



STRATEGIES, BARGAINING POWER AND LEADERS IN THE SUPPLY CHAIN

Sylwia Konecka, Marek Matulewski

Poznań School of Logistics, Poznań, Poland

ABSTRACT. In the introductory section, the Authors discuss major determinants affecting the operation of enterprises in the contemporary economy, including information, time, globalisation and - above all - organisational integration and network formation tendency. The discussion is complemented by a presentation of concepts which are dealt with in the subsequent sections. In the following part, relations that can occur within the supply chain are described. Based on available literature, an in-depth account of the concept and importance of bargaining power is presented, focused on its impact on the development of supply chain relations and the resulting potential role of supply chain links, the leader role in particular. Finally, results of literature reports and own empirical studies are used to describe possible strategies used in the supply chain.

Key words: strategies, supply chain, bargaining power, relations.

INTRODUCTION

In the contemporary setting, running business activity of any type requires attention to the following factors: information, time pressure, widespread globalisation, organisational integration and the economy's network structure.

Ours is an information society. As a result, it is hard to imagine a situation whereby a business entity does not have a well-developed information system or information elements of network organisations. The phenomenon is a natural consequence of the fact that "information has now become a value which, in addition to capital, physical and human resources, may achieve a level that has a decisive role in determining the existence and development of companies" [Jabłoński, 2003]. Time pressure is a direct consequence of (...) the role of time in the management process. Product life cycles are now shorter than they used to be, industrial clients and distributors demand on-time deliveries, while final users have no qualms about buying other manufacturers' brands if the product of their first choice is temporarily unavailable" [Christopher, 1998]. All these elements make it necessary to implement changes in the management of different types of activities (e.g. relating to the launching of new products) with a view to reducing, as far as possible, the time from order placement until the receipt of payment. In addition to shortening order cycle time, the changes referred to above also concern the choice of distributors and cooperating parties, distribution and post-sale activity.

Faced with local market saturation, large chains expand abroad which, given deepening internationalisation, give it distinctive signs of globalisation. Globalisation can be defined as a "(...) process of elimination of national boundaries and development of links between various countries,

resulting in a modern capitalist world state" [Tetzlaff, 2004]. The development of such structures as the market or global company has completely changed the way business activity is conducted. A global company "(...) mostly integrates its activities in such a way as to capture links between different countries. The company pursues a coordinated strategy. Basically, there are no sub-strategies for individual national markets; the way the company operates on these markets is a derivative of the global strategy (...)." The global market is a segment or a niche for a product that is recognised all over the world and found in all countries regardless of their economic development and culture" [Kozłowski, 1995]. Globalisation affects both financial markets and markets in goods and services, science and technology and the so-called information production (which, in a largely simplified definition, refers to the production of knowledge and processing of information) or the labour market.

In addition to globalisation, another important aspect is the network structure of the economy. Until relatively recently, individual enterprises were thought to be the basis of the market and market competition. At present, it is entire chains or networks that engage in competition. As Ciesielski claims, "economy was never a set of small, medium-sized and large enterprises existing independently and affecting other market entities exclusively through its supply and prices" [Ciesielski, 2009].

Another aspect of conditions inherent in running business activity is organisational integration. This refers, for example, to such solutions as the supply chain. The supply chain consists of "a network of organisations engaged, through their association with suppliers and customers, in diverse processes and activities which create value in the form of products and services supplied to final consumers" [Baldwin, 1997]. Another example is the logistic network. The network refers to "a group of independent companies which compete and cooperate to improve the effectiveness and efficiency of product flow and accompanying information, according to customer expectations" [Kisielnicki, 2005].

NETWORK LEADER AND BARGAINING POWER

The economic structure within the supply network is largely defined with the role (of a leader, partner, etc.) which a company is able to perform due to a particular system of positions and relations. Depending on product and industry type, different links of the supply chain (manufacturer, network customer) may gain the leader position. Enterprises operating within supply networks must take into account the existing distribution of bargaining power and current relationships, and strive to achieve changes that would swing the balance in their favour. It seems that the best solution is to seek a company in the supply chain which will be responsible for the coordination of activities. It can then be assumed that each enterprise in the supply chain is capable of achieving its value chain. However, there are claims proposing that a "centrally" coordinated network will not be able to attain a leading competitive position due to being insufficiently flexible.

