



Katrina Lintukangas

**SUPPLIER RELATIONSHIP MANAGEMENT CAPABILITY
IN THE FIRM'S GLOBAL INTEGRATION**

*Thesis for the degree of Doctor of Science
(Economics and Business Administration) to be
presented with due permission for the public
examination and criticism in the Auditorium
1382 at Lappeenranta University of Technology,
Lappeenranta, Finland, on the 16th of October,
2009, at noon.*

Acta Universitatis
Lappeenrantaensis
350

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ISBN 978-952-214-813-1

ISSN 1456-4491

Lappeenrannan teknillinen yliopisto

Digipaino 2009

ABSTRACT

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Supplier relationship management capability in the firm's global integration

Lappeenranta 2009

153 p., 3 Appendixes

Acta Universitatis Lappeenrantaensis 350

Diss. Lappeenranta University of Technology

ISBN 978-952-214-813-1

ISSN 1456-4491

Organizing is a general problem for global firms. Firms are seeking a balance between responsiveness at the local level and efficiency through worldwide integration. In this, supply management is the focal point where external commercial supply market relations are connected with the firm's internal functions. Here, effective supplier relationship management (SRM) is essential. Global supply integration processes create new challenges for supply management professionals and new capabilities are required. Previous research has developed several models and tools for managers to manage and categorize different supplier relationship types, but the role of the firm's internal capability of managing supplier relationships in their global integration has been a clearly neglected issue. Hence, the main objective of this dissertation is to clarify how the capability of SRM may influence the firm's global competitiveness. This objective is divided into four research questions aiming to identify the elements of SRM capability, the internal factors of integration, the effect of SRM capability on strategy and how SRM capability is linked with global integration.

The dissertation has two parts. The first part presents the theoretical approaches and practical implications from previous research and draws a synthesis on them. The second part comprises four empirical research papers addressing the research questions. Both qualitative and quantitative methods are utilized in this dissertation.

The main contribution of this dissertation is that it aggregates the theoretical and conceptual perspectives applied to SRM research. Furthermore, given the lack of valid scales to measure capability, this study aimed to provide a foundation for an SRM capability scale by showing that the construct of SRM capability is formed of five separate elements. Moreover, SRM capability was found to be the enabler in efforts toward value chain integration. Finally, it was found that the effect of capability on global competitiveness is twofold: it reduces conflicts between responsiveness and integration, and it creates efficiency. Thus, by identifying and developing the firm's capabilities it is possible to improve performance, and hence, global competitiveness.

Keywords: supplier relationship management, capability, organizational integration, strategic management

UDC 658.71 : 339.5

ACKNOWLEDGEMENTS

This dissertation would not have been completed without help and support from many friends and colleagues. I wish to express my sincere thanks to all of you.

First, I wish to thank my supervisor Professor Veli Matti Virolainen for support and the opportunity to join the research team of Supply Management. Further, I would like to thank the reviewers of this dissertation Professors Attila Chikán and Hannu Kuusela for their constructive comments and valuable suggestions, which have helped to improve this dissertation substantially.

I would like to thank all my past and present colleagues in the Supply Management team. I thank Anni-Kaisa Ahtonen, Jukka Hallikas and Jani Mäkinen for good cooperation and all the help they have provided in my teaching and research tasks. I appreciate the support and help from my former colleagues Heli Sissonen and Satu Peltola who have showed me the way and proved that doctoral dissertation is not a “mission impossible”. I also wish to express my gratitude to Toni Vesterinen and Pirita Niemi for collecting and coding the raw data in the first phase.

Further, I would like to thank my other friends and colleagues. Especially, the regular gang at the 3rd floor coffee room deserves thanks for the great and inspiring atmosphere at the LUT School of Business. I thank you for our enjoyable discussions and your encouragement during this process.

I thank Sanna-Katriina Asikainen, Kaisu Puumalainen and Anssi Tarkiainen for their advice concerning the methodological issues of this study. Also, I wish to express my gratitude to Hanna Salojärvi and Liisa-Maija Sainio for reading and commenting on my work. I also appreciate the work of Terttu Hynynen, Riitta-Liisa Pitkänen, Irma Sihvo, Kaija Huotari and Minna Ranta and the other members of the administration team. It has been a pleasure to work with you.

I wish to thank the people in the case company who gave their valuable time and shared their thoughts with me during the interview sessions.

I gratefully acknowledge the financial support received from Lappeenrannan teknillisen yliopiston tukisäätiö and Lauri ja Lahja Hotisen rahasto.

I would also like to thank Minna Vierimaa for her professional help in revising the language of my work.

Finally, I would like to express my greatest and warmest thanks to my family for patience and understanding during my never-ending studies. Tuomo, Sarianna and Annika, you have done your bit of this work.

Lappeenranta, August 2009

Katrina Lintukangas

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PART II: PUBLICATIONS

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1. Lintukangas Katrina (2009). Supplier Relationship Management Capability in Global Supply Management. Accepted for publishing in International Journal of Procurement Management (forthcoming).
2. Lintukangas Katrina, Peltola Satu, Virolainen Veli-Matti (2008). The Relationship of Organizational Capabilities of Supplier Management to the Firm's Supplier Orientation. Proceedings of the 15th International Working Seminar on Production Economics (IWSPE), March 37, 2008, Innsbruck, Austria, Pre-prints volume 1, pages 301–310. Revised and further submitted version.
3. Lintukangas Katrina, Peltola Satu, Virolainen Veli-Matti (2009). Some Issues of Supply Management Integration. Journal of Purchasing & Supply Management, Article in Press, DOI 10.1016/j.pursup.2009.03.001.
4. Lintukangas Katrina (2008). Matching Purchasing Maturity and Supplier Relationship Management Capabilities. Proceedings of the 24th Industrial Marketing and Purchasing (IMP) conference, September 4–6, 2008, Uppsala, Sweden. Downloadable from the Internet: http://www.impgroup.org/paper_view.php?viewPaper=6748

The contribution of Katrina Lintukangas to the publications:

1. Sole author.
2. Made the research plan. Main responsibility in data analysis, methodology and in writing the paper.
3. Made the research plan. Main responsibility in data analysis, methodology and in writing the paper.
4. Sole author.

PART I: OVERVIEW OF THE DISSERTATION

1. INTRODUCTION

In the past two decades in many firms the role of supply management has shifted from an operative support activity to the strategic function of the firm (Reck and Long, 1988; Freeman and Cavinato, 1990; Ellram and Carr, 1994; Carter and Narasimhan, 1996; Nollet et al., 2005; Paulraj et al., 2006). However, the emergence of a global economy, corporate acquisitions, outsourcing, and relocation of manufacturing to low-cost countries as well as the integration of supply chains, have created new challenges to the firms organizing their supply management. Organizing is a general problem for the management of global operations, where firms are seeking a balance between two conflicting priorities: responsiveness at the local level and integration for global competitiveness (Doz and Prahalad, 1984, 1991; Morrison and Roth, 1992; Bartlett and Ghoshal, 1998).

These two contradictory forces – integration and responsiveness – shape the supply management strategies of today's global companies (Johnson and Ivey, 2003; Richter, 2003; Atkinson, 2004; Ogden et al., 2005). Globally buying firms are on the edge where they need to search a balance of actions and control between the standardization and efficiency pressures, which push supply management toward worldwide integration, and the customization and responsiveness pressures that push supply management toward local level actions (Brandes, 1994). Between these two ends of the continuum is the coordination or a mixed structure where the exact mix of the level of integration and responsiveness is unique to each firm, and which tries to combine the advantages of both extremes (Matthyssens and Faes, 1997)

In this conflict situation, firms face such questions as how to manage their supplier relationships at the right organizational level, who their key suppliers are, and what products or services should be bought globally and what locally. Moreover, it is stated that the future supply management strategies, which may lead to significant improvements over the next years, will be increased integration, information sharing and collaboration among supply chain members (Ogden et al., 2005). Thus, the

importance of supplier relationship management, organizational coordination, and capabilities will increase. This provides impetus to study supplier relationship management to find answers how a firm may perform better and gain the best possible benefits from its supplier base. Moreover, even though new information technology creates new ways of doing business, the relationships between individuals in business still play a significant role. Thus, the capability of how to maintain these relationships becomes essential.

Previous research has presented some models and tools for defining supply strategies and the categorization of suppliers (e.g. Kraljic, 1983; Ollsen and Ellram, 1997b; Bensaou, 1999; Cox et al., 2003; Caniëls and Gelderman, 2005; Hallikas et al., 2005; Gelderman and Semeijn, 2006). However, the discussion about the concept of supplier relationship management (SRM) on the academic level is still fragmented and relatively rare, whereas the concept of customer relationship management (CRM) is widely studied in the marketing literature. The discussion around SRM is mainly attached to the discussion over buyer–supplier relationship management (see e.g. Olsen and Ellram, 1997a). A search from databases ABI/INFORM, EBSCO, ELSEVIER and ELSEVIER reveals that under the theme *relationship management* both the concepts of supplier relationship management and customer relationship management appear in 13 academic articles. The contexts of these articles cover relationship management models and interaction (Rajagopal and Romulo, 2005; Moeller et al., 2006; Tuli et al., 2007), the effects of culture and power on relationships (Pietrobelli and Saliola, 2008; Rinehart et al., 2008), dissemination of information and data systems (Lichtenthal, 2003; Choy et al., 2003; 2004; Tagliavini et al., 2007;) and the influence of intermediaries and customer value thinking (Ehret, 2004; Fung et al., 2007; Walters and Rainbird, 2007; Hughes, 2008). However, the influence of the firm’s internal capability on the issue of managing supplier relations has been neglected. In that sense, there is a clear need to draw together the theoretical approaches used in previous buyer–supplier relationship studies, to clarify the concept of SRM, and to specify the existing models to take into account the firm’s capability to manage supplier relationships.

