

# **From Industrial Marketing and Purchasing to Industrial Marketing Purchasing and Distribution – The case of Supply Chain Management**

Work in progress

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## **1 Background**

*Supply chain management* (SCM) is a popular topic that can be studied from different perspectives, such as system engineering, economics, sociology and strategic management. It is also popular as a management discipline, which is indicated by the various international conferences, books, and trade journal articles about this topic. But only few contributions demonstrate how to deal theoretically with the SCM phenomena. These include Handfield and Melnyk's (1998) work on the scientific theory building process shown with TQM, Mears-Young and Jackson (1997) on the need for a paradigm shift in logistics, New's (1995) research frameworks in logistics, and Logan's (2000) work on the use of agency theory to design outsourcing relationships. One of the main contributions in the field of SCM-modeling is the suggestion of Cooper et al. (1997), whose three-leg-model of components, structure and processes has been introduced from a managerial pragmatic point of view, but certainly lacks a theoretical ground, which e.g. the IMP-perspective (e.g. Håkansson and Snehota 1994 or 1995; Håkansson et al. 1999) can deliver.

We show in our article, how the network approach can be used to explain the phenomena of customer-driven relationship management called SCM. We think, that based on the main SCM characteristics, IMP can be widened to IMPD in order to include also the industrial distribution perspective. Several authors in the field of SCM refer to the network approach as a rewarding theory for the existence of supply chains (e.g. Skjoett-Larsen 2000). As for practical evidence and implications, we apply our notions to the case of Efficient Consumer Response, an industrial initiative that suggests a new way to manage distribution and purchasing relationships and to govern a structure in the fast moving goods industry.

## 2 A need for expansion?

Inter-organizational relationships represent the interface between buyers and suppliers. Ramification of repeated interaction into long-term relationships (Skjoett-Larsen, 2000), partnerships (Lambert et al., 1999) and alliances (Moore, 1998) are just few of many evidences of how both the discussion on firm boundaries and inter-firm relationships have been manifested in the logistics discipline. Inter-firm relationships can be described as “a mutual orientation of two firms towards each other” (Johanson and Mattsson, 1986, p. 5). Ford (1980, p. 42) contains that the concepts of “industrial marketing” and “purchasing”, respectively, can be described as “the management of buyer-seller relationships”. Accordingly, in order to understand business marketing and purchasing, we also must understand business relationships (Ford, 1997, p. xii). The typical understanding of SCM has been reflected upon from a relationship perspective (see e.g. Christopher, 1998; Skjoett-Larsen, 2000). Similar development has taken place in disciplines closely related to logistics such as purchasing and industrial marketing, which has resulted in a further manifestation of the concepts of supply chain management<sup>1</sup> and relationship marketing (recently upgraded to “customer relationship management” – CRM). Both these concepts emphasize the catering of relationships with suppliers and/or customers. Although SCM as an inter-organizational relationship constitutes the phenomenon to be explained, and hence the level of analysis, it is important to note that this perspective is not embedded in a unified “theory” or a distinct “approach” in the same sense as we refer to e.g. transaction cost theory. Neither does it comprise an independent discipline similar to marketing, accounting, purchasing, innovation, or logistics. Rather, our view on inter-organizational relationship has its basis in contributions *from* these disciplines. This view is supported by Thorelli (1986, p. 450), who suggests that the “network paradigm” should be viewed as a supplement and not substitute to the theory of

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<sup>1</sup> In 1998/1999 the National Association of Purchasing Management (NAPM) changed the name of their academic journal from ‘Journal of Purchasing and Materials Management’ to the ‘Journal of Supply Chain Management’.

the firm, market, and industrial organization. Although the network is presented here as a complementary to other theories and disciplines, Thorelli (1986) speaks of a “network paradigm” in the sense that “Networks are ubiquitous. Perhaps the most obvious example is distribution *channel systems*. When the analysis of such systems extends to matters of power, influence, trust, expertise, and information flow, writers are really making use of the network paradigm” [Emphasis in original text].