However, it is beyond doubt that the pursuit and increase of competitiveness depends to a large extent on relations between network participants. Possible interdependencies in the "supplier-customer" relationship are accounted for in the so-called CCC paradigm. It includes competition and cooperation, but also the element of "control", i.e. striving to achieve economic power or attain and use dominant bargaining power. "CCC mechanisms are "equally powerful" means of coordinating inter-organisational decisions. Consolidation of the company's market position is associated with competition if the company believes this is the way to achieve the valorisation of its resources or if it is unable to follow the control and/or cooperation strategy. The same holds for control and cooperation. A strategic analysis reveals their advantages and disadvantages in specific market configurations and company resources" [Sulejewicz, 1997]. Within networks, one can notice the establishment of a combination of competition, cooperation and control in relationships with business partners. Network relations are accommodated within the leader-company's strategy who determines their nature in such a way as to valorise its pool of resources. It is very difficult to specify exactly what attributes and aims pursued by the leader are conducive to the emergence of specific relationship types. Certainly, the type of resources held by the leader's network partner matters: key resources determine partnership-type relations, while non-key resources promote use of the bargaining power.

There are certain elements of bargaining power that are typical of suppliers, customers, and those that generally (i.e. both for the supplier and customer) determine the bargaining power. Determinants of the supplier's bargaining power include: diversification of raw materials, costs of changing suppliers in the industry, access to substitute raw materials, degree of supplier concentration, importance of volumes ordered from a single supplier, relationship between costs and total number of purchases in the industry, influence of raw materials on costs or diversification, threats related to progressing company integration in the industry vs. risks involved in gradual disintegration. On the other hand, determinants of the purchaser's bargaining power include mainly: advantage resulting from bargaining power, concentration of buyers vs. concentration of companies, number of purchasers, costs of changing buyers vs. costs of changing companies, information held by buyers, disintegration potential, substitution products, push, price flexibility: relation of the price to the total purchase value, product diversification, brand identity, impact on quality or results, purchaser's profits, incentives for decision-makers.

Still, it is difficult to pinpoint precisely what determines the CCC combination or bargaining power within a network, though understanding these issues is of key importance for exploring processes taking place in supply networks. Therefore, it seems apt to present an outline of views concerning bargaining power included in literature dealing with this topic.

Before an organisation even embarks on implementing a strategy in the supply chain, it must thoroughly understand the distribution of power. Bowersox and Cross claim that power is one of three basic factors (the remaining being risk and leadership) required to understand the structure, order and management of the supply chain [Bowersox, Cross, 1996]. Porter identifies the customer and supplier bargaining power as two factors determining the company's competitive position [Porter,]. The majority of authors focus on relations where the customer holds the advantage. In these circumstances, the introduction of non-adversarial partnerships with suppliers enables them to keep up their activity [MacBeth, 2002, de Lourdes Veludo et al. 2004].

There are also claims that depleted supply chain management usually identified with using relying on cooperation with a limited number of suppliers and such activities as supplier development programmes is based on the assumption that the supplier is capable of establishing terms and conditions of supply contracts. However, a larger supplier with a greater bargaining power can take control of the recipient, leaving the customer with very limited capacity to impose their conditions.

On the other hand, in the resource-based approach power is perceived as an element depending on the attractiveness of resources and the other party's ability to obtain them from other sources. Another factor which must be taken into account analysing the distribution of power in the supply chain pertains to regulations that are in place in different industries. They play a major role when they are treated as a basis for the ongoing free competitive market struggle.

It is also vital for different links to use their advantage in relationships holding within the supply chain. According to Cox, conflicts existing in the supply chain arise as a result of the supplier competing with the customer for added value and in vertical-type competition. In such conflicts, power is the decisive factor determining the division of value between the supplier and recipient. The power element becomes very prominent when there is a division of risks and rewards in the supply chain, with different organisations seeking to attract value both horizontally (i.e. from their competitors) and vertically (from suppliers and customers) [Cox, 1999]. Cox goes further arguing that in order to succeed, an organisation has to dominate the supply chain to gain value and attain the strongest position on the chain, effectively preventing other supply chain participants. When suppliers dominate, recipients might try to win over the supplier's value by eroding their "insulation mechanisms" and forcing them into a situation dominated by the recipient. Business practice shows that a number of companies use their size and power to press suppliers into "cooperation" [Cox, 2001].