This doctoral thesis was inspired by the firms' need to develop capabilities to meet the ever growing challenges in global business, and the need to clarify the theoretical bases of SRM. With a focus on the firms' internal capabilities and global competitiveness in the field of supply management, this study structures theoretical frames for supplier relationship management research in a global context. The study provides new insights into the coordination of global supply management and widens the existing concepts to take into account the firm's internal capability.

1.1. Research context

The research context in this study is global supply management, which is considered to be a strategic function of the firm (Arnold, 1989; Bozarth et al., 1998; Samli et al., 1998; Kotabe and Murray, 2004; Quintens et al., 2006a). The literature concerning global supply management has used various definitions and terms about it. Quintens et al. (2006a) have summarized some of the terms being used concerning global supply management to be global sourcing, international purchasing, worldwide sourcing, import sourcing, offshore sourcing and international procurement. Given that the term *purchasing* is a relatively narrow expression when describing a whole process and a function of a firm consisting of operative and strategic activities related to supply and supplier management, the term *supply management* is applied in this thesis instead of *purchasing*. According to Cox and Lamming, (1997, p. 62), supply management is “the strategic management of external and internal resources and relational competencies in the fulfilment of commitments to customers.” Thus, it is a process which flows across the firm and aims to make the firm more competitive opposed to only being a detached function of the firm (Cousins, 2002; Cousins and Spekman, 2003).

Quintens et al. (2006a, p. 171) define *global supply management* to be “an activity of searching and obtaining goods, services and other resources on a possible worldwide scale, to comply with the needs of the company and with a view to continuing and enhancing the current competitive position of the company.” Moreover, the definition of

Quintens et al. (2006a) comprises three main ideas: i) global supply management includes all the phases of the purchasing process from operational tasks to strategic responsibilities, ii) the degree of global supply management cannot be captured by measuring cross-border ratio only, thus, the decision to buy locally can be included in a global supply management strategy, and iii) global supply management aims to generate competitive advantage for the firm. As Quintens et al. (2006a) put it - strategy formulation, organizational alignment and implementation processes are all parts of global supply management.

The characteristics of a global company include planning and resource allocation on a global basis, dependence on global markets, worldwide manufacturing capability, standardized products, globally integrated strategy and centralized structure and decision-making with high coordination (Cavusgil et al., 2004). However, often firms that are regarded to be global do not meet all of the above-mentioned features. Moreover, according to Porter (1986, p. 154), “a firm is global to the extent that it is structured and operates so as to realize benefits from international integration of particular activities (scale economies), coordination of activities (scope economies), and transnational learning”. In this study the units of analysis are large Finnish companies with global or international operations (from the respondent firms of this study 63% have a global or the EU market as their main market and only 4 cases pursue solely domestic buying). Therefore, even though there are firms included that do not exactly meet the features defined by Cavusgil et al. (2004) the global view is applied. Moreover, small domestic markets and inadequate self-sufficiency of raw materials in Finland force the majority of Finnish companies compete in the global market¹. A detailed description of the data and sample is presented in Chapter 3.

¹ The share of foreign trade in the Finnish GDP has grown in the last fifteen years from 25% to close to 45% (Ministry of Finance, Finland, 2008). Traditionally Finnish import has been applied in energy and raw materials, but as the structure of production industries has changed, there are hardly any economic sectors where imported inputs would not play a significant role (Ministry of Foreign Affairs, Finland, 2008). The total value of import in Finland in year 2007 was 59.6 billion euros (Finnish Customs, 2008).

1.2. Research gap

Global competition forces companies to redefine the role of supply management according to the strategic directions of the firm. Thus, it is vital to examine how the supply management function fits with the strategic orientation of the firm as a whole (Freeman and Cavinato, 1990, 1992; Cavinato, 1999). Furthermore, several studies have emphasized the increasing role of the firm's internal capabilities in global business as well as in strategic supply management. (e.g. Bartlett and Ghoshal, 1998; Luo, 2002; Mol et al., 2004; Quintens et al., 2006a). Bartlett and Ghoshal (1998) have argued that many of the failures firms have faced in their international operations have not been the consequences of inappropriate strategic analyses, but the result of organizational deficiencies. Managers know what they have to do to increase global competitiveness but the challenge is how to develop organizational capabilities to do it. Moreover, March (2006) has stated that the "pursuit of intelligence" in organizations has increasingly become the responsibility of people with special competencies, and this intelligence is organized around strategic management, planning, and decision-making. Therefore, developing and exploiting the firm's internal capabilities to act in a global market is a key issue in enhancing global competitiveness.

In the field of supply management the importance and influence of the firm's internal capability is clearly recognized. It is stated that before supply management can be "a competitive weapon in the battle of markets, it must first develop its own capabilities" (Reck and Long, 1988, p. 8). However, research on the role and impact of capability in the supply management context is still limited to the listing of personal supply management skills. In most cases, supply management skills are viewed as personal traits (e.g. Giunipero and Percy, 2000; Faes et al., 2001) and technical knowledge (Carr and Smeltzer, 1997, 2000). The first distinction to separate the personal and organizational level was made by Das and Narasimhan (2000) who argued 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.

Quintens et al. (2006a, 2006b) call for studies that could identify and measure supply management capabilities. They have proposed a general model for global supply management performance where the strategy is seen as a central mediating construct. According to them, further research is required to understand how resources and capabilities are included in the strategic decisions of global supply management and how global supply management can contribute to a positional advantage for a firm and increase firm competitiveness. Thus, more in-depth exploration is needed about capabilities related to global supply management.

Recently, supplier relationships have become one of the key areas in strategic supply management. The focus has changed from transactional and short-term relationships to collaborative and long-term relations, where the mutual intention is to increase flexibility and create value through cooperation. Olsen and Ellram (1997a) have assessed the buyer–supplier relationship literature. According to them, three different research themes have been taken in the articles in the field: i) characteristics and benefits of buyer–supplier relationships, ii) establishment and development of buyer–supplier relationships and iii) managing buyer–supplier relationships. Cousins (2002) has also listed the perspectives and contributions from supplier relationship studies. According to him, the main focus in the relationship studies can be divided into behavioral and economic schools of thought. The behavioral (or humanistic) school of thought sees b-to-b relationships on the same basis as personal relationships, which are based on trust, understanding and cooperation. The economic perspective presents that inter-firm relations are based on the economic power in the market. These two comprehensive literature reviews on the studies of supplier relationships reveal that the essence of capability in supplier relationship studies is still an unexplored area.

To summarize, three research gaps can be identified from the literature: i) the role of capability in supply management and in supplier relationship management, ii) the measurement of supply management capabilities and iii) the strategic fit of the supply management function in a global context.

1.3. Research objectives

This thesis approaches the above-mentioned research gaps by studying supplier relationship management (SRM) in the context of global supply management. The thesis aims to clarify the elements of capability in SRM, develop a measurement for the capability of SRM, and examine the effects of capability on the strategic fit of the supply management function in a global context. The overall objective is to examine how the organizational capability related to SRM may influence the firm's global competitiveness. Previous research has helped academics and practitioners understand global supply management, what it is, and how firms have tried to solve the problem of supply coordination. But as stated in the previous section (1.2.), there is a clear research gap in studies on how the capability of managing supplier relationships may contribute to the integration of supply management and to the firm's global competitiveness. Therefore, the main argument in this study is that the capabilities related to supplier relationship management reduce conflicts between integration and responsiveness in global organizing decisions. In other words, it is argued that the capabilities of supplier relationship management are linked to the supply management integration and have a positive impact through strategic supply management on the firm's global competitiveness. The argument is formulated into the following main research question:

How does supplier relationship management capability influence the firm's global competitiveness?

The thesis comprises four complementary publications addressing the main research question with more specific goal setting. Therefore, the main research question is divided into four sub-questions. Capability is a latent phenomenon, which is difficult to define and measure (Jantunen, 2005), and thus, it is essential to search the elements that construct the concept. Moreover, capability associated with SRM is scantily researched area (Quintens et al., 2006a) and previous measures and scales do not exist. Therefore, it is asked:

Q1: What are the constructing elements that form the capability of supplier relationship management?

To increase knowledge of how the capability of SRM influences the firm's positional advantage and competitiveness, there is a need to explore the relationship between SRM capability and the firm's strategic decision-making. It is assumed that the link between SRM capability and firm strategy is established through strategic supply management (Quintens et al., 2006a). Thus, it is asked:

Q2: What is the effect of supplier relationship management capability on strategic supply management?

The main argument of the thesis emphasizes the role of SRM capability in reducing conflicts between integration and responsiveness in global organizing decisions. The issue is approached through the process of supply management integration, where the coordination and strategy implementation are central themes (Narasimhan and Das, 2001). Thus, it is essential to clarify the concept of supply management integration and search the internal factors, which may contribute positively to the success of global supply management integration. Therefore, it is asked:

Q3: What are the internally influencing factors of global supply management integration?

