Abstract

The paper focuses on the value creating role of purchasing and studies it through the purchasing maturity model. Generally, it is assumed that operating on a higher maturity level requires more skills and knowledge from the purchasing staff. In the past literature many conceptual maturity models have been suggested; however, the empirical studies matching capabilities related supplier relationship management with the maturity models of purchasing are only few. The aim of the study is to find out how the value creating role of purchasing is linked with supplier relationship management. A case study is presented indicating that the value creation role of purchasing highly depends on the future insights of the company management. The experience and the capabilities of the purchasing staff are essential in cost optimization and asset utilization, but achieving the value chain integration, the capabilities of supplier relationship management and collaborative interaction with key suppliers is required. The maturity of purchasing in a specific company should be evaluated in a way that takes into account how well purchasing and supplier relationship management are aligned according to the firm’s strategy and business.

Keywords: supplier relationship management, purchasing maturity model, capability

Introduction

Purchasing is argued to perform three different roles within the organization: cost optimization, asset utilization and value creation (Axelsson et al., 2005a). The cost optimization role aims to influence the competitive advantage by cutting down costs. The asset utilization role can be seen as a developmental role that aims to match the company’s R&D and innovations with the technologies and innovations of supplier networks. The value creation role acts as a structuring role aiming at the optimal balance in terms of dependence and independence on suppliers.

Searching the optimal balance in the relationships of suppliers is closely linked to organizational issues and strategic planning. It is said that the firm’s capacity to deal with a variety of relationships in different ways influences its performance. For example, Cox et al. (2003) have presented that one of the key dimensions in buyer-supplier relationships is the division of surplus value that is created by the relationship. The variety of supplier relationships is subject to dynamic forces where the relationships between buyers and suppliers change over time (Dubois and Wynstra, 2005). In the context of a global company the complexity of supplier networks and variety of relationships increases remarkably. Thus, designing a global purchasing strategy and organizing supplier relationship management become more demanding. As Quintens et al. (2006a) have stated, a global purchasing strategy consists of a degree of configuration and standardization of purchasing.

In this study the value creating role of purchasing is studied through maturity models. Thus, the purchasing maturity models from previous literature are examined. The contribution of the models has been the statements that firms should establish a sustainable foundation when improving their purchasing function. (Axelsson et al., 2005a). Generally, it is assumed that operating on a higher maturity level requires more skills and knowledge from the purchasing staff. In the past literature many conceptual maturity models have been suggested; however, the empirical studies matching
The aim of this study is to identify the capabilities of supplier relationship management and match them with the maturity models of purchasing. The study aims to answer the following research question: How the value creating role of purchasing is linked with supplier relationship management capabilities? It is stated that the resource-based view (RBV) focuses on firms’ internal resources and capabilities (Penrose, 1959; Wernerfelt, 1984; Barney, 1991, Teece et al., 1997). Thus, the theoretical basis of the study is built on the arguments of the RBV. In align with RBV this study focuses on the internal view of a buying company.

Because research with an internal perspective into organizations requires thorough descriptions, observation derived data, and in-depth longitudinal approaches (Rouse and Daellenbach, 1999), a case study methodology is applied here. The next section will clarify the theoretical background and concepts of supplier relationship capabilities and purchasing maturity models, followed by the empirical part. In the empirical part, the reasoning for the methodological choice is described. Then the case description and findings from the study are presented. Finally, the conclusion part will draw together the main findings and contributions.

**Theoretical background and concepts**

The focus of this study is the internal capability of a firm. The resource-based view (RBV) of a firm (Penrose, 1959, Wernerfelt 1984, Barney 1991) is a theoretical framework for understanding how competitive advantage is achieved by focusing on the internal organization. The RBV assumes that firms are bundles of resources, which can be used to implement value-creating strategies. Teece et al. (1997) have defined the concept of dynamic capabilities which are the firm’s ability to integrate, build, and reconfigure internal and external competencies to address rapidly changing environments. Makadok (2001) has defined capabilities to be the firm’s capacity to deploy resources by using organizational processes to achieve their goals. If appropriate capabilities are further developed, changes in the companies’ performance can be expected (Lawless et al., 1989). Moreover, Barney (1995) has stated that firms must not only search for environmental opportunities but also identify and develop their internal resources and capabilities. Snow et al. (2006) have maintained that the core configurational elements in the firm are strategy, capabilities, structure and process. If strategy is the firm’s intent and plan, then capability is the main enabling factor that allows the strategy to be pursued.