It is suggested that the use of power brings short-lived benefits but does not increase value for the customer. Recipients who take advantage of their bargaining power over a short period often achieve the opposite results, e.g. by throwing out suppliers from business. Such actions tip the balance (in competition between suppliers) in the industry to their disadvantage. Both suppliers and customers need appropriate relationships to be able to exist and invest in their activity. If suppliers go out of

business due to activities undertaken by dominant customers, the supplier market becomes more concentrated. As a result, the customer may lose their position in the supply chain [Watson, 2003].

Benefits derived from partnership should not be overlooked, either. Potential benefits of integrated cooperation in the supplier-customer relation are discussed by M. Maloni and W.C. Benton. They assert that supplier-customer cooperation yields important benefits to customers mainly by reducing their level of uncertainty relating to costs of materials, quality, order completion times, availability and response time. By the same token, the uncertainty of suppliers (concerning the market, understanding consumer needs and product/material specifications) is also reduced. In relations of this kind, it is also the uncertainty of activities undertaken by both parties that decreases. This aspect refers to restricting opportunistic attitudes, increasing communicativeness, reward and risk sharing, convergent expectations and goals, and reducing external effects. In addition to the benefit of reduced uncertainty, operating in the integrated supplier-customer relation also brings other advantages in the form of cost reduction (due to effects of economies of scale in ordering, production, transport, lower costs of administration and changes, integration of processes, technologies, increased utility of resources). Also, it increases the response capability by joint product and process development, quicker market access and shorter delivery times [Maloni, Benton].

STRATEGIES IN THE SUPPLY CHAIN

There are a number of different definitions of strategy in reference literature. For the purpose of this paper, the following definition of strategy is assumed: "(...)

- set of decisions and activities concerning the choice of methods and resources leading to the achievement of goals;
- establishment of common activities leading to the accomplishment of hierarchical objectives in a specified period;
- activity undertaken to maintain the enterprise's activity in competitive conditions over a long period and in order to keep own capital, assuming that the business environment is duly explored and the desirable market share is achieved;
- creation of long-term competitive advantage;
- means to achieve the mission of the enterprise,
- the art of choice making" [Marchesnay, 1994].

At the same time, it should be borne in mind that to properly understand the notion of strategy in the context of a company, it is essential to take into account the hierarchical structure of each element. This line of reasoning gives rise to the so-called strategy levels. The number of levels discussed in reference literature varies from two to four. In the simplest framework, two levels can be distinguished: global strategy (referring to the enterprise as a whole) and part strategies (referring to individual functions, e.g. marketing or R&D). The most complex model specifies a total of four strategy level within each enterprise. These include strategies relating to the goals of the enterprise as a whole, industry strategies, functional strategies and operating strategies. A more useful concept, however, is based on three levels of strategies: The most complex level is related to the strategy pursued by the company as a whole. Another level accounts for strategic units distinguished within a given business entity. The third level is composed of functional strategies concerning such areas as marketing, research, finances or production [Gorynia, 2007].

The strategy of enterprise networks (depending on their type and potential) encompasses selected strategic issues. These are, among others, the strategy of joint R&D, the strategy of joint product launching, the strategy of joint production, the strategy of joint sales and purchasing, the strategy of common actions towards authorities and towards market competitors. Typically, within a network of enterprises, one (or several) companies assume the leading position in creating and fulfilling the

strategy. As already mentioned, strategies adopted by enterprises operating within a network must take into account the distribution of bargaining power and existing relationships.

Analysing the results of pilot questionnaire-based studies conducted by the authors of this paper in 2007 in a sample of 271 enterprises, of which the majority belonged to the group of large enterprises (with staff levels exceeding 250 employees), it appears that most companies declared they felt no domination. However, enterprises stating in the questionnaire that a degree of dominance was present in their relations with suppliers or customers were mostly large enterprises. Detailed information is included in the table 1.