The general objective of global integration is to increase the effectiveness of the firm and enhance global competitiveness. In this thesis it is argued that the capabilities of supplier relationship management are linked to supply management integration (Day and Lichtenstein, 2006) and have a positive impact through strategic supply management on the firm's global competitiveness (Quintens et al., 2006a). Thus, there is a need to explore how the capabilities are involved in the integration process. Therefore, it is asked:

Q4: How is supplier relationship management capability linked to supply management integration?

To answer these questions four different research papers were written. The influence on the firm's global competitiveness is examined through the concepts of SRM capability, supplier relationship management, supply management integration and strategic supply management. By this the study aims to enhance knowledge and understanding about the role of supply management and supplier relationships in a global business. Development of the firm's internal capability to act in a global market is a key issue in enhancing global competitiveness, therefore the effect of SRM capability on global competitiveness is assumed to be realized through strategic supply management and global supply management integration.

In this thesis the following definitions of the main concepts are applied:

Strategic supply management is “the process of planning, implementing, evaluating, and controlling strategic and operating purchasing decisions for directing all activities of the purchasing function toward opportunities consistent with the firm's capabilities to achieve its long-term goals” (Carr and Smeltzer, 1997, p. 201).

Supply management integration is internally focused action that aims to the alignment of strategic supply management practices according to the goals of firm (Narasimhan and Das, 2001).

Supplier relationship management (SRM) is a process that defines how the company interacts with its suppliers and it is a mirror image of customer relationship management (Croxtton et al., 2001).

SRM capability is the firm's internal capacity and ability to manage its suppliers and conduct its internal tasks and responsibilities related to supplier relations in order to achieve its overall goals (definition follows the views of Makadok (2001), and Helfat and Peterhaf (2005) concerning the firm's organizational capability).

A more detailed explanation of the above-mentioned concepts and their theoretical foundations are provided in Chapter 2.

1.4. Outline of the study

This thesis consists of two parts. The first part introduces the theoretical background of the work and gives an overview of the dissertation. It summarizes the results and answers the presented research questions. The second part of the dissertation comprises four research papers addressing the research questions presented above. The outline of the thesis is illustrated in Figure 1.

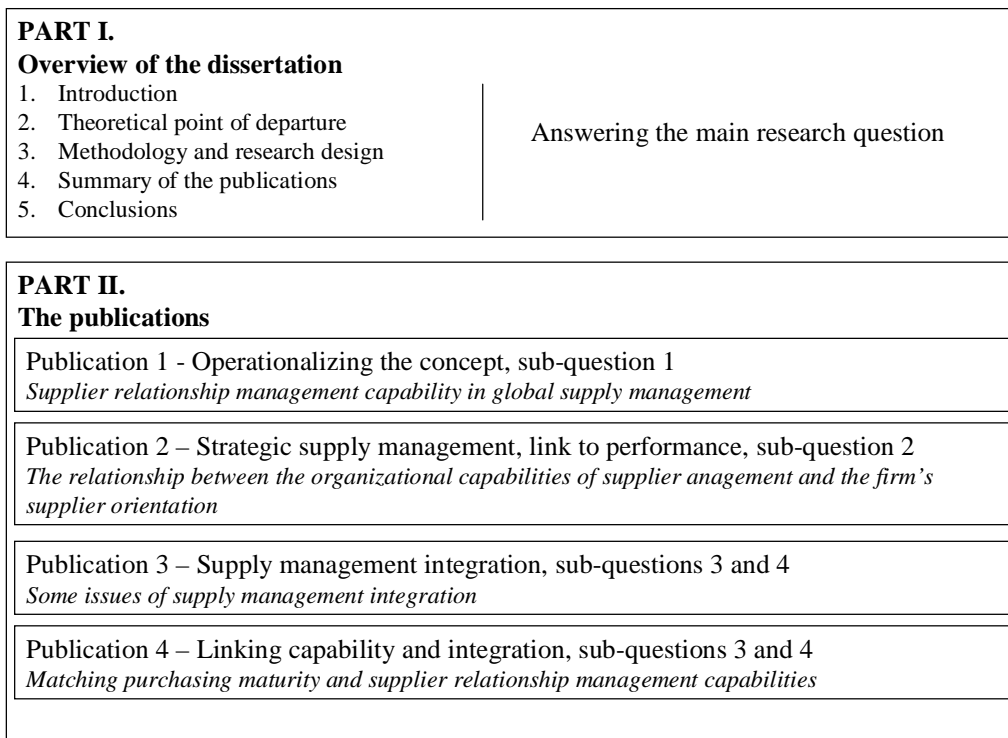


Figure 1. The outline of the thesis

The first part consists of five chapters. Chapter 1 introduces the context, points out the research gap and presents the objectives of the study. In Chapter 2 the theoretical

background, basic concepts and the framework of the study are presented. Chapter 3 describes the methodological choices and research design. Chapter 4 reviews the results and presents a summary of the publications. Chapter 5 concludes the study and answers the research questions. In this chapter theoretical and managerial implications are presented as well as suggestions for further research.

The second part of the dissertation comprises four empirical research papers. Publication 1 examines the constructing elements of SRM capability and develops a measurement scale, which is applied in the subsequent research papers. Publication 2 focuses on the examination of the relationships of SRM capability, supplier orientation and the firm's performance. The paper clarifies SRM in relation to strategic supply management. Publication 3 broadly discusses the issues of supply management integration in the research context. Publication 4 investigates the relations of supply management maturity and SRM capability and the value creating role of SRM.

2. THEORETICAL POINT OF DEPARTURE

This chapter introduces the concepts and theoretical background of this study. The first section describes strategic supply management and its connections to the firm's business and global strategy. The second section connects the concept of supply management integration to the general discussion of global integration. The third section defines the concept of supplier relationship management and presents the theoretical approaches taken to the issue in previous research. Finally, the definition of the organizational SRM capability is introduced. The chapter ends with a conceptual framework of this dissertation.

2.1. Strategic supply management

Strategy has been defined to be “a pattern in a stream of decisions” (Mintzberg and Waters, 1985 p. 257). Thus, it is an analytic process to establish long-term goals and action plans for a firm, whereas strategic management is a system of corporate values, planning capabilities, and/or organizational responsibilities, which connect strategic thinking with the operational decision-making at all levels and across all functions in a firm (Gluck et al., 1980).

During the evolvement of the concept of strategic management from the 1980s² different organizational functions have begun to consider their role in the strategic management process. Since the early 1990s also in the field of supply management there has been a pronounced need to be integrated into the strategic management process. According to Ellram and Carr (1994), the strategy formation concerning supply management includes three different types. First, it is possible that companies define

² The early development of the concept was based on the work of Chandler (1962) and Ansoff (1965) emphasizing the contingency perspective. In the 1970s there was a movement toward industrial organization (IO) economics (Porter, 1980, 1985) which paid attention to external aspects such as industry structure. Then, the focus areas of strategic management research turned back to the firm's internal view and boundary relationships, where TCE became the dominant theory. Recently, the insights of the RBV have had a strong impact on the development of the concept. More details about the development of the concept are available in the article of Hoskisson et al. (1999).

specific strategies employed by the supply management. Second, the role of supply management is to support the strategies of the other functions of the firm. Third, supply management is utilized as a strategic function of the firm. Thus, the role and strategic level of supply management can vary between firms. Nevertheless, several studies have shown that supply management actually is a strategic function in many firms (e.g. Spekman et al., 1994; Carter and Narasimhan, 1996; Carr and Smeltzer, 1997; Kocabasoglu and Suresh, 2006). In any case, supply strategy needs to be defined and co-aligned with the firm's overall goals.

Strategic supply management has been defined to be “the process of planning, implementing, evaluating, and controlling strategic and operating purchasing decisions for directing all activities of the purchasing function toward opportunities consistent with the firm's capabilities to achieve its long-term goals” (Carr and Smeltzer, 1997, p. 201). Narasimhan and Das (1999) widen the concept to cover supplier relationships. They argue that by using supplier networks firms can obtain manufacturing capabilities without capital investments. Their argument refers to the firm's strategic make-or-buy choices and outsourcing decisions. Carr and Pearson (1999) have a parallel approach. They see that strategic supply management is an investment of a buying firm in the transaction specific assets that can lead to benefits from vertical integration without the costs of actual ownership. Paulraj and Chen (2007) state that the strategic nature of supply management rises from the activities the buying firm adopts to foster superior relations with suppliers to have mutual benefits. These arguments emphasize the exploitation of the firm's external resources where the maintenance and management of relations with a supply base have a considerable role.

To operationalize the concept, several studies have examined the construct of strategic supply management. Carr and Smeltzer (1997) have defined the factors that have an impact on the level of strategic supply management to be the following: the status of supply management, knowledge and skills of supply management, willingness to take risks in supply management and supply management resources. According to Kocabasoglu and Suresh (2006), strategic supply management consists of four major elements: the status of supply management, internal coordination, information sharing

with suppliers and the development of key suppliers. Paulraj et al. (2006) define that strategic supply management is constructed on a strategic focus, strategic involvement and the visibility or status of supply management. All these constructs include the status of supply management to be the indicator of strategic supply management. Therefore, these studies participate in the discussion on the role of supply management, namely, whether it is strategic or not for the firm's business.

The Chartered Institute of Purchasing and Supply Management (CIPS) has created a supply management model, where strategic supply management is management of the firm's external resources, maximization of value and minimizing of risks (CIPS, 2009). The doctrine of supply management combines several disciplines of economics, technical sciences and psychology within the business science. This multidisciplinary approach has further widened the understanding of the role of supply management in business among the practitioners and scholars.