**Capabilities of supplier relationship management**

Supplier management is a general expression of all the activities a firm is performing to maintain, control and develop their supplier base. The purchasing and supply management literature uses the term *buyer-seller relationship management* to describe the management of dyadic buyer-seller relationships from the buyer’s point of view. The term *supplier relationship management* (SRM) refers to a part of a supply chain application running in the enterprise management systems. Its target is to be a system that will help companies in supplier selection and to maintain the supplier base. It benefits companies by providing a centralized interface for supplier information (Choy et al., 2004). The term SRM can however be used more generally to describe the management of buyer-seller relationships from the buyer’s perspective. Buyer-seller relationship management takes a long-term view on mutual business activities and joint goals, and a win-win approach (Wilson, 1996). Thus, supplier relationship management can be defined to be an activity that the firm is pursuing after the supplier selection decisions to maintain and develop the dyadic relationships between the buyer and the seller in order to gain benefits and best performance in the long term.
In the supply management literature, capabilities are defined in various ways, and the terms knowledge, skills, competences and capabilities are used interchangeably. Individual skills and knowledge referring to supply management have been widely researched. In most cases, purchasing and supply management skills are viewed as personal traits (e.g., Giunipero and Peary, 2000; Faes et al., 2000) and technical knowledge (Carr and Smeltzer, 1997, 2000). Competences referring to supply management include a wider aspect. Narasimhan and Das (2000) separate purchasing competence and purchasing practices. They argue that purchasing practices are internal observable activities that can be measured, and purchasing competence is a latent capability to structure, develop and manage the supply base in alignment with the firm’s business priorities. Furthermore, Narasimhan et al. (2001) and Knight et al. (2005) pointed out that the key content elements of supply management competence, in addition to individual skills, include buyer-seller relationship management, network understanding, developing the network position, and strategy formulation and implementation. Thus, in these studies, competence also covers the organizational aspect.

As stated above, the terms competence and capability are used interchangeably in the literature. Both terms describe the factors beyond the success and performance of firms. Competence refers to individual knowledge and skills of human resources. Capability refers to the firm’s ability to fulfil its assignments (Axelsson et al. 2005b). In this study, the term SRM capability follows the views of Narasimhan et al. (2001), Knight et al. (2005) and Makadok (2001). SRM capabilities are defined to be the firm’s capacity to deploy its purchasing and supply resources including individual skills, buyer-seller relationship management, network understanding, developing the network position, and strategy formulation and implementation by using organizational processes to achieve the firm’s goals.

Role and maturity of purchasing

Maturity models aim at more advanced supply management and present structured working methods. The main idea is that firms should establish a sustainable foundation when improving their purchasing function. One single action does not increase the purchasing maturity. Firms must also consider carefully that actions improving their supply management are justified in terms of the industry, expenditure and their needs. The price of the improvement should not be higher than the gained benefits. (Axelsson et al. 2005a)

There are several models describing the development and maturity of the purchasing function. Reck and Long (1988) have presented four stages in the development from passive to integrative activity. They point out that before purchasing can become a competitive weapon it must first develop its own capabilities. Freeman and Cavinato (1990, 1992) have fitted the maturity of the purchasing function to the model of evolution of strategic management, originally developed by Gluck et al. (1982). Freeman and Cavinato argue that only when the role of purchasing has matured to a strategic function, purchasing can structure its activities and capabilities to meet the needs of the whole organization. In these studies capability is seen as an enabler of the development process. The previous maturity model studies have also assessed e.g. relationship capabilities in the context of high-tech industry (Ritter and Walter, 2006) and outsourcing through the firm’s growth models (Gottschalk and Solli-Saether, 2006).

