

Cooperative and competitive relationship strategies in supply chains: evidence from Russian market

Key words: supply chain management, cooperative and competitive strategies, Russian market

Introduction

Supply Chain Management (SCM) — is one of the most popular and rapidly developing concepts in the field of strategic management, marketing and logistics in past decade. It was conceptualized as strategic-level logistics at the 80-s and then developed in different perspectives; such as marketing, logistics, strategic management, supply, etc. Probably the greatest influence on SCM concept was made by the theory of strategic management, which includes competitive strategies introduced by M. Porter, resource-based approach and the concept of core competences. Today SCM is widely adopted concept, popular among researchers, consultants and practitioners and getting more and more important for marketing specialists. It happens due to customer-orientation trend and putting customers' values first. SCM integrates key business functions (planning, logistics, marketing, etc.) of several firms (in supply chain) with purpose for meeting customers' requirements and bringing them maximum value by producing innovative products. We assume that further development of SCM will find itself in the field of marketing and customers' value and will follow the emerging of new technologies and development of new paradigms in strategic management (the dynamic capabilities theory, for instance). In our paper we answer the questions what capabilities do the companies need to create the value for customers in supply chains. To answer this question we made a theoretical investigation and analyzed the data of 152 companies at Russian market.

Towards the new dominant logic of Supply Chain Management

As it was stated by many researchers, that the shifting environment reflects in deep changes in supply chain management theory and practice. The concept of demand chain management as a customer-oriented substitute of Supply Chain Management was introduced (see for example Jüttner et. al., 2007; Heikkilä, 2002). The basic factors that influence on SCM transformation are the following characteristics: 1) customers become more and more sophisticated (it is hard to surprise customers, they know a lot and want even more); 2) features of most products become equal (or very close to each other; it mean that competitors are able to copy any innovation in a short period of time); 3) price competition getting even more tough (customers on different markets compare prices and studying how to save their money and social networking gives them such an opportunity); and, finally, 4) transition from a sellers' to a buyers' market (an old thesis, which only now gains real meaning) (Christopher, Peck, 2003, Prahalad, Ramaswamy, 2004). Hence, complicated marketing environment forces companies to look for new sustainable competitive advantages and one possible way to get them is to produce products with higher value for customers. That is why the mechanism of value creation is of particular interest for contemporary marketing theory and practice. We assume, that comparably higher value could be created in supply chains. From this perspective, supply chain is a continuum of pairs of relationships between companies that finally form a network, as it happens in social networks. For better understanding of the nature of relationships in supply chains we made a theoretical investigation.

Following T. Schelling (2007) we assume that all partners are at conflict with each other. It doesn't mean that they want to annihilate counterparties like the enemies. It means that they compete for the profit, but they need to collaborate to make this profit as high as possible. Consequently, partners always compete because of profit, but they need to produce this profit out of exchange.

The object of conflict between counterparties is the amount of profit. Supplier always has its lowest price (supplier can't sell below this price) and always wants to sell its products/services at a highest possible price to increase own profit. On the other hand, client has its highest price (client can't buy above this price) and always wants to buy at lowest possible price to increase own profit. The price of the contract couldn't be less than lowest price of the supplier and higher than value of goods/services for the client (the highest possible price is value), at least in the longrun (sometimes possible in shortrun). The price usually closer to the weaker side; it means that price should be higher for weaker buyer than for strong, The same is for supplier. For example, if the client has the

opportunity to choose out of several suppliers, it dominates in relationships and is able to shift the price down *ceteris paribus*. In other situation, when the share of particular client is very small in supplier’s turnover, the supplier dominates and is able to push the price up, *ceteris paribus*.

We have analyzed the types of relationships and identified three basic strategies that are very similar to the types of buying behavior that were introduced by N. Campbell (2002): competitive, cooperative and command strategies. The first type is competitive (or independent) strategy. The companies use competitive strategy in situation, when there are a lot of alternatives for supplier/client to choose (perfect competition), when the product is highly standardized, when it is not the core product and so on. Competitive strategy presume counterparties do not fall in protracted relationships, that the *ex ante* transaction costs are low enough, so the parties are able to look for new supplier on the next stage. The good example of competitive relationships on b2c market is the housekeeper who buys household goods. According to our in-depth interviews usually the customer doesn’t remember what household brand of aluminum foil or waste bags s/he used previously (the usage cycle is usually long) and he starts to evaluate each brand and each stock keeping unit on the shelf of supermarket as for the first time (transaction costs of doing it are lower than transaction costs to remember the information about the brands). That is why price is very significant in this segment and there are not much premium brands there.

Competitive strategy of relationships means that companies cooperate to increase the profit. Classic supply chain is the example. In supply chains companies cooperate to decrease the amount of waste (for example, see bullwhip effect). The cooperation accompanied by positive transaction cost, usually in form of specific investments. If the companies invest in specific information system, so they are not able to use it elsewhere. On the other hand, the partners in supply chain are able to save money by decreasing amount of stocks, efficiently planning and so on. In other words, cooperative strategy requires investments but gives an opportunity to increase profits. Usually the companies fall in protracted relationships and the *ex ante* transaction costs are high. That is why such relationships are more constant, lasts for longer time and requires positive atmosphere, trust and commitment between parties. The example from b2b market is when the companies cooperate and share the information of their sales, production capacity, and stocks on-line. The well-known practice of Procter-and-Gamble (brand Pampers) and Wall-Mart is outstanding example. For differences between cooperative and competitive strategies, see table 1.