The intention of supply strategy is to create value to customers and to be innovative in building competitive capabilities (Nollet et al., 2005). For several reasons the role and strategic status of supply management can vary considerably in firms. Depending on, for example, the industry, nature of business, market, competition and scarcity of the supply base, its role can range from supportive activities to being a source of competitive advantage. When a firm considers supply management as one of the sources of its competitiveness it is most likely linked to the exploitation of its supply base and interaction with suppliers and the supply network. In that case, suppliers are external resources which may provide opportunities to new technologies, cost advantages and knowledge that cannot be achieved otherwise. Therefore, a specific orientation toward suppliers may indicate the strategic nature of supply management.

2.1.1 Supplier orientation

In strategy research the concept of strategic orientation is a focal element in discussions on competitive advantage. Many studies have shown that firms successfully pursuing a specific orientation will show better performance (Ruekert, 1992; Baker and Sinkula,

1999; Langerak, 2001) although the results have been inconsistent (Noble et al., 2002). Still, it is stated that strategic orientations reflect the firm's business strategy and that they are the guiding principles influencing strategy-making activities. Firms choosing a specific strategic orientation to enhance their competitive advantage and performance must have adequate capabilities to implement the strategy in practice.

In the supply management literature, orientations have been linked to the role and status of supply management within the firm. On the other hand, companies emphasizing the role of supply management to be one of the elements of competitive advantage may actively strive toward better relationships with their suppliers. In that case, supply management can be considered to be a buying firm's investment in transaction specific assets that can lead to the benefits of vertical integration without the costs of actual ownership (Carr and Pearson, 1999). Therefore, it can be said that firms have a strategic orientation with their suppliers. Supplier orientation refers to the organizational activity in managing supplier relationships to achieve the firm's goals. Thus, supplier orientation is considered to be one of the possible strategic orientations firms can choose to achieve competitive advantage.

In the strategy literature the relationship of business strategy and other functions is considered to be strategic co-alignment. Relatively enduring patterns of strategic behavior that actively co-align the firm with its environment can be understood to be the firm's strategic orientations. Miles and Snow (2003) have proposed a strategic fit where the firm and its internal elements should be aligned with its environment and fitted together to achieve the desired strategic fit. Snow et al. (2006) have later explained that the core configurational elements in a firm are strategy, capabilities, structure and process. Therefore, it can be said that strategy and capability are intertwined. If strategy is the firm's intent and plan, then capability is the main enabling factor that allows the strategy to be pursued (Snow et al., 2006). Moreover, capability may shape the pattern of strategic behavior and strengthen a certain orientation. Strategic orientation and strategic fit are key issues in the firm's organizational alignment. They form the basis on the examination of supply management integration, which is discussed next.

2.2. Supply management integration

Meeting the challenges of global competition necessitates that firms must integrate their activities on a worldwide basis to capture the linkages among countries. However, at the same time a firm needs to maintain its country perspective at some level. Balancing these two perspectives is an essential question in a global strategy (Porter, 1986). This problem of balance in coordination and structure in global organizations is generally referred to be the discussion of the degree of integration and responsiveness (I-R) in a global strategy and how this degree influences global competitiveness. (Doz and Prahalad, 1984, 1991; Goshal and Nohria, 1989; Bartlett and Ghoshal, 1998)

In the supply management literature the discussion of supply management integration can be distinguished between two streams. Firstly, the integration involves the research stream on control and scale economies. In the supply management literature this issue is often referred to be the centralization and decentralization of the supply management function (e.g. Matthyssens and Faes, 1997; Hughes, 1998; Arnold, 1999). The debate over the advantages and disadvantages of the centralization of the supply management function has been lively in the supply management literature and it has shown that a clear trend of centralization is going on in the firms (Johnson and Ivey, 2003). Many of these studies take an international or global perspective to the issue. Globalization is a driver toward centralized supply management and global strategy. It is proposed that the organizational structure of the firm and the distribution of supply management expertise in a firm globally determine the level of centralization (Hartmann et al., 2008). Thus, this discussion is related with the discussions on the global integration of the business processes in geographically dispersed firms and the I-R theme. However, the basic problem – how to organize and manage a certain function in a dispersed environment – is not specifically tied to global issues. The problem can be present even if the firm operates purely domestically.

The second stream is related to the issue on the firm's internal integration between supply management and other functions of the firm, strategic co-alignment and strategic status of supply management (e.g. Freeman and Cavinato, 1990; Carr and Smeltzer,

1997; Cavinato, 1999). Supply management integration is defined to be an internally focused action that aims to the alignment of strategic supply management practices according to the goals of the firm (Narasimhan and Das, 2001).

In this study these both streams are combined. The context of this study expands the discussion to the global integration level. Implementing a global strategy and developing the capabilities required in global business is difficult. Even though global firms may have a clear global vision and orientation about their strategy and objectives, the development of a global organization structure is still lagging behind (Cavusgil, 2004). Thus, an international or global environment increases the complexity of integration in terms of distance, communication, language and culture, among other things.

Ghoshal and Nohria argue (1989) that global integration is a function of organizational needs, which internally differentiate various sub-units within the global intraorganizational network. They have explored the internal differentiation within a global company and presented the concept of *conditions of fit*. According to them, the subsidiary context can be differentiated into categories which are based on the joint conditions of subsidiary local resource levels and environmental complexity relative to the other subsidiaries. Each category is a different combination of the following three elements: i) centralization, meaning a lack of autonomy in decision-making, ii) formalization, indicating the use of systematic rules and procedures in decision-making, and iii) normative integration, which means consensus and shared values as a basis for decision-making. These elements characterize the structure of relations inside the global company.

2.2.1 Factors of integration

Global integration offers multinational customers, possibility of high technology, scale of economics, better investment intensity, easier access to scarce raw materials and energy, and universal product needs (Doz and Prahalad, 1984). In supply management the arguments in favour of the integration are several. Economies of scale and increased

efficiency help the management to establish a global supply view and deepen their knowledge of the supply market. It allows the efficient use of available supply management skills and accumulation of knowledge internally. (Matthyssens and Faes, 1997; Arnold, 1999; Faes et al., 2000; Lysons and Farrington, 2006) The integration of supply management has been argued to be a prerequisite for cost-effective partnering with the suppliers, in the development of new products together with the suppliers and in global supply management (Leenders and Blenkhorn, 1988; Faes et al., 2000; Burt et al., 2003; Quintens et al., 2006a). Moreover, knowledge of the supply markets and strong power position in negotiations require more coordinated supply actions (Matthyssens and Faes, 1997).

Responsiveness, instead, addresses the environmental and industrial factors that force companies to local strategic decision-making and quick responses to each local market or industrial setting (Bartlett and Ghoshal, 1998). These factors are diversity in market and industry structures, distribution channels, manufacturing processes and customer needs. Moreover, the signs of protectionism such as norms and standards, trade barriers, the importance of the public sector market and regulation of global activities push companies towards local business (Doz and Prahalad, 1984). In supply management responsiveness addresses closer relationships with local suppliers (Matthyssens and Faes, 1997; Monczka et al., 2005; Lysons and Farrington, 2006). Closeness generates a better fit for local requirements and reduces delivery times and costs. Moreover, firms need problem-solving capabilities close where the problems occur (Gadde and Håkansson, 1994). Other arguments in favour of responsiveness in supply management are better internal cooperation with buyers and the staff within the plant or business unit (e.g. Matthyssens and Faes, 1997). However, responsiveness requires better communication between all organizational levels, and the organization should be more aware of the various contracts that are available.

Hughes et al. (1998, p. 80) emphasize the integration issue with the view “think global – act local.” According to Hughes et al. (1998), responsiveness can lead to dependency on local country-specific suppliers, which can result in price differences and nationalistic sourcing, and increase transactional complexity. Lysons and Farrington (2006) point out

that responsiveness may cause reduced leverage and increase the transaction costs of supply management. They state that in the case of a dispersed organizational structure, the personnel in supply management tends to report to a lower organizational level, and supply management decisions are operational rather than strategic considerations. In this situation the buyers have limited expertise and few opportunities for cross-functional collaboration that may lead to restricted career opportunities for the local purchasing staff.

In addition to the environmental and industry factors influencing the firm's integration, there are internal factors as well. It has been stated that strategic intent, organizational needs and the firm's internal capability together constitute the organizational dynamics that influence the optimization of integration and responsiveness (Luo, 2002). In the field of supply management it has been presented that the integration of supply management is involved with processes, information, cross-organizational teams and relational integration (Paulraj et al., 2006) These factors emphasize the functionality of the firm's internal cooperation and organizational needs and capability. Quintens et al. (2006b) conceptualize the global supply management strategy as a multidimensional construct that is built upon standardization, configuration and coordination. This view points out the strategic intent and the role of global supply in the firm's strategy and indicates that the status of supply management is a driver toward integration.

Moreover, it has been shown that the internationality of supply management in terms of the extent to which firms buy raw materials, services and products from a foreign market, and the magnitude and level of foreign supplier relationships, is a driver for supply management integration (Mol et al., 2004). Economies of scale and increased efficiency are obvious benefits of integration and act strongly in its favor in the strategic decision-making of global supply management. Thus, the high share of purchasing costs from turnover may influence the integration level internally as well.