In the maturity model of van Weele (2002, originally van Weele and Rozemeijer, 1998) value chain integration represents the highest maturity. The lowest level of maturity is transactional orientation in which the role of purchasing is considered to be passive and reactive. On the second level is commercial orientation. Here the purchasing activities are more developed consisting of comparisons of suppliers and negotiations. On the third level is purchasing coordination, meaning centralization of the supply management function. Here, the main task of supplier relationship management is controlling the volumes and activities across factories, business units and divisions. These three first levels represent the functional approach and operative role of supply management. Supplier
relationship management focuses on supplier performance measurement and establishing long-term contracts.

The following three higher levels in this model represent the integration approach and strategic role of supply management. The fourth phase is internal integration meaning that the firm sees the purchasing as a process and uses cross-functional teams to increase their competencies and expertise in supply management. The fifth level is external integration where the aim is to optimize and integrate the supply chains into the purchasing process. In this model, the highest level is value chain integration in which the supply management function actively contributes to the creation of customer value. Here supply management is more responsible for business process development, redesigning business processes and developing supply markets (Brundin et al., 2005). In the integration approach the objectives of supplier relationship management are the diffusion of supplier information between firm functions and business units, minimization of transaction costs, value creation through internal capabilities and external resources, and reducing risks of dependence and availability. It can be said that when an organization reaches a higher maturity level, knowledge about suppliers, their performances and structures becomes more important, but it is also essential to know the suppliers’ future R&D activities and ability to develop and improve themselves (Axlesson et al., 2005b). Thus, departing from the functional approach and entering into the integration approach requires extensive development in supplier relationship management capabilities. In this paper, the model of van Weele is selected and matched with the supplier relationship management capabilities.

**Matching supplier relationship management capabilities and purchasing maturity**

Trent and Monczka (2003) have claimed that global sourcing is not only international purchasing but also an opportunity to develop supply processes and integrate supply and supplier management into the firm’s business processes. Thus, their view is parallel with the integration approach in the maturity model of purchasing, which requires development of expertise, optimizing the purchasing process and value chain integration. As van Weele (2002) has stated, value chain integration requires a global perspective on suppliers and entrepreneurial collaboration with suppliers.

The integration approach of van Weele’s maturity model is closely tied to the organizing issues and to the structure of the purchasing function. In the integration phases of the maturity model the operations are centrally led and cross-functional teams are used. According to Rozemeijer et al. (2003), the optimal purchasing structure is determined through purchasing maturity and corporate coherence. The global aspect takes in several other factors, which influence the supplier relationships and the way they are globally managed. Quintens et al. (2006b) have classified the antecedents of global purchasing into five categories: product, firm/management, network, industry/competition and environment. They have defined each of the categories’ drivers, facilitators and barriers. When analyzing this list of antecedents from the point of view of SRM at the product, firm/management and network level some conclusions can be made. At the product level, supplier relationship management concentrates on the improvement of supplier performance. The buyer aims at better quality, prices, technology and availability of the purchased products by influencing the supplier. Thus, the buyer tries to manage the relationship in a way that will lead to better conditions. The focus is in the dyadic relationship itself and in the power position between the buyer and the seller. At the firm level the question is how to organize supplier relationship management and align it according to the firm’s goals. The focus is on the internal capabilities of the firm. At the network level the task of SRM is the integration of the network and finding the evolving synergy among the members of the network.

As Carr and Smeltzer (1999) have stated, firms that strategically manage their purchasing and supply management have higher levels of cooperation with their suppliers. When the cooperation and interaction with suppliers increases, the firm’s ability to respond to the changing requirements of end customers will also grow. Carr and Smeltzer define the ability to influence the suppliers in the supply
Purchasing integration approach and supplier relationship management capabilities in a global forest company

Research method and data collection

The research focus is restricted to the internal perspective of a firm. However, the existence of interaction in a supply network, and the influence of inter-organizational relations to the internal capabilities of a firm are acknowledged. The paper applies qualitative research methods by presenting a single case study. The case study method is chosen because a case study is an empirical inquiry that studies a phenomenon within its real-life context (Yin 2003). On the other hand, the
theory and the method should be aligned with each other (Dubois and Araujo, 2007). In this paper the assumptions are based on the RBV theory in which the focus is on firms’ internal resources. Thus, the method should reflect research in organizations which requires thick descriptions, observation derived data and in-depth longitudinal approaches (Rouse and Daellenbach, 1999). Stuart et al. (2002) have pointed out that case studies are not only the first stages in theory development but they also provide extensions to the existing concepts.