The existence of SCM is due to the general notions that the attention was drawn from competition between individual firms to a competition of broader network of relationships. These relationships are defined then as an inter-organizational unit that generates competitive advantage. Albeit Thorelli (1986, p. 454) views the network as a form of “quasi-market”, located on a continuum between the firm and the open market, he argues: “the end is not in sight for the open market competition in its most multifaceted form”. Rather, networks add a new dimension to competition – an “inter-network competition”. An issue that has been brought further into the logistics discipline by the assumption that the competitive domain is not necessarily firm vs. firm, but rather a supply chain vs. supply chain. (Lambert and Cooper, 2000). Håkansson (1993, p. 211) discusses then networks as a mechanism to develop resources and identifies suppliers and customers, respectively, as “two of the most important interfaces from a resource perspective”.

### **3 Potential areas of cross-fertilization**

We can identify eight aspects of inter-organizational relationships in a purchasing and distribution network that may be used to enrich the current understanding of inter-organizational relationships. One of the predominant origins of the network approach is based on the idea that relationships as units of analysis can provide a better understanding of industrial markets. That is, the concept of relationships is applied to limit the focus of study. In SCM, however, relationships have been used to broaden the domain of IMP.

The flow of goods is viewed across the inbound (= Purchasing) and outbound boundaries (= Distribution) of the firm. Based on this, some researchers have actually moved their focus away from the flow itself to the customer-supplier interfaces of the company by referring to the network approach. Second, it has been argued that relationships are fundamental for every business' ability to operate and prosper. Economic actors acknowledge their limited knowledge and do thus only control a certain portion of resources. Hence, firms do not only act or react. They also interact. Third, relationships are not only driven by the economic logic of division of labor, but do moreover both overlap with, and even fall beyond the conventional efficiency criteria of SCM. Fourth, inter-firm exchanges that aim towards the exchange of resources between two separate firms often imply a high degree of repetitiveness and continuity. When individual exchanges evolve into the continuous interactions that are termed relationships, they can be shaped by an almost infinite number of factors: Trust, power, mutuality, longevity, and their connectedness to the wider network of other dyadic relationships. Researchers seem to be aware of this multiple nature of the network approach, and acknowledge that the individual study should only include a limited set of concepts to explain the relationship. Fifth, inter-firm dynamics can be related to at least three factors: a) a firm's strive for positioning itself against other network members; b) relationships develop in sequences (e.g. Ford, 1980) and c) relationships go through cyclical stages of evolution (e.g. Ring and Van De Ven, 1994). Although relationships simultaneously embrace continuity and dynamics, as well as stability the endeavor for the last, for example the attempt to reduce the negative consequences of the bullwhip effect, may close the windows of innovativeness. SCM may benefit much from the dynamic dimensions of a relationship. This may both be related to development of the relationship itself, and in particular how the actors in the supply chain may learn from each other.

It is thus proposed that the conventional logistics focus on exchange processes (flow of materials) should be complemented by the notion of adaptation processes proposed by the network approach. To achieve a greater acceptance and understanding of dynamics in SCM, the sixth assumption implies that the emphasis on productivity as an efficiency criterion of SCM relationships arrangements must be complemented by innovativity. This implies that we give SCM the opportunity to be viewed not only as an output-oriented relationship but also a learning oriented relationship. Ultimately, this will facilitate the view on SCM as a means to configure logistics resources and competencies. The seventh assumption ascribes inter-firm relationships a role in facilitating the learning processes. Learning does not only occur within the individual firm. The firm can also learn either *from* or *with* their suppliers. Instead of accumulating skills within the company, the process of skill acquisitions can be short-circuited by inter-firm relationships that create a venue for accessing as well as internalizing new and/or complementary knowledge/skills controlled and possessed by suppliers or customers. This venue will be developed further through the analytical framework that explains in further details the notion of “competence configuration”. Compared to the three aspects of dynamics above, this view seeks to understand dynamics *in* the relationship, and not the development and welfare *of* the relationship itself. Therefore, adaptation in and through relationships will not only concern systems, products or processes, but should also be considered as being “knowledge based”. A limitation of this study is that it does not consider the context of the dyadic relationship, although this factor has been suggested as an important learning factor. From a methodological point of view, this would mean that a more comprehensive version of the supply chain should be defined into the study instead of the dyad. The eight dimensions can be seen as an attempt to develop a common denominator of the seven previously mentioned assumptions.