2.2.2 Value chain integration and purchasing maturity

The degree of integration of supply management can be expressed using the purchasing maturity model. Purchasing maturity describes the level of professionalism in the supply management function (Rozemeijer et al., 2003). The main idea is that firms should establish a sustainable foundation through their capabilities when integrating their supply management. In case the purchasing maturity is on a low level, utilizing new methods or practices may fail (Schiele, 2007). Capability enables the movement from a low maturity level toward integration.

Acquiring and developing new capabilities can be expensive and time consuming. Firms should consider carefully that actions improving their supply management are justified in terms of the industry, expenditure and their needs (Axelsson et al., 2005). It is clear that the price of the improvement should not be higher than the gained benefits, but how to measure the improvement, what the actual gained benefits are and in which form they are visible in the supply management function are the key questions that firms need to address before taking any action.

There are several models describing the development and maturity of supply management (Reck and Long, 1988; Freeman and Cavinato, 1990; Van Weele and Rozemeijer, 1998; Ritter and Walter, 2006; Gottschalk and Solli-Saether, 2006; Schiele, 2007). The first levels of the purchasing maturity models represent the functional approach and operative role of supply management, and the highest levels of the models represent the integration approach and strategic role of supply management (Van Weele and Rozemeijer, 1998; Van Weele, 2002). The final stage in purchasing maturity is value chain integration, which requires a global perspective on suppliers and entrepreneurial collaboration with suppliers. Departing from the functional approach and approaching the value chain integration requires extensive development in supplier relationship management capabilities.

2. 3. Supplier relationship management

Supply management is the focal point in a firm strategy where the external commercial supply market relations meet the functions inside a firm (Freeman and Cavinato, 1990). Suppliers and collaborative partners are referred to be firm's external resources. Management of supplier relationships connects the firm's internal supply organization to the firm's external resources (Van Weele, 2002; Salmi, 2006). However, it has been argued that defining the types of the existing supplier relationships is the most difficult barrier to overcome in linking supply management to the corporate level strategy (Watts et al., 1995). Thus, the effective management of suppliers requires firms to define which type of relationship they ought to adopt and under what circumstances (Cox, 1996). Defining the different types of supplier relations forms the basis of the supplier relationship management system.

According to Croxton et al. (2001), supplier relationship management (SRM) is a process that defines how the company interacts with its suppliers, and it is a mirror image of customer relationship management (CRM). In the marketing literature it has been clearly pointed out that maintaining the existing long-term customer relations is more profitable than to seek new customers (e.g. Kalwani and Narayandas, 1995). Moreover, it has been stated that customers are not alike in terms of profitability (e.g. Storbacka, 1997; van Raaij et al., 2003). Thus, firms aim to identify their strategically important customers, maintain and enhance good business relations with them, and increase firm competitiveness by exploiting the synergy of mutual business activities.

SRM aims to put into practice the principles of CRM from the perspective of the buying company. When supply management has a strategic role in the firm's business, they have a higher level of cooperation with their suppliers (Carr and Smeltzer, 1999). Moreover, a long-term perspective increases the intensity of coordination in supplier relationships (De Toni and Nassimbeni, 1999). When the cooperation and interaction with suppliers increases, the firm's ability to respond to the changing requirements of end customers will also grow, and the flexibility of the supply chain can be improved. This will have a positive impact on the firm's financial performance (Carr and Pearson,

1999). Effective SRM takes a long-term view on mutual business activities, establishes joint goals with suppliers, and maintains a win-win approach in business negotiations (Wilson, 1996; Croxton et al., 2001). Thus, supplier selection, categorization and management of existing relations should follow the strategic goals of the firm.

Several studies have presented concepts and dimensions related to SRM. The approaches of these studies can be classified into two main groups: i) the theoretical approach discussing the power issues, social relations, economic choices and value creation (e.g. Spekman and Johnston, 1986; Krapfel et al., 1991; Cox, 1996; Cousins, 2002; Williamson, 2008), and ii) the portfolio approach with managerial implications providing tools to help categorize suppliers and define strategies (e.g. Kraljic, 1983; Bensaou, 1999; Wagner and Johnson, 2004; Gelderman and Semeijn, 2006). The next two sub-sections take a closer look at these approaches.

2.3.1 Theoretical perspectives in the SRM literature

According to Hoskisson et al. (1999), the primary theoretical bases in the field of strategic management have been the Porterian view of the link between strategy and the external environment (the Five Forces model by Porter, 1980), transaction cost economics (Williamson, 1979, 1986) and the resource-based view (Wernerfelt, 1984; Barney, 1991). The literature review on the previous studies on buyer-supplier relationships revealed that several theoretical views can be found: transaction cost economics (TCE), the resource-based view (RBV), resource dependency perspective (RDP) and game theory (GT). Transaction cost economics (Coase, 1937; Williamson, 1979, 1986) and the resource-based view (Penrose, 1959; Wernerfelt, 1984; Rumelt, 1987; Barney, 1991) are organization theories aiming to explain why firms exist and how they are able to achieve competitive advantage. Resource dependency perspective (Pfeffer and Salancik, 1978) and game theory (Axelrod, 1984; Aumann, 1997) focus on optimizing the power position and social relations in dyadic or networked relationships between the companies.

Other theoretical perspectives that can be found in the supply management literature are the relational view and IMP approach. The relational view (Dyer and Singh, 1998) proposes that the relationship between firms can be a unit of analysis of competitive advantage. Relation-specific assets, knowledge-sharing routines, complementary resources and capabilities and effective governance are potential sources of interorganizational competitive advantage. The IMP (Industrial Marketing and Purchasing) approach emphasizes networking and interaction between firms suggesting that firms do not have strategic autonomy, and therefore, firms must act with others (Gadde and Håkansson, 1994; Gadde and Snehota, 2000; Baraldi et al., 2007). These views aim to explain the interaction and exchange in a relationship. The focus of the explanation is the dyadic or networked relationship and the interaction in these relations.

In this study the unit of analysis is the firm and its internal functions. The perspective taken is that of a buying company. In the relational view and IMP approach the unit of analysis is the relationship and the interaction between firms, whereas the theories of TCE, RBV, RDP and GT may take the firm's internal view. Therefore, these theories are taken under further scrutiny in this study. Table 1 summarizes the main views and dimensions of supplier relationships presented from the perspective of a buying company.

Table 1. A summary of the main views and dimensions of supplier relationships presented from the perspective of a buying company.

Authors	Theoretical view	Dimensions of the relationships
Spekman and Johnston, 1986	TCE	Level of vulnerability Extent of control
Heide and John, 1990, 1992	TCE RDP	Joint action Expected continuity
Krapfel et al., 1991	TCE RDP	Interest communality Relationship value
Heide and Miner, 1992	GT	Extendedness of relationship Frequency of contact Performance ambiguity Increase vs. decrease cooperative behavior
Cox, 1996	TCE RBV RDP	Relative ownership of contracts Relational competence Degree of power between participants
Kaufman et al., 2000	TCE	Strategic supplier typology: The degree of technology The degree of collaboration
Cousins, 2002	GT	Level of dependency Level of certainty Opportunistic behavior vs. strategic collaboration
Grover and Malhotra, 2003	TCE	Efficiency and performance metrics
Heimeriks and Duysters, 2007	RBV	Experience Alliance capability consisting of learning mechanisms and routines
Williamson, 2008	TCE	Increase of bilateral dependency Importance to preserve continuity in relationship

Transaction cost economics (TCE) seeks to explain why organizations exist. It is a theory, which bases its arguments on economics. It originates from the thoughts of Coase (1937) who maintained that if there are no transaction costs or they are negligible, the organization as an economic activity is irrelevant because the contracting is costless. Thus, when running an economic system (a firm) there are always some transaction costs involved. Transaction costs are the costs that arise from contracting *ex*

ante, e.g. negotiating and writing, and *ex post*, e.g. executing the contract and settling disputes (Williamson, 1979, 1986).

Transaction costs affect the firm's decisions on how they organize their activities, whether to move towards vertical integration (hierarchy) or to prefer market exchange. The high frequency of transaction costs, uncertainty and asset specificity guide firms towards hierarchy. Between the market and hierarchy option is a hybrid governance form – cooperation. Cooperation is an efficient solution only if it creates extra value compared to the market and hierarchy options (Blomqvist et al., 2002). Factors encouraging cooperation are a high degree of transaction frequency, mutual dependency, the possibility to share risks and the possibility to share information.

It is stated that TCE is useful when studying relationships, because it provides insights into the circumstances that cause the development of a closer relationship between the buyers and suppliers (Heide and John, 1990). Establishment of a closer relationship corresponds to a shift away from market-based exchange towards hybrid governance (cooperation). Transaction costs are optimized if the relationship management is optimized according to the relationship type (Krapfel et al., 1991). Cox (1996) argues that all discussion on the proper form of the relationship between the firm and its external environment must include the theory of TCE, because it presents the factors that determine the internal and external boundaries of the firm. Grover and Malhotra (2003) argue that TCE can be studied in relation to efficiency and performance metrics within the supply chain. According to Chikán et al. (2007), TCE provides a framework to explain internal and external business relationships, though it has some limitations. It is difficult to measure, too variable, difficult to use in public sector, it does not deal the issue of mutuality and do not allow cross-cultural comparisons of social capita and cultural constructs. These studies state that transaction costs have an impact on the type of supplier relationship and flexibility of the supply chain.