In this study the research question is viewed in the light of empirical data collected from one large international company in the field of forest industry. The analysis is based on eight semi-structured theme interviews. The interview frame is presented in Appendix 1. All the interviewees were global sourcing directors and regional purchasing directors from different geographical areas and different product categories in the same company. The main objective of the case study is to illustrate the link of supplier relationship management capabilities and the value creating role of purchasing as it has been experienced in the case company.

Description of the case firm

The case company is a global actor in the forest industry. It has production in 15 countries and it employs 28,000 people. The company’s sales in 2006 were about 10 billion euros. The plants are mostly located in Europe, North America and China. The company’s shares are quoted on the Helsinki and New York stock exchanges. According to the firm’s annual report, low cost production and good customer relations are the key attributes. Through these the company aims to achieve profitable growth. The company relies on strong vertical integration of raw materials, energy and production. It has a high degree of self-sufficiency in chemical pulp and electrical power and it has own forests to partly guarantee the availability of wood raw material. The top management of the company has paid attention to the global supply strategy already in the beginning of the decade by starting a project of common supply processes. Moreover, the total volumes and spend of product groups worldwide were mapped earlier in a separate project.

Strategy formulation

The planning of a global supply strategy was done by a global sourcing team consisting of five sourcing directors, four regional directors and their director who was the member of the executive team in the corporation. The team identified five major globally important product categories. The categories were established according to total spend, availability and the size of the supplier. Consequently, the strategy was matched to the regional and local needs and four main geographical areas were identified. Cross-functional teams were also established. By a matrix organization the company aimed to connect the benefits of global sourcing with local responsiveness. One of the main problems was that in some cases the strategy does not take into account the total supplier relationship. It is possible that one global supplier delivers to different product categories. In that case, the total purchases from one supplier may not be recognized. Figure 2 presents the basic structure of the global sourcing organization in the case company. A new global sourcing organization was fully launched in the year 2006.
Factors for and against integration

The main incentive to integrate was the strong pressure to be profitable. Strong competition has forced forest companies to cut costs and seek efficiency from production and supply processes. By integrating supply management the case company could strongly reduce their total spend. In addition, the global strategy emphasized ensuring the availability in all the conditions and everywhere. Thus, managing supply risks via supplier relationships was essential.

The anticipated advantages of integration were realized through the increased negotiation power and consolidated volumes. The main reported benefit was remarkable cost savings. For the management the global sourcing strategy gave a better understanding about the needs of their production plants. Clearly identified functions, simplified and standardized sourcing processes were also advantages from the supplier perspective. The parties got to know each other better, which in turn generated trust between the parties. Accumulation of knowledge created expertise at the global level. A global strategy also made it possible that in some products local buying was a conscious choice.

Some problems related to the integration have however appeared. One major problem has been the new division of power and control internally. Previously, the plants were quite independent and the management of purchasing was decentralized. The integration efforts caused fear of losing power and independency. The resistance to change has reduced commitment to the new organization. In some cases the flexibility in supply has been decreased causing bigger safety stocks. Furthermore, it has been found that negotiations with the same supplier are performed on several levels. The discovered problems indicate that there is still work in defining the boundaries of global, regional and local supply. The biggest challenge has been found to be internal communication. A lot of communication, motivation and education are needed to remove the obstacles to change. In addition, the units have several different IT systems and transferring data between the systems is at least difficult and troublesome, if not impossible. The implementation of a new system covering the company globally is a heavy but a necessary investment.