Table 1. Type of enterprises analysed (by employment level)
 Tabela 1. Rodzaj badanych przedsiębiorstw ze względu na wielkość zatrudnienia

		Enterprise size			
		No data available	Small	Medium-sized	Large
Enterprises	Number	17	7	8	16
	% (of 48)	35.41	14.58	16.66	33.32
Enterprises which feel no dominance in business relationships	Number	84	52	37	50
	% (of 223)	37.67	23.32	16.59	22.42
All enterprises under study	271 (100%)	91 (33.58%)	59 (21.77%)	45 (16.61%)	66 (24.35%)

Source: own study

As for the position of companies within the supply chain, one can make the categorical claim that enterprises seek to achieve a principal role and become leaders within the supply chain. There are no clear and unambiguous answers as regards imposing terms of cooperation or making companies dependent on their partners. This clearly points to the fact that the Polish market is not stabilised in terms of the role a company plays in the supply chain. On the one hand, companies want to impose their requirements on other enterprises, however they may lack appropriate competences to have economic power and become a focal company within the supply chain. On the other hand, companies under study would like to be on partnership terms with companies they feel worthwhile to identify with.

Depending on product and industry type, different links of the supply chain may gain the leader position. Studies completed at the Poznań School of Logistics (WSL) show that, conversely to claims included in reference publications which place an emphasis on the shift of the dominant position from manufacturers to retailers, suppliers or other entities in the supply chain, it is mainly producers that hold the dominant position and have the most far-reaching influence on strategic decisions that are taken in the supply chains. Producers are followed by suppliers of prefabricated goods and logistics service providers. After them come wholesalers, distributors and, finally, retail networks. The above data show that it is still producers who hold the power in terms of influencing strategic decisions, though this does not determine their role as supply chain coordinators.

It should also be stressed that companies analysed in the study were tasked with describing competitive strategies they usually apply in their cooperation with other enterprises in the supply chain. The questionnaire included no questions relating to strategies jointly implemented in the supply chain, since the replies could be subjective. Not always the strategy pursued by the company coordinating the supply chain is the best solution for enterprises it cooperates with. Naturally, results of our studies may not be a basis for any definite assessments of strategies employed in the supply chain, however they are a good starting point for further research in this area.

According to results obtained in the study (including previous research - Poznań School of Logistics (WSL), KZSL -1/05), a total of 44% enterprises pursue low cost strategy. The idea behind

the strategy is to achieve a long-standing competitive advantage in terms of costs. In this case, the starting point must be a cost analysis based on the identification of a specific (applicable to a particular analysed case) value chain and on the assignment of all existing costs and assets to individual value-determining activities. The assignment should be effected the moment the company under analysis achieves average results. Cost analyses are then performed (very frequently with the help of dedicated IT systems), followed by drawing conclusions and taking definite actions. Obviously, one should keep in mind that the sources of this advantage can vary greatly. These include, among others, effective use of the economies of scale (opportunity to execute certain activities differently and in a manner that is more efficient in each respect or occurs on a greater scale, or the possibility to distribute costs over a larger volume), technology matching demands or convenient access to raw materials and components.

Furthermore, ca. 56% of surveyed companies used diversification strategy. The essence of the strategy is to create the "uniqueness" of the company's products. Putting it in other words, in order to stand out from its competitors, a company should seek to perform certain activities in a unique way, differently from commonly recognised ways. The aim of the strategy is to achieve competitive advantage as a result of permanent diversification of products on offer. There are different ways to realise the diversity. Some of them include: labour cost reduction, shortened manufacturing process, decrease of raw material consumption levels, lower installation costs or shorter installation time. Certainly, well-defined stages are necessary to implement the strategy efficiently. They are listed in the table 2.

