual supply chains not enterprises competing in the market),
- introduction of information and communication technology (information available in due time is of key importance for a quick and adequate response to the changes on the market and increasingly rising requirements of customers; the systems ap-

plied must support full "interoperability" in the entire supply chain).

The strategy of supply chain management must conform to the a. m. presumptions: only thus it can cope with the requirements of the market successfully and efficiently. In connection with the supply chain management, the corporate strategy is of vital importance for coping with the challenges of global operations

# 5. COORDINATING CORPORATE STRATEGY AND SUPPLY CHAIN MANAGEMENT

The corporate strategy and the supply chain management strategy have to be synchronised and directed to the same goals. The new age paradigm that at present the competition relies on the efficiency and effectiveness of supply chains rather than individual enterprises, introduces an unquestionable fact that the final success of an enterprise strongly depends on the integration and management of business processes throughout the entire supply chain. Accordingly, the excellence of an individual enterprise depends on the excellence of the entire supply chain. However, the academic and business sphere did not yet arrive at an integrated view on both strategies, or the harmonisation thereof. One thing is certain: the activities need to be arranged at the level of the enterprise first, and then within the supply chain. In all the eight business processes referred to above, individual elements of the business strategy have to be analysed and then harmonised with the individual and jointly set goals.

The conceptual framework of the supply chain management supports to focus initial attention on defining the underlying purpose for the supply chain management, which is subject to both the corporate strategy and the strategy of the supply chain management. In order to design an adequate strategy within the supply chain management, the enterprise has to make it clear for itself what such a strategy represents and only then synchronise it with the emerging corporate strategy. We can only establish that the existence and definition of the supply chain management is the prerequisite for the synchronisation of both these strategies. Only then a corporate strategy can be outlined. Such a conclusion brings about additional questions, to which the management policy with a visionary perspective must provide adequate answers in order to function successfully and efficiently within the supply chains environment. The emerging questions are:

Do all participants understand the coordination of the corporate strategy and the strategy of supply chain management in the same way?

- What is understood under the supply chain management strategy and how is it articulated?
- In what way is such a strategy being introduced in every-day operations and what strengths, weaknesses, opportunities and threats does it bring along?
- Which strategy promotes the other: does the corporate strategy support the strategy of supply chain management, or vice versa?
- If we follow the definition that the foundations for the strategy of supply chain management are laid down first, we need the answer to the following: What is the purpose of a network structure of the supply chain, what business processes need to be integrated in the network structure, and how deep, or what span of integration is to be applied?
- At what point need the conclusions of the supply chain management strategy be integrated with the corporate strategy?

A well coordinated approach and concerted action, in addition to building-up a global strategy, is the only assurance for growth in today's business environment. A continual development of operating facilities and capacities is needed, primarily towards the excellence in communication and coordination. That should be supported by the corporate strategy, strengthened by and harmonised with the strategy of supply chain management, as well as global strategic activities within the global supply chain, the development of products and services therein and activities in development of global purchases and production.

### 6. CONCLUDING THOUGHTS

The contribution has illustrated the basic strategic concept and the concept of the supply chain management. The latter is gaining importance as the key element of entrepreneurial competitiveness in the long run. For that reason, it is necessary to integrate that concept in the strategic thinking of international corporations operating in global market circumstances. For easier understanding, we have highlighted the conceptual framework of supply chain management through its network structure, business processes and the management of its components, and shown the importance of these three basic elements for optimal business decision-making and directing the operations of the entire supply chain. That was followed by the characteristics of the strategy implementation of the supply chain management, or the presentation of main presumptions which had to be complied with. Understanding the terms "strategy" and "supply chain management" is the precondition for any approach to developing a corporate strategy which is to outline the

strategic, tactical and operational conduct of an enterprise that is involved in the context of a supply chain.

The underlying conclusion of this paper provides an answer to the method and order of sequence in coordinating a corporate strategy with the strategy of supply chain management. First, the basic presumptions and characteristics of the supply chain management and its strategic aspect have to be dealt with and explained, and then it has to be positioned into the corporate strategy and synchronised with it. The corporate strategy – irrespective of the strengths and opportunities introduced by the supply chain management strategy, cannot function optimally in today's business environment in which global pressures direct and require a wider business context. It is no longer about competition between enterprises, but rather about the competition between supply chains.