Supplier relationship management

The company has categorized suppliers mainly by dividing the suppliers with long contracts into key suppliers. The portfolio approach is used to distinguish the critical suppliers from the non-critical ones and volume suppliers from the regular ones. The sourcing function has adopted the concept of
extended supply chain which aims to control the supply chain starting from the product specification and ending to the waste disposal. These issues are dealt with suppliers in supplier workshops.

In relationship management the company is structuring their relationship management profile. The supplier relationships have been divided into partnerships, key suppliers and commodity suppliers. Depending on the position of a supplier, the negotiating parties from the company’s side are from the top management level, business development level or operative level. However, critical suppliers are not always globally active suppliers; thus, the categorization also depends on the availability of the product. The volume suppliers are approached as global suppliers. When the company is highly dependent on the supplier, relationship management is more or less risk management. The firm can try to brake down the supplier’s monopoly position by developing a new actor in the supply market. One’s own position and power has to be recognized and the strategy has to be aligned to change this position more favorable. In supplier relationship management one problem is that many suppliers are so big that they are not interested in the buying company. Another problem is that in some cases the supplier is global but has a decentralized structure. In such cases supplier relationship management and purchasing is challenging.

*Individual capabilities of supplier relationship management*

The global purchasing staff have several interfaces with different interest groups and they need to understand the processes of the end customers as well as those of their suppliers. To lead global purchasing and to be able to perform the tasks required, the purchasing staff should have practical experience and a worldwide perspective on the organization and the supply management’s role and function. Purchasing personnel should be open-minded and ready for new challenges. They must have abilities in effective networking with business units and plants to be able to deliver the understanding and philosophy of global sourcing. The skills of individuals are highlighted and more personal skills are required. Especially, network and knowledge management skills are needed and the ability to use experts. The global purchasing staff should have special expertise on product knowledge, and commercial and financial issues. They have to be capable to manage people and have analytical skills and the ability to make strategic decisions. For one person this complex combination of required skills is difficult to fulfill. Thus, cross-functional teams are an essential element in managing supplier relations.

*Influence on performance and competitiveness*

In the forest industry the sales price of the basic end product is decreasing rather than increasing. In this troubled situation the top management of the company has found that effective purchasing is one way to increase gross margin. They have started to support strongly all the activities aiming at developing effective purchasing processes and integration on the global level. This has caused pronounced image lifting concerning the purchasing function. Personnel in the plants and business units have better knowledge of the goals and achievements of supply management. The use of cross-functional teams has increased the expertise and knowledge about the raw materials and products. There is clear consensus among the purchasing staff that understanding supplier relationships and managing them in the right way in the long run is essential for future competitiveness.

However, because of the heavy investments in people, education and information systems the performance of the purchasing function has come down despite the cost savings worth one million euros in product and service purchases. Nevertheless, in the long run these investments will produce higher purchasing performance in terms of knowledge management and supplier relationship management.

*Value creation role of supply management*
In a mature industry the possibilities to create added value in a form of innovative or unique end product is rare. Thus, the value creation has to happen in the other links of the value chain. The role of global purchasing is to support the company to maximize its income. Global purchasing creates value through cost savings and through supplier management. Its role is to deliver information from the demands of the end customers to the suppliers and manage the risks arising from the supply market.

The data from the interviews indicate that in the case company the maturity of the purchasing is on a relatively high level if measured with the length of the experience of interviewees and the cross-functional focus. However, the role of purchasing has not been emphasized in the company’s global strategy until recently. The collected data clearly indicates that there is still lack of skills and knowledge among the purchasing staff. The capabilities of supplier relationship management have not yet developed on the level where the value chain integration may happen, although internal integration is formally achieved. This integration has influenced the power positions between the supply network actors and increased the negotiation power to be more favorable for the buyer. Figure 3 illustrates the current level of supplier relationship management capabilities in the case company matched to the integration approach and functional approach of the maturity model.