Table 2. Stages in implementation of the diversification strategy
 Tabela 2. Etapy realizacji strategii zróżnicowania

No.	Stage	Activity
1	Establishment of buyer	Establishment who the actual buyer is. Aside from final consumers, distributors can also be buyers.
2	Identification of the buyer's value chain	It is necessary to identify the buyer's value chain and, furthermore, how it is affected by activities undertaken by the enterprises.
3	Establishment of criteria assigned by the buyer	Establishment of criteria which the buyer assigns to products. The process needs to be repeated systematically and the list of criteria adopted by customers must be updated on a regular basis.
4	Identification of existing and potential sources of diversification	It needs to be established which activities are of significance from the point of view of previously adopted criteria and then compared with sources of diversification used by the competition (in other words, the company's own value chain must be compared with those of the competition).
5	Investigation of existing and potential sources of uniqueness	Establishment of costs which an enterprise needs to incur to achieve diversification.
6	Selection of the most favourable configuration of activities	It is necessary to select the best (in value terms) configuration of activities to be taken. In this case, the goal is to select a configuration of activities which will make it possible to achieve the greatest difference between value generated for the buyer and costs of diversification.
7	Analysis of selected diversification strategy in the aspect of its permanence.	It is necessary to conduct an analysis of selected diversification strategy in the aspect of its permanence. The permanence of diversification depends on the stability of sources of value for the customer and the existence (generation) of barriers which render imitation difficult.
8	Reduction of costs of insignificant activities	It is necessary to decrease costs of these activities which do not contribute to generating value for the buyer.

Own study based on [Porter, 2006]

What is more, it needs to be emphasised that ca. 10% of enterprises opt for the strategy of waiting. The strategy essentially refers to a host of measures aimed at avoiding or limiting the scope of confrontation. Examples include e.g. single-segment strategy, strategy of selected buyers, economic

delivery lot, "one-step-behind" the competition, deliberately low standards or the strategy of promises and service declarations [Kempny, 2001].

The remaining 35% of enterprises use the integration strategy. The strategy is based on understanding and managing sequences of activities from the supplier to the ultimate customer which, in effect, yields extra benefits. Only full coordination of activities within the entire supply sequence, i.e. from sources of raw materials to the delivery of final goods, using advanced information infrastructure (equipped with integrated information systems) is a guarantee of achievement of preset goals.

It must be stressed that of all tasks relating to the implementation of time-oriented strategies, surveyed companies most commonly use cross-docking (79%) and the concept of efficient customer service (80%). Equally popular measures include the barcode technology (80%), electronic data exchange systems (70%), and JIT and QR (54% of respondents). As for tasks relating to the strategy of increasing asset productivity, 78% of enterprises mentioned the delivery method directly from the works. Also, a considerable proportion of companies indicated a reduction in material handling equipment (74%). Deliveries directly to stores are effected by 48% of enterprises taking part in the survey. The substantial 62% of companies use the services of external logistics providers. Merely 42% of respondents are aware of the effectiveness of transaction costs reduction which is one of the possibilities of affecting the process of adding external value to products, mainly related to customer negotiations. Meanwhile, 72% implement the strategy of adding external value e.g. by consulting the sale agreement individually with the customer. An increasing number of companies shift from the push to the pull system. This basically means that a product is manufactured only after an order has been placed (70%) and contract terms and conditions are negotiated to cut logistics costs or improve customer service (78%).

REFERENCES

- Baldwin C.Y., Clark K.B., 1997, *Managing in an Age of Modularity*, Harvard Business Review, September-October, 7.
- Bowersox D.J., Cross D.J., 1996, *Logistical Management: The Integrated Supply Chain Process*, McGraw-Hill Sigapore, NY, 399.
- Christopher M., 1998, *Logistyka i zarządzanie łańcuchem podaży*, Wydawnictwo Profesjonalnej Szkoły Biznesu, Cracow, 29.
- Ciesielski M., 2009, *Instrumenty zarządzania łańcuchami dostaw*, PWE, Warsaw, 13.
- Ciesielski M., Łupicka A., *Kształtowanie relacji pomiędzy dostawcą a odbiorcą w sieciach logistycznych*, projekt badawczy WSL, KZSL -1/05.
- Cox A., 1999, *Power, Value and Supply Chain Management*, Supply Chain Management: An International Journal, Vol. 4 (40, 167-178).
- Cox A., 2001, *Understanding Buyer and Supplier Power: A framework for Procurement and Supply Competence*, Journal of Supply Chain Management, Spring, Vol. 37, 8.
- De Lourdes Veludo M., Macbeth D.K., Purchase S., 2004, *Partnering and Relationships within an International Network Context*, International Marketing Review Volume 21, (2), 142-157.
- Gorynia M., 2007, *Strategie zagranicznej ekspansji przedsiębiorstw*, PWE, Warsaw, 34.
- Jabłoński Wł., 2003, *Zarządzanie informatyką w przedsiębiorstwie*, Wydawnictwo Wyższej Szkoły Zarządzania i Marketingu w Sosnowcu, Sosnowiec, 16.
- Kempny D., 2001, *Logistyczna obsługa klienta*, PWE, Warsaw, 106.
- Kisielnicki J., Sroka H., 2005, *Systemy informacyjne biznesu*, Wydawnictwo Placet, Warsaw, 168.
- Koźmiński A.K., 1995, *Zarządzanie. Teoria i praktyka*, Wydawnictwo Naukowe PWN, Warsaw, 410.