The criticism against TCE explaining relationships between companies has pointed out that TCE does not recognize power or dependency in the interaction between the firms (Heide and John, 1992). Furthermore, TCE does not tell under which circumstances and

conditions contractual relationships achieve the lowest transaction costs, and it does not take into account the potential benefits that can arise out of a collaborative relationship with suppliers, or how the costs and gains are combined within the decision-making framework (Cox, 1996, 2005). Moreover, Ghoshal and Moran (1996) criticize TCE because it fails to explain the influences of internal management and social relations between the people in firms.

Resource-based view (RBV) aims to explain why firms are different and how firms can achieve competitive advantage. Differences in competitiveness can be explained through firm resources and capabilities, and not in terms of product and market structures. The view assumes that firms are bundles of resources. If these resources are valuable, rare, inimitable and non-substitutable, sustained competitive advantage can be achieved (Penrose, 1959; Wernerfelt, 1984; Rumelt, 1987; Barney, 1991). Resources are defined to be specific physical, human and organizational assets that can be used to implement value-creating strategies. The more these resources are the basis for the firm's success, the more the firm depends upon them. The characteristics of the firm's resources and capabilities, which may generate economic rents, form the strategic assets of the firm (Amit and Schoemaker, 1993).

Priem and Butler (2001) have presented criticism towards the static nature of the RBV because it does not take into account product markets and stated that there is still need for conceptual work before it meets the requirements of a theoretical structure. Barney (2001) has replied to this criticism by stating that the value of resources must be analyzed in the context of each market conditions and by that dynamism is achieved. However, Priem and Butler (2001) have presented that suitable topics to study with the help of RBV are studies on how firm resources and capabilities are accumulated and employed.

In the studies of supplier relationships the applications of the RBV theory are more scarce than the applications of TCE. However, e.g. Cox (1996) has stated that successful firms in the future will be those who can create skills and knowledge that help them get the dominating position within a supply chain. The argument is parallel

with the arguments of the RBV even though he does not mention RBV in his study. Heimeriks and Duysters (2007) have studied how differences in the sources of alliance capabilities explain performance. They argue that learning mechanisms, routines and capabilities are inherently linked. Their model suggests that a firm's alliance capability is a mediating variable. This result means that the impact of experience on the firm performance is realized via capability.

Resource dependency perspective (RDP) states that to acquire resources, organizations must interact with others who control these resources. The survival of the organization can be partially explained by its ability to ensure the continuity of the needed resources. Power is determined by the definition of social reality created by the actors and their control over the resources. Organizations seek to avoid dependencies and external control and try to retain their autonomy for independent action (Pfeffer and Salancik, 1978).

In the studies of supplier relationships the RDP is used as a complementary element besides TCE to explain the risk of dependency and describe the nature of the dyadic relationship. Krapfel et al. (1991) refer to the RDP and argue that the value of a relationship differs according to the willingness and ability of current exchange partners to provide sufficient demand for current and expected outputs, in light of the availability and cost of locating, qualifying and establishing relationships with an alternative exchange partner. Cox (2005) states that relational power determines the sharing of added value, thus it is also relevant to explore how the power and dependency forms the relationship types. However, the RDP does not address the question of how to manage the relationship.

Game theory (GT) addresses the issue of cooperation from the viewpoint of a game (Axelrod, 1984). The game aims to provide solutions to the situations, where each player considers different choices between cooperation and acting selfish. The players can achieve mutual gains from cooperation, but it is also possible that one player exploits the other, or neither will cooperate (Axelrod, 1984). Aumann (1997) has pointed out that even though game theory provides rational solutions to the interaction

situations, the choices of the decision makers can be less rational because of the bounded rationality of the players.

Heide and Miner (1992) have used an iterated games framework to predict future interaction between buyers and suppliers. They have found that the extendedness and frequency of contact increase the possibility of cooperation. Performance ambiguity will, however, decrease the possibility to cooperate. According to them, inter-organizational cooperation can be influenced by adjusting interaction properties. They state that there are relationships which may contain elements from both competition and collaboration. Thus, GT provides a theoretical frame for decision-making situations where there is a possibility to gain synergy from cooperation between the buyer and supplier.

The theoretical approach provides four different aspects of SRM research. In sum, TCE underlines the aspects of efficiency and cost focus. RBV refers to the firm's internal value creation through its resources and capabilities, whereas RDP applies the aspects of social relations, power distribution and the level of dependency on external counterparts. GT, for its part, analyzes the rationality of the choices of decision makers and supports interactive decision-making and cooperation with suppliers. Table 2 summarizes the different insights of theories and their contribution to the concept of SRM.

Table 2. The four different aspects of SRM research.

Theory	Source	View of the firm	Source of competitiveness	Objective
TCE	Coase, 1937 Williamson, 1979	Nexus of contracts	Economizing	Efficiency and costs, boundaries of a firm
RBV	Penrose, 1959 Wernerfelt, 1984 Barney, 1991	Bundle of resources	Capabilities	Value creation
RDP	Pfeffer and Salancik, 1978	Interlocked activities and coalitions of varying interests	Power and control over scarce resources	Social relations
GT	Axelrod, 1984 Aumann, 1997	Analyzes the rationality of choices of decision makers	Cooperation	Interactive decision-making

2.3.2 Portfolio approach in the SRM literature

The portfolio approach utilizes the different views arising from organization and management theories. Portfolio theory and models in general address the view of tradeoffs in expected returns relative to the risk characteristics of investments. The portfolio approach concerns investors and other economic agents acting under uncertainty and can be used to direct future actions and practice (Markowitz, 1991). The supply management portfolio model of Kraljic (1983) was the first comprehensive portfolio approach presented in the field of supply management. Kraljic underlined the importance of supply management in the firm's business. He pointed out that firms must recognize what kind of supply risk and profit impact is involved in their supply base. The supplier portfolio models are tools to help managers categorize suppliers and define strategies in each category. Establishing a strategic supplier portfolio requires careful planning, configuration of the supply base, supplier development and integration into the functions of the firm (Wagner and Johnson, 2004).

Portfolio ideas have been frequently applied in SRM. For example, Ollsen and Ellram (1997b) have developed a three-step portfolio to assist in managing different kinds of supplier relationships. According to Bensaou (1999), the supplier relationship type is determined based on the amount of investments by the buyer and/or supplier. Caniëls and Gelderman (2005, 2007) have studied supply management strategies from the perspective of power and dependence in supplier relations with the help of Kraljic's model. Moreover, Gelderman and Semeijn (2006) have fitted global supply base management to the Kraljic's portfolio model. A review of the literature on portfolio approaches and classifying dimensions related to the management of supplier relationships is presented in Table 3.

Table 3. A review of the supplier portfolio models

Authors	Classifying dimensions
Kraljic, 1983	Profit impact Supply risk
Olsen and Ellram, 1997b	Strategic importance of supply management Difficulty in managing the purchasing situation Attractiveness of the supplier
Bensaou, 1999	Level of buyer specific investments Level of supplier specific investments
Masella and Rangone, 2000	Time horizon of the relationship Nature of the buyer–supplier integration
Cox, 2003	Share of surplus value Interdependence/Dominance
Caniëls and Gelderman, 2005, 2007	Relative power Total interdependence
Hallikas et al., 2005	Network related risk Collaborative risk management
Gelderman and Semeijn, 2006	Value of purchase Number of suppliers
Saccani and Perona, 2007	Exchange criticality Operational impact

There are, however, studies (e.g. Dubois and Pedersen, 2002; Gelderman and Van Weele, 2003; 2005) that have raised some questions about the applicability of the simple portfolio model to the complex strategy formulation situations concerning supplier relationships. In general, the decisions based on a portfolio are sensitive to the

choice of dimensions, factors and weights. Therefore, additional information is needed: such as the overall strategy of the firm, knowledge on the supply market and capacity of the suppliers (Gelderman and Van Weele, 2003). Moreover, in many cases, the ways to interact with suppliers have changed from adversarial relationships towards collaborative interdependence between firms. Products are often jointly developed by buyers and suppliers, and evolve during the relationship. In these cases, important factors such as alternative governance forms, pressures to reduce the supply base, and increased concern for sustainable competitive advantage through supplier relationships are not included in the portfolio models (Wagner and Johnson, 2004).

According to Wagner and Johnson (2004), a strategic supplier portfolio should consist of a set of supplier relationships where management activities involve not just individual supplier relationships but the entire supplier portfolio as a group. Firms should map the strategic role of the various relationships, where dependencies and interdependencies are created, the alternative governance mechanisms, and where the firm will invest in and leverage relational capital.

2.3.3 A synthesis of the approaches

Theoretical approaches provide four different aspects of SRM research. Applying TCE underlines the aspects of efficiency and cost focus. The minimization of transaction costs and efficiency is the fundamental issue in the integration tendencies of firms in global business. In this context, TCE theory is widely applied in relationship and strategic management studies. In TCE theory, the unit of analysis is firm-level dyadic transaction where the minimization of transaction costs is the objective (Hoskisson et al., 1999). RBV refers to the firm's internal value creation through its resources and capabilities. Therefore, it stresses the internal factors that have an impact on the competitiveness of the firm, and the concept of organizational capability is strongly derived from the RBV. RDP applies the aspects of social relations, power distribution and the level of dependency on external counterparts. It raises questions on risks related to supplier relations and how to reduce dependency by increasing the negotiation power of the firm. GT, on the other hand, provides a framework to analyze the rationality of

the choices of decision makers and supports interactive decision-making and cooperation with suppliers.