A “relational capability”, that simply describes the firm’s ability to interact with other companies, should consider both the productivity and innovativity efficiencies of inter-firm arrangements. This is relevant, especially seen in relation to the propositions implied by the resource-based perspective: Firms do not only compete on products but also on resources and capabilities. Hence, we must understand the supply chain, or a selected part of it such as the dyad, as a bundle of competencies. By this, we also imply that the uniqueness of the individual firm does not only have its origins in resources and/or capabilities controlled by the focal firm. Rather, uniqueness of the company should also be related to connections with other companies.

#### **4 Is ECR a case of Industrial Marketing Purchasing and Distribution?**

Managers who work for companies that form the grocery industry are facing since the 1980’s significant developments, e.g.:

- Stagnant and decreasing markets have major impacts on the profit situation of these companies. The profit situation for retailers is in many countries (except the UK) in the discouraging range between -0.5 and +1.5 percent (n.A. 2001, p. 8). However, this forces the participants to rationalize wherever possible (e.g. human resources or logistics).
- Retailers try to increase their sales volume by mergers and acquisitions (PwC 2000). Such actions are performed more and more on an international level (e.g. the European market entry by Wal-Mart by buying Interspar, Wertkauf and ASDA). Many of this international retail players have been getting bigger than its vendors, which is shifting power from the manufacturer side to the retailer side.
- Flattened distribution structures lead to enormous concentration in the retail market. In order to face the economic pressures, the remaining players are following scale-oriented strategies (e.g. Olbrich 1999), which then leads to quasi-monopolistic market structures. A few retailers control the majority of the market.

It is obvious that managers in such a business environment will look for alternative management styles in order to increase the efficiency (= profitability) of their operations.

However, the former pure market-exchange driven distribution of competencies between manufacturers, who produce and retailers, who distribute is not valid anymore (e.g. Ahlert 1999, Meffert 1999). Instead of using the means of market exchange mechanism to coordinate the different activities between these market partners, harmonization by vertical integration could help to face the stagnant markets (Ahlert 1999). However, for some reasons, Whipple Schmitz, Frankel and Anselmi (1999) do not assess a fully vertical integration as a successful option for the participants. It might be too expensive for a manufacturer to set up a nationwide distribution structure, or for a retailer to invest into production facilities. The solution had to be sought in the middle: getting to hybrid integrative structures. Such a form of a governance structure would increase the opportunistic behavior in the chain, but would help to safe the relationship between the partners (Whipple Schmitz, Frankel and Anselmi 1999, p. 45). Thereby partners recognize mutual interests in establishing certain norms and rules, which control a certain behavior and reward the involved institutions positively and negatively (Heide 1994). ECR would increase the profitability of all partners (= win/win-situation) by combining the various internal efficiency seeking processes to an external partnership management. Efficient Consumer Response (ECR) recognized as a supply chain management approach for the grocery industry (e.g. Corsten 2000). ECR is defined as a cooperative strategy between retailers and manufacturers to better fulfill consumer wishes, faster and at lower cost (ECRE 1996, p. 1 or Salmon 1993, p. 12). The basic ECR-model was firstly introduced in 1992/93 for the US-American fast moving goods supply chain and was than established in 1995/96 in Europe in a slightly modified manner. The vision of ECR is to set up a consumer-driven distribution system in which the production is permanently managed by the consumers' POS-activities (according to Salmon 1993).