Both cooperative and competitive strategies are efficient (the profit is efficiently distributed between two parties). If the profit is distributed not efficiently it means that one of the companies uses command strategy. Inefficiency could arise out of two sources. The first one is political decision of shareholder(s). For instance, in situation when somebody owns two companies (supplier and client) and decides to accumulate profit in one of them (to decrease taxes, for example), it would cause inefficient relationships and we describe it as command strategy. The second source is opportunistic behavior of the managers in one of the company. The good example is when sales manager from one side and purchasing manager from another side work for a long time together and make some kind of friendship, one of them may act opportunistically by pressing the other side to accept more favorable prices (if you are in friendship, it is hard to reject). Due to its inefficiency, we don’t analyze this type in our research.

*Table 1. Criteria of cooperative/competitive types of strategies
(adopted from [Campbell, 2002])*

Criteria	Cooperative strategy	Competitive strategy
<i>“Integration” group of criteria</i>		
The integration of key business-processes with suppliers (and other partners)	No	Yes

Integrated process of strategic development	No	Yes
Integrated information system	No (might be)	Yes (condition)
Joint orientation on ultimate customer	Yes (косвенно)	Yes
<i>“Mutually beneficial” group of criteria</i>		
Mutually beneficial relationships	Yes	Yes
Longitude relationships	No (might be)	Yes
Joint work for driving efficiency	No (не является целью)	Yes (является целью)
<i>“Number of sources” group of criteria</i>		
Our strategy is to work with several suppliers for each supplied product/material	Yes	No
We try to decrease the amount of suppliers in order develop longitude relationships with several suppliers	Yes	No
We don't decrease the amount of suppliers to avoid dependence of one supplier	No	Yes
<i>“Decision making factor” group of criteria</i>		
Price is a key parameter for decision making	Yes	No
Quality is a key parameter for decision making	Yes	Yes

Each relationship between two parties could be classified as “more cooperative” or “more competitive”, or “more command”. We assume that each relationship follows all of types of strategies and it does not stick only to one of the type. Marketing perspective of SCM means that companies cooperate in order to generate more value. The extra value could be found in innovative or modified products — companies use the existing supply chain to establish the network of knowledge that allows them to invent new and modify old products according to ultimate customer value system (companies cooperate to increase its flexibility and capabilities in reaction to customers' requests). In both cases the interface of SCM could be used, the arranged procedures and administrative routines would be helpful. Finally, the increasing of value means that the company (chain of companies) is able to increase contract price and, as a result total profit.

The research

After theoretical analysis several important questions have been raised. (H1) What characteristics of each of the company refer to each type of the strategy? We suppose, that companies predominantly with cooperative strategy of relationships tend to have long relationships with their partners, jointly develop some of their business processes and even have joint strategic planning and, finally, discuss future demand (quantitative and qualitative characteristics).

(H2) Are there any significant relationships between relationship strategy and departments, that are involved in process of supply. We suppose that Marketing department should be more involved in cooperative relationships.

(H3) Are their any specific evaluation factors (criteria that lie in the base of evaluation of the supplier). We suppose that such factors as cost reduction should not differ, but such factors as specific investment and similarity of the goals or strategic outlook of relationships differ really significant.

(H4) Are there any positive influence on different aspects of the companies, such as business processes development.

To answer these questions we analyzed the data from 152 companies out of 36 regions in Russia. The questionnaire included 43 questions on topics of marketing and purchasing strategies and some general questions. 54.9% of companies were established in the year 1990 or later. Most of the companies (63.7%) employ from 100 to 1000 workers; 24.9 — less than 100 employees; 8.4 — more than 1000 employees. 10.1% of companies has turnover of not more than 10 000 000 rubles (approx. €277 000); 30.9% — from 10 000 000 to 100 000 000 rubles (€277 000–€2770000); 46% — from 100 000 000 to 1 000 000 000 rubles (€2 770 000–€2 000 000), 12.7% more than 1 000 000 000 rubles. All the scales, that are described in this paper used the Likert scale from 1 to 5 (or from -2 to +2), where 1 (-2) – no correspondence and 5 (+2) full correspondence.

The findings

Using K-Means function (SPSS, version 16.0) we divided all companies in three clusters. The first cluster (tend to cooperative strategy) consists of 45 companies, the third (tend competitive strategy) consists of 39 companies. 58 companies choose mixed strategy. The data for 10 companies is missing. We take three clusters instead of two, because there is critical amount of companies that use different strategies in different situations. To divide companies by these clusters we used five questions (see table 2), that refer to our understanding of cooperative and competitive relationships. These criteria were chosen after the factor analysis that excluded several questions. It has proved (H1), that companies that have longer relationships with companies usually also is able to develop business processes jointly, have a collaborative strategic planning and discuss with partners the problems of demand. These are main differences from two different types of strategies.