Portfolio models provide the foundation for the categorization of suppliers and form the basis of the supplier relationship management system in a firm. They present examples of dimensions, which firms can use and modify according to their needs in their strategy development. The existing classifying dimensions can be divided into four main categories: economic (profit impact, level of investment), risk (availability, strategic importance, network, exchange criticality, power and interdependence) value (attractiveness, nature of integration, surplus value, value of purchase) and social interaction (difficulty of management, time horizon of the relationship), which can be examined through the theories of strategic management.

Coupling together the both streams of relationship research shows that some similarity exists. Both, the TCE theory and the economic factors presented in the portfolio models suggest that firms act economically and aim to minimize the interaction costs which can arise from the exchange between the buying company and supplier firms. The RBV and the value creating dimensions found in the portfolio approach propose that by using and developing the firm's internal resources and capabilities related to business relationships it could be possible to create added value for final customers. The presented risk dimensions in the portfolio models as well as the RDP refer to a power balance in the relationships. Changes in the power position may reduce or increase the risks of supply, and thus, firms struggle to keep the power balance optimal and are forced to maintain their social relations with other firms. The principles of GT encourage cooperation with suppliers. A fruitful collaborative relationship could promote competitive advantage. Moreover, cooperation between different functions inside the firm and/or between the firm's different business units is required when aiming toward the firm's overall goals. Social interaction factors suggested in the portfolio models emphasize the exchange of information between the firms as well as inside the firm where there can be several interfaces connected with suppliers, for example, R&D, process management or marketing in addition to the supply function. Therefore updated information available for all the levels is needed. Figure 2 couples the different insights of the theories and

the dimensions of the portfolio models, and summarizes the objectives of SRM arising from the literature. Consequently, it presents a theoretical framework of this study.

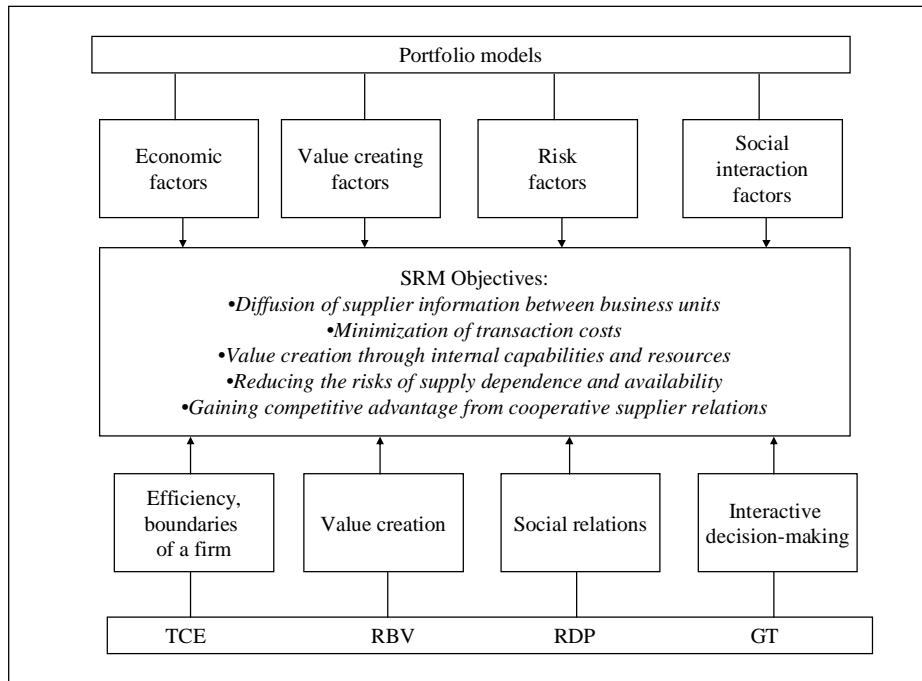


Figure 2. The theoretical framework of the study

In sum, it can be concluded that the theories and portfolio models presented here highlight the main objectives of supplier relationship management, which are i) the diffusion of supplier information between business units, ii) minimization of transaction costs, iii) value creation through internal capabilities and resources, iv) reducing the risks of supply dependence and availability and v) gaining competitive advantage from cooperative relationships. Global companies need to develop adequate capabilities to achieve and fulfill these SRM objectives.

2.4. SRM capability

Capabilities, competences, resources and skills are often used interchangeably in the literature. However, a clear distinction between the terms exists. *Resources* are “stocks

of available factors that are owned and controlled by the firm” (Amit and Schoemaker, 1993, p. 35). Teece et al. (1997) define resources to be firm-specific assets that are difficult to imitate. Transferring these assets between firms is difficult because of high transaction costs. In addition, firm-specific assets may contain tacit knowledge. The term *skill* is defined as an acquired proficiency within a discrete and relatively narrow area of psychomotor and/or mental activity (Cheetham and Chivers, 2005). *Competence* refers to an effective performance in a specific area ranging from the basic level of proficiency to the highest levels of excellence. According to Green (1999), personal competence connects individual expertise in the organization.

Capability, instead, is commonly understood as organizational level competence. According to Kale et al. (2002), capabilities are highly related to the accumulation and development of competencies through the path of learning and innovations. Moreover, capabilities are developed through a process that involves organizational experience based on present and future actions and, thus, organizational capabilities are a result of recombining and integrating knowledge within the organization. Capability is “a firm’s capacity to deploy resources” and “capabilities are information-based, tangible or intangible processes, which are firm specific and developed over time through complex interactions among the firm resources” (Amit and Schoemaker, 1993, p. 35). Makadok (2001) and Helfat and Peteraf (2003) have followed this view and define capabilities to be the firm’s capacity to deploy resources by using organizational processes to achieve their goals. Capabilities fill the gap between the firm management’s intention and outcome (Dosi et al., 2000). Organizational capability grows from the experience, knowledge and skills of individuals (Eisenhardt and Martin, 2000). Teece et al. (1997) presented the concept of *dynamic capabilities*. According to them, dynamic capabilities are the firm’s ability to integrate, build and reconfigure internal and external competencies to address rapidly changing environments. Thus, a capability refers to the organizational level of knowledge, performance and assets, which are unique and rare, and can be a source of competitive advantage.

Supplier relationships are part of the firm’s business system where the economic impact of a specific type of supplier relationship depends on the way how this relation is

managed and the degree of involvement in the relationship (Gadde and Snehota, 2000). Thus, the capability to handle the relationships requires control and assessment of the economic consequences, understanding the interactive nature of the relationship and perceiving the forces driving the change.

According to Day and Lichtenstein (2006), supply management can be divided into the external and internal interface. Internal interface consists of internally focused activities involving the integration and alignment of supply management with the goals of the firm. External interface involves externally focused activities directed towards supply markets. Managing the external interface of supply management is the most crucial point where internal supply processes and complex relations of entire supplier networks meet (Salmi, 2006). The basic elements of the external interface consist of the development of buyer–supplier relationships, SRM, leveraging the supply base and supplier performance evaluation. Capability connects the external and internal interfaces via supply management integration and SRM. Thus, following the views of Makadok (2001) and Helfat and Peterhaf (2005), SRM capability is defined to be the firm’s internal capacity and ability to manage their suppliers and conduct their internal tasks and responsibilities related to supplier relations in order to achieve their overall goals.

The existence of SRM capability in a firm can be difficult to observe. Generally, the visibility of capability comes through the actions of the firm. The skills, competences and knowledge of individuals inside a firm accumulate to the level of organizational capability. Therefore, the capability is structured on several dimensions and elements covering various work tasks of individuals. To be able to develop SRM capability further, the construct of SRM capability needs to be identified.

2.5. The conceptual framework of the study

This section combines the presented theoretical foundation, the main concepts and the research questions. Moreover, the connections of the concepts with research questions

and the four publications are drawn. Figure 3 illustrates the relations of the main concepts and the research questions.

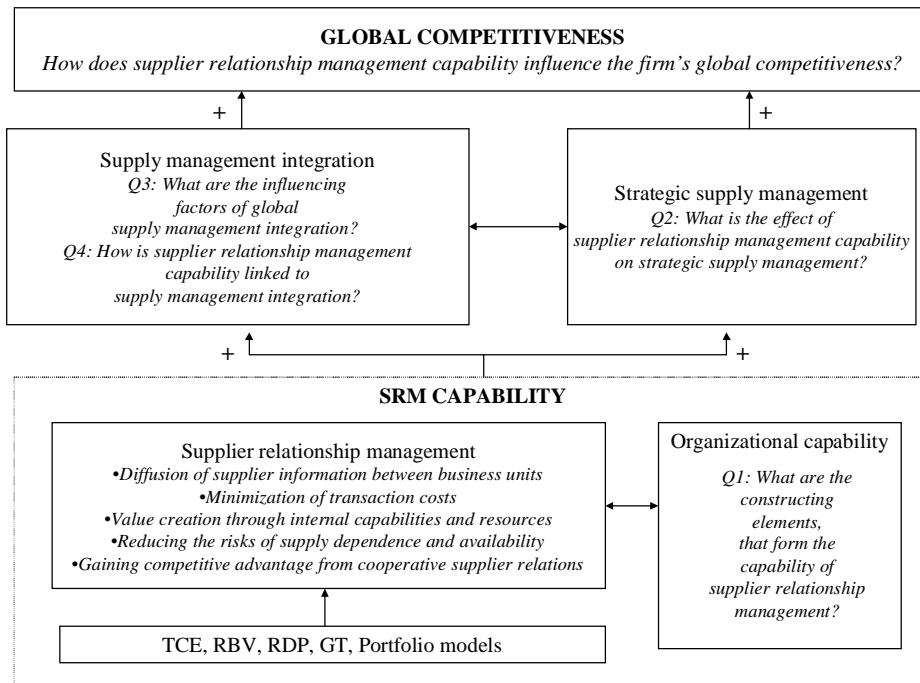


Figure 3. The relations of the research questions with the main concepts of the study

Figure 4 shows the research model where the connections of the concepts used in this study are drawn and it presents in which publications the concepts show up. The concept of SRM capability is studied in Publication 1, whereas Publication 2 presents the concepts of strategic supply management and supplier orientation. Publication 3 studies the influence of internationality, internal cooperation, the value of purchasing and the status of supply management in integration. Publication 4 examines the concepts of supply management integration, value chain integration and purchasing maturity. The contents of each Publication and the key results are summarized in Chapter 4.