The new approach aims to increase consumer value, which can be achieved via the implementation of a four-part process: 1) Efficient Replenishment, 2) Efficient Promotion, 3) Efficient Store Assortment and 4) Efficient Product Introduction (see Salmon 1993, JIPOECR 1996a and 1996b, ECRE 1996, ECRE 1997). Given the various interests of each of the channel members, the efficiency criterion requires strategic partnerships be developed within the grocery channel. It also requires the use of “enabling technologies” such as information systems and improved business processes. The desired effect is to harmonize the activities among the various channel members (Coughlan et al. 2001; Bowersox and Closs, 1996) in an end-user-oriented manner. The harmonization and coordination of the various activities is guaranteed, when all involved partners overcome mental, organizational and technical barriers between internal and external areas (Kotzab 1999). In this sense, ECR is a strategy of „how partners in the supply chain can best synchronize the flow of product through the distribution pipeline from point of manufacture to point to final sale” Martin (1994, p. 377). As a result, ECR leads to increased productivity. The optimal combination of these areas leads to a benefit for the members of the supply chains of US-\$ 30 billion in the US and DM 50 billion within Europe (according to Salmon 1993, p. 4 and ECRE 1996). The savings result mostly from total-chain reduction of inventory by speeding up cycle-time. The consumers could profit from ECR by price reductions up to 10.8 % in the US-market and 5.7 % in the European market. From a network point of view we can say that ECR is a cooperative strategy, which involves different stages of a channel (= actors). The management principles (= activities) are suggested by various nationally organized interest groups (= resources). Within an ECR-driven network, no inefficiencies prevail, because the activities of the involved organizations are optimally combined (Tietz 1995).

The concerned activities refer to all management areas such as purchasing and logistics (= efficient replenishment, category management), marketing/sales (such as efficient assortment, efficient promotion and new product development) and operations (= operational excellence) (e.g. Salmon 1993, ECRE 2000). The linkages are organized to overcome internal as well as external organizational barriers. Therefore the involved organizations have to agree on common standards, processes and technology (ECRE 1996). There are two key elements, characterizing ECR though also as a purchasing and distribution network concept, which are: a) the integration of business processes, which takes place on an inter-departmental as well as inter-organizational level. An ECR-driven channel might fit to Bechtel and Jayaram's (1997) view of SCM as a "seamless demand pipeline" with the end-user as the driving force in the entire system and; b) the end-user-orientation, which refers to the belief that all activities performed in the supply chain are initiated by customer requirements. Based on such an understanding, the supply chain defines itself as a pull-oriented network of interrelated activities and institutions (see Cooper et al. 1997). ECR though is mainly organized in a dyadic and industrial network manner. The dyadic relationship refers to the material cooperation between two actors (e.g. a retailer and a manufacturer), while the industrial network perspective refers to the meta-arrangements, which control the dyadic relationship (Corsten 2000). The interaction between dyadic and industrial networks are based on the commonly agreed exchange processes such as the common use of certain EDI- and barcode standards, the common use of balanced scorecard techniques, cooperative planning processes, etc. (e.g. Kotzab 2001). During the exchanges, the system can learn, adapt and provide the other elements of the network with their learning results. These activities certainly build up trust and commitment and consequently lead to closer relationships between the parties. However, one could also argue that in the case of ECR network terms are used for showing quasi-organizations, which has not been the tradition of the IMP. Nevertheless ECR could be

used for our purpose of widening the basic notions as ECR integrates purchasing and distribution on an industrial level.

## 5 Conclusions and future perspectives

Network concepts might be helpful in order to understand supply chains. By having supply chains that include inbound as well as outbound relations, we assume that distribution should also be explicitly integrated in the IMP-thinking. The case of SCM in general and of ECR in particular show that such business relations between actors exist. We are going to continue on our research by confronting ECR with our potential areas of cross-fertilization in order to generate more evidence for broadening the concept of IMP.

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