- Marchesnay M., 1994, Zarządzanie strategiczne. Geneza i rozwój, Poltext, Warsaw, 171-176.
- Porter M.E., 2006, Przewaga konkurencyjna: osiąganie i utrzymywanie lepszych wyników, Gliwice, Helion, 207- 209.
- Sulejewicz A., 1997, Partnerstwo strategiczne. Modelowanie współpracy przedsiębiorstw, AGH, Warsaw, 66.
- Tetzlaff R., 2004, Weltkulturen unter Globalisierungsdruck, Bonn 2000 [after] Rymarczyk J., Internacjonalizacja i globalizacja przedsiębiorstw, Warsaw, PWE, 21.
- Watson G., Power and value appropriation, Supply Chain Management: An International Journal, Vol. 4, No. 4/1999, 198.

STRATEGIE, SIŁA PRZETARGOWA I LIDERZY W SIECI DOSTAW

STRESZCZENIE. Autorzy na wstępie wskazali istotne determinanty funkcjonowania przedsiębiorstw we współczesnej gospodarce m. in. informację, czas, globalizację a przede wszystkim integrację organizacyjną i sieciowość, przybliżając przy tym pewne terminy, niezbędne dla rozumienia dalszej tematyki artykułu. Następnie wskazano relacje, jakie mogą zachodzić w sieci dostaw i na podstawie literatury szczegółowo omówiono pojęcie i znaczenie siły przetargowej dla kształtowania się tychże relacji i roli, jaką mogą przez to pełnić ogniwa sieci dostaw, w szczególności roli lidera. Ostatecznie na podstawie wyników badań literaturowych i własnych, empirycznych opisano możliwe strategie w sieci dostaw.

Słowa kluczowe: strategie, sieć dostaw, siła przetargowa, relacje.

STRATEGIEN, VERHANDLUNGSMACHT UND LEADERS IN LIEFERKETTE

ZUSAMMENFASSUNG. Am Anfang des Beitrages haben die Autoren relevante Determinanten der Unternehmensaktivitäten in der gegenwärtigen Wirtschaft, u.a. Information, Zeit, Globalisierung, Organisationsintegration und vor allem die Netzwerkbildung dargestellt. Im weiteren Teil wurden Relationen aufgezeigt, welche in den Lieferketten auftreten können. Desweiteren wurden - aufgrund der Literaturquellen - der Begriff und die Bedeutung der Verhandlungsmacht für die Gestaltung dieser Relationen und die Rolle, die die einzelnen Glieder der Lieferkette spielen können, detailliert dargestellt. Schließlich, auf Basis der durchgeführten Literaturrecherchen und empirischen Eigenstudien, wurden mögliche Strategien in der Lieferkette dargestellt.

Codewörter: Strategien, Lieferkette, Verhandlungsmacht, Relationen.

Marek Matulewski PhD
Sylwia Konecka
Poznań School of Logistics
ul. Estkowskiego 6
61-755 Poznań, Poland
Tel: +48 061 850 47 92
Fax: +48 850 47 89
Marek.Matulewski@wsl.com.pl
Sylwia.Konecka@wsl.com.pl