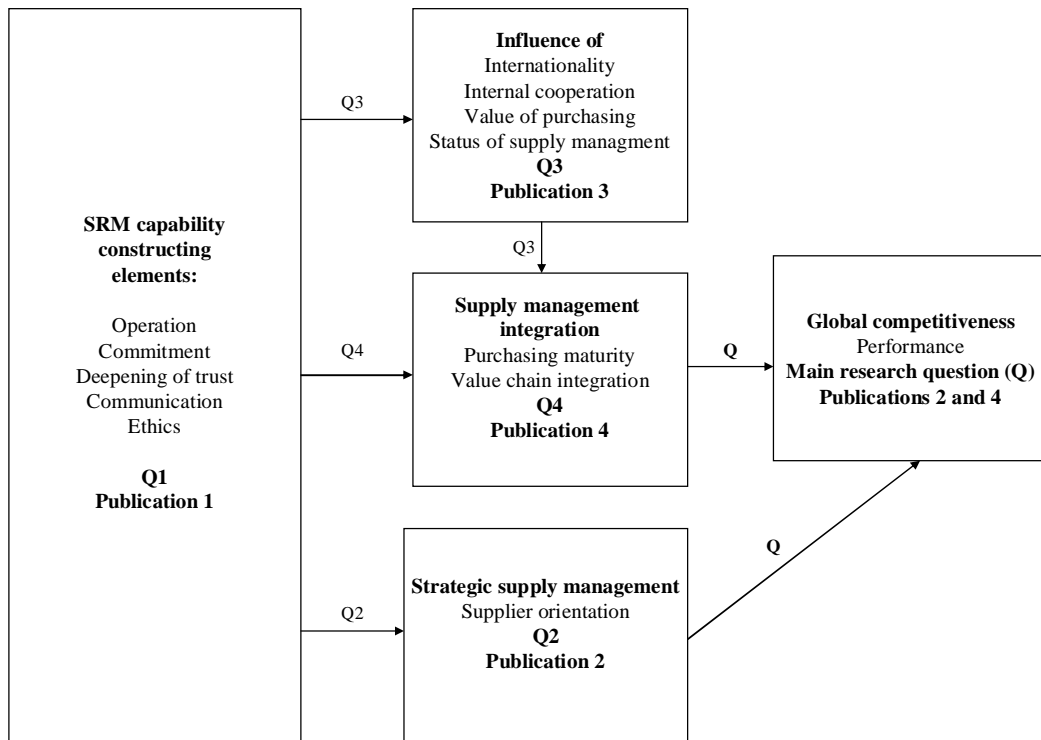


Figure 4. The research model of the study

The study ascends in the following order: First, the elements of SRM capability are searched. Second, attention is given to the relations of SRM capability and strategic supply management. Third, the effect of the defined internal factors on supply management integration is studied, and fourth, the link between SRM capability and supply management integration is established. The assumed positive influences on global competitiveness are examined through supply management integration and strategic supply management.

3. METHODOLOGY AND RESEARCH DESIGN

3.1. Methodological approach

The philosophical thoughts of science have had two main directions: explanatory and interpretive. The explanatory view intends to explain phenomena and find out the causal paths that lead to the existence of the phenomenon. The opposite view sees that the meaning of science is not just to explain the phenomenon but to interpret it and add human understanding (Wicks and Freeman, 1998). This dichotomy is often referred to with a discussion on the methodological choice between the quantitative and qualitative research approach. Recently, these two extremes have started to converge. Several academics (e.g. Denzin and Lincoln, 2000; Patton, 2002; Mangan et al., 2004; Metsämuuronen, 2006; Dubois and Araujo, 2007) agree that looking at the phenomenon from various perspectives, and using different methods and data gives more comprehensive knowledge and a better picture about the phenomenon under scrutiny.

The main research question “*how does SRM capability influence the firm’s global competitiveness*” refers to a more qualitative than quantitative approach (Yin, 1994). However, when the studied phenomenon is difficult to define and measure, or when its existence is hard to explain, a multi-method approach seems to be an appropriate choice (Hirsjärvi et al., 2002). Therefore, in this study different theory approaches are combined and different methods have been used. Moreover, to achieve in-depth understanding of the phenomenon and to increase the validity of the results, methodological and data triangulation (Denzin and Lincoln, 2000; Yin, 2003) are applied.

3.2. Research design and data collection

In this thesis two types of data are collected and exploited: cross-sectional survey data and interview data. The survey data is collected from one hundred Finnish firms. The

constructs of the concepts and the relationships between the concepts are defined based on this survey data. The interview data consists of eight semi-structured interviews from a single company constituting a case study. A case from the Finnish forest industry is drawn into the discussion to increase understanding about the phenomenon, and to give an example of the implementation of a global supply integration project in a real life context (Yin, 2003). As Dubois and Araujo (2007) have suggested, disciplines can benefit from examples, and case study research may follow prior quantitative research. Case studies can help to refine key theoretical concepts and the scope of theories being studied (Dubois and Araujo, 2007).

The constructs and relationships of the concepts in Publications 1 and 2 have been analyzed with quantitative methods. In Publication 3 the effects and inputs of the concepts into organizational integration are examined with qualitative and quantitative methods. The link between value chain integration and capability in Publication 4 is studied through a case study, thus utilizing a qualitative approach. The used methods and approaches are explained in more detail in each publication separately.

The survey data was collected during a separate research project which explored the current state of purchasing and supply management (PSM) in Finland and the biggest challenges of supply management in Finnish large companies. The project was part of the large nationwide EGLO – Enhancing Global Logistics (EGLO-yhteenveto.pdf, 2007) project. The study was conducted by a research group of Supply Management in Lappeenranta University of Technology (LUT), School of Business. It was financed by the EGLO project, the Finnish Ministry of Transport and Communications, The Finnish Association of Logistics, and by two case companies. The EGLO project started in the year 2004 and was finalized in spring 2007.

The Author was part of the supply management research group at LUT and participated in the research design, development of the questionnaire and collection of the data. The general results of the study were presented in the form of a report which was sent to the respondent companies. The summary of the report was published in the 16th IPSERA conference (Lintukangas et al., 2007). This research paper served as a starting point for

this thesis and helped the Author to gain an adequate pre-understanding about the current supply management capabilities in Finnish firms.

Publications 1–3 exploit some selected parts and constructs from the EGLO project survey data as they were found to be suitable for the purposes of this thesis. The full survey questionnaire is presented in Appendix 1, and the selected parts from the survey are presented in each publication separately.

The survey data was collected during the year 2005. The survey was addressed to large Finnish companies with a turnover of at least 50 million euros. A total of 612 companies were identified from the company register of Statistics Finland. Of those, 570 were found eligible to answer the questionnaire. These companies were contacted by telephone in order to reach the suitable key informant and to inform the respondent of the questionnaire beforehand. The aim of the telephone contacts was also to increase the response rate. Some of the companies or respondents were not reached in spite of numerous telephone calls. However, the questionnaire, preaddressed postage-paid return envelope, and the covering letter describing the purpose of the research, were mailed to all eligible respondents whether they had been personally contacted or not. Besides a telephone contact, participation in the survey was solicited by means of incentives such as the offer of a summary report of the results and by assuring the confidentiality of the responses. A reminder e-mail was sent to those who had not answered within two weeks.

A total of 100 responses were received, the response rate being 17.5% (100/570). This is considered to be fair and acceptable given the length of the questionnaire. Non-response bias was assessed on a number of variables (e.g. size of staff and turnover, market share, market area, year of foundation) by comparing early and late respondents, following the suggestions of Armstrong and Overton (1977). This procedure is based on the assumption that late respondents are more similar with non-respondents. There was no evidence of non-response bias except in the division of the main market area. From the late respondents 76% operated mainly domestically when the same rate among early respondents was 24%. However, in the whole sample 37% of the respondents operated

mainly domestically and 63% in the foreign market. Only four respondents used solely domestic buying. As there were no other significant differences between the late respondents and early respondents, it was concluded that the data is not overburdened with non-response bias.

The interview data for Publication 4 and partly for Publication 3 were collected from one large globally active company in the field of forest industry. This specific company was selected because of its large geographical dispersion due to corporate acquisitions and general global consolidation inside the industry. In addition, the company has started a large supply management integration project in the year 2006. The collected data comprises eight half-structured theme interviews where the approximate length of each interview was one hour. The interviewees were sourcing directors and regional directors from different geographical areas and different product categories. The interview questions are presented in Appendix 2. All the interviews were conducted in spring 2007 and were tape-recorded and transcribed. Three of the interviews were performed by phone because of the geographical distances. Appendix 3 presents the interview schedule. The overall research process is shown in Figure 5.