The research and its findings should be useful to managers in understanding these problematic issues, and in practice they can function as assistance in the concretisation of setting up the corporate strategy. The research has enriched the current theoretical sources of the supply chain management and the strategic approaches thereto, and contributed to a quicker development of the science.

#### Dr. GREGOR VESELKO

E-mail: gregor.veselko@intereuropa.si Intereuropa d. d.

Vojkovo nabrežje 32, 6000 Koper, Republika Slovenija Dr. **IGOR JAKOMIN** 

E-mail: igor.jakomin@fpp.uni-lj.si

Univerza v Ljubljani, Fakulteta za pomorstvo in promet Pot pomorščakov 4, 6320 Portorož, Republika Slovenija

### POVZETEK

## KOORDINACIJA STRATEGIJE UPRAVLJANJA OSKRBOVALNIH VERIG S KORPORACIJSKO STRATEGIJO

Izhodišče pričujočega prispevka je internacionalizacija poslovanja podjetij v razmerah globalne konkurence, ki za številna podjetja predstavlja nujno potrebno organizacijsko spremembo. Ta sprememba uvaja nove načine poslovanja, ki se čedalje bolj odražajo v obliki vključevanja v globalne oskrbovalne verige. Prav to pa zahteva nove strateške pristope v smislu povezovanja in usklajevanja različnih poslovnih strategij, predvsem korporacijske strategije in strategije managementa oskrbovalne verige. Namen prispevka je bralca seznaniti s številnimi vplivi, ki jih imata globalizacija in internacionalizacija poslovanja na oblikovanje poslovnih strategij. Usklajevanje poslovnih strategij postaja ključni element konkurenčnosti v mednarodnem poslovanju. Cilj prispevka je v danem okviru

predstaviti temeljne dejavnike uspešnega povezovanja korporacijske strategije in strategije managementa oskrbovalne verige. Zaključki raziskave potrjujejo implikacijo, da morata biti korporacijska strategija in strategija managementa oskrbovalne verige obvezno usklajeni, saj le tako lahko podjetje popolnoma izkoristi prednosti, ki jih omenjeni strategiji prinašata in se hkrati izogne številnim slabostim, ki jih v primeru neusklajenosti povzročata vsaka strategija posebej. Dokazano je, da oskrbovalne verige postajajo globalna realnost, organizacije širokih razsežnosti, katerih strateške okvire je zato nujno natančno definirati.

### KLJUČNE BESEDE

Globalization, Corporate Strategy, Supply Chains, Supply Chain Management Strategy, Strategy Coordination

#### LITERATURE

- [1] **Boxall, P.** (1996) The strategic HRM debate and the resource-based view of the firm, Human Resource Management Journal, **6**(3), 59-75.
- [2] **Boxall, P.** (1991) Strategic Human Resource Management: the beginning of a new theoretical sophistication?, Human Resource Management Journal, 2(3), 60-79.
- [3] Brewer M. Ann, Button J. Kenneth, Hensher A. David (2001), Handbook of logistics and supply-chain management, Pergamon.
- [4] Cooper C. Martha, Ellram M. Lisa, Gardner T. John, Hanks M. Albert (1997) Meshing Multiple Alliances, Journal of Business Logistics, 18(1), 67-89.
- [5] **Hoyt, J., Huq, F.** (2000) From arms length to collaborative relationships in the supply chain: an evolutionary process, International Journal of Physical Distribution and Logistics Management, **30**(9), 750-764.
- [6] Lambert M. Douglas, Cooper C. Martha, Pagh D. Janus (1998) Supply Chain Management: implementation Issues and Research Opportunities, The International Journal of Logistics Management, 9(2), 1-19.
- [7] Lambert M. Douglas, Emmelhainz A. Margaret Gardner T. John (1996) So You Think You Want a Partner? Marketing Management, 5(2), 25-41.
- [8] McDermott, M and Chan, K. (1996) Flexible intelligent relationship management: the business success paradigm in a stakeholder society, The Learning Organisation, 3(3), 5-17.
- [9] Mintzberg, J. (1994) The fall and rise of strategic planning, Harvard Business Review, January-February, 107--114.
- [10] Stock, J. R., and Lambert, D. M. (2001) Strategic Logistics Management, McGraw-Hill.
- [11] Zejian Fan, Weiwei Zhang (2003) Evaluation of Suppliers on the Chinese Market, Logistics and Transport Management, Graduate Business School, School of Economics and Commercial Law, Göteborg University