Table 2. The description of clusters

Criteria (1 = doesn't correspond to the practice of the company; 5 = fully correspond to the practice of the company)	Clusters, mean values		
	1 – cooperative (n=45)	2 – combined (n=58)	3 – competitive (n=39)
Longitude collaboration	4,56	4,26	3,38
Collaborative discussion of future demand with suppliers	4,36	3,60	2,33
Collaborative development of business processes	4,33	2,79	1,36
Collaborative discussion of possible qualitative changes in demand with suppliers	4,27	3,29	1,74
Collaborative strategic planning with supplier	4,33	2,76	1,59

After providing the understanding of two clusters, we analyze their differences; especially what concerns of marketing perspective of relationships in supply chains. First of all, we analyzed how different departments (R&D, Production, Marketing, Finance department) are involved in process of supply (and relationships with partners). The departments of R&D and Marketing are usually more involved in process of purchasing, than in companies with competitive strategy of relationships (see table 3). We can explain it as more significant role of marketing in cooperative relationships — it means that companies understand the influence of suppliers' relationships to their market share development. It is also interesting to find out that such departments as Financial department or Production department are on about the same level. We suppose it happens because financial and production functions play the same role in different relationships.

Table 3. The involvement of departments in the process of supply

Criteria (1 = never involved, 5 = always involved)	Clusters, mean values		
	1 – cooperative (n=45)	2 – combined (n=58)	3 – competitive (n=39)
Research and Development	2,93	2,23	1,95
Production	4,00	4,02	3,45
Marketing	3,84	3,05	3,13
Finance	3,98	3,69	3,79

As it shown in table 4, evaluation criteria (H3) are not obligatory the same or higher for cooperative strategies, though some of them do. For instance, cost of reduction is equally important for both strategies. Less important is the innovation potential of supplier, probably because most of the companies do not face tough competition on Russian market. As we supposed, less important for competitive relationships are such factors as similarity of goals of both companies and suppliers' investment in relationship that could be described in not very long relationships of the companies.

Table 4. Important factors of evaluation relationships

Criteria (1 = low; 5 = high)	Clusters, mean values		
	1 – cooperative (n=45)	2 – combined (n=58)	3 – competitive (n=39)
Cost reduction as a result of relationships	4,67	4,25	4,34
Commitment of suppliers to particular relationships	4,56	4,14	3,56
Close relationships between partners	4,51	4,29	3,46
Similar goals of the companies	4,16	3,75	2,77
Suppliers' investment in relationships development	4,04	3,5	2,34
Strategic outlook of relationships	4,66	4,19	3,63
Innovation potential of supplier	3,86	3,41	2,53

On the next stage we have analyzed the answers of managers whether they think suppliers' relationships developed package design or sales, or business-processes, or quality (see table 5). We found out, that no serious development was only in quality (look in table 1, both types of relationships refer to quality of supplied goods and materials). Most significant difference was observed in design and business-processes, because these aspects could be developed only in lasting relationships with high level of commitment, trust and specific investments. On the other hand, most dramatic improvement could be observed in sales, but we suppose that it is because of high tempo of development of Russian market.

Table 5. Development of different aspects in the past 2-3 years (result of relationships with suppliers)

Criteria (1 = low; 5 = high)	Clusters, mean values		
	1 – cooperative (n=45)	2 – combined (n=58)	3 – competitive (n=39)
Design	3,36	3,12	2,22
Business-processes	3,58	3,2	2,54
Quality	3,93	3,81	3,18
Sales	4,17	3,71	3,28

Finally, we look at several marketing and financial figures, such as ROI, or market share that put us in picture of efficiency of different strategies. On all figures we see slightly better results of those companies, that use cooperative strategies, but they are not significant.

Table 5. Market and financial performance

Criteria (-2 = much worse, 2 = much better)	Clusters, mean values		
	1 – cooperative (n=45)	2 – combined (n=58)	3 – competitive (n=39)
Increasing the market share compare to main competitors	1,09	0,69	0,41
Increasing the sales	1,39	1,06	0,86
Customers' satisfaction	1,45	1,06	0,89
Developing the value for customers	1,23	1,06	0,92
Increasing the loyalty of customers	1,07	0,65	0,69
ROI	1,07	0,54	0,41

Conclusion

The paper analyses the theoretical investigation and practical results. We analyzed three basic types of relationship strategies in companies. After that we looked at empirical results of the survey. The figures, shown in tables, prove that cooperative relationships have bright future but only for several companies that do follow particular corporate strategy. It was important to show that in cooperative relationships marketing department and department of R&D are being involved in supply process much more often than in competitive relationships. It means the long-term relationships and effectiveness in long-run, so it is strategic relationships compare to more operational competitive relationships. Factors that are usually considered as important for evaluation the relationships differ according to preferred strategy. Thus, strategic outlook to the relationships and specific investments in relationships are more important for companies with cooperative strategies.

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