![Figure 3. The level of purchasing maturity, integration and SRM capabilities in the case company.](image)

**Conclusions**

In this study the value creating role of purchasing was studied through a maturity model. Based on the previous research and literature it was concluded that purchasing maturity, integration of purchasing and purchasing capabilities are connected. It is argued that the more the maturity of purchasing deepens inside the company, the more capabilities the company has in managing and classifying various types of relationships. Still, the degree of integration of the purchasing function influences the SRM capability in terms of accumulation of knowledge and skills related to supplier relationship management. It can be said that purchasing maturity and integration has two-dimensional effect on the SRM capability.

The case showed that the company has achieved a high maturity level from the perspective of the functional approach. The supplier relationship management control volumes and activities across
factories, business units and divisions. In the path of integration the company is on its first step. However, the capabilities of supplier relationship management in a case company are rapidly developing. An increase in the capabilities enables movement towards value chain integration. It can be said that the capability is an enabler in value chain integration and in a development of purchasing maturity.

The value creation role of purchasing highly depends on the future insights of the company management. The experience and the capabilities of the purchasing staff are essential in cost optimization and asset utilization, but to achieve value chain integration, the solid capabilities of supplier relationship management and collaborative interaction with key suppliers are required. These findings also support the notions of Axelsson et al. (2005a) that to increase their purchasing maturity firms must apply structured working methods and natural growth paths may not exist. The maturity of purchasing in a specific company should be evaluated in a way that takes into account how well purchasing is aligned according to the firm’s strategy and business. Without it, the true value creation role of purchasing cannot be achieved.

The findings from the case study supported the assumption of the RBV that competitive advantage can be achieved by focusing on the internal organization. As RBV explains, specific physical, human and organizational assets (resources and capabilities) can be used to implement value-creating strategies. In a forest industry, as well as in many other industries, the environment is changing more or less rapidly. In this situation the firm’s ability to integrate, build and reconfigure internal and external capabilities becomes an asset.

The conscious choice to focus on internal aspects of a firm is also a limitation of this study. However, it will provide opportunities for further research. In the future, studies with a wider perspective would be recommended. The future research should focus more on the inter-organisational aspects in supply network context and take account the supplier perspective. Examining the supplier relationships from the supplier point of view and how their interests influence to the development of integration approach may reveal issues that can contribute firms in their intentions towards value chain integration. The future research may also operationalize these concepts, which can lead to the opportunities to examine the relationships of purchasing maturity, SRM capability and integration with quantitative methods.

References


Appendix 1

Interview themes:

Background and general information about the case company
1. The background of the interviewees? (experience, education)
2. How global purchasing and supplier management is organized currently in your company? (responsibilities, control, centralization level)
3. How and on what hierarchy level the purchasing organizing decisions are made in your organization? (underlying strategy: product-/geographic-based or other?)
4. How the information systems support purchasing function and the management of suppliers? (diffusion of the information and knowledge)

Supplier management and relationships
1. What kind of supplier relationships your company have and how they are managed? (long-term suppliers, key suppliers, collaboration)
2. What kind of collaboration do you have with your suppliers? (joint planning, investments, information systems)
3. According to your mind what are the pros and cons of centralization / decentralization of purchasing? (centralization of operations / centralization of supplier management / global suppliers vs. local suppliers)
4. How the power relations between buyers and suppliers influence to the management of suppliers and management of global purchasing? (the size of the supplier, negotiation power, criticality, volume, replaceability, can suppliers reduce internal costs of purchasing process or contribute to the integration of supply chain?)

Supplier management capabilities
1. According to your mind, what kind of capabilities (individual / organizational) global supplier management requires from purchasing personnel and from your organization? (skills, knowledge, intangible assets)
2. In your company, what are the drivers to globally manage supplier relationships?
3. In your company, what are the factors that contribute global supplier management?
4. What are the major challenges in managing of global suppliers you have lately met?

Performance and competitiveness
1. How do you see that the capabilities of supplier management influence to the competitiveness of your company?
2. How do you see that purchasing organizing decisions influence to the competitiveness of your company?
3. Has the performance of purchasing function improved during the last three years in your company? Yes/No, why?
4. How important do you see is the role of supplier management in your company? According to your mind, what is the role of supplier management in value creation in your company? (added value, value chain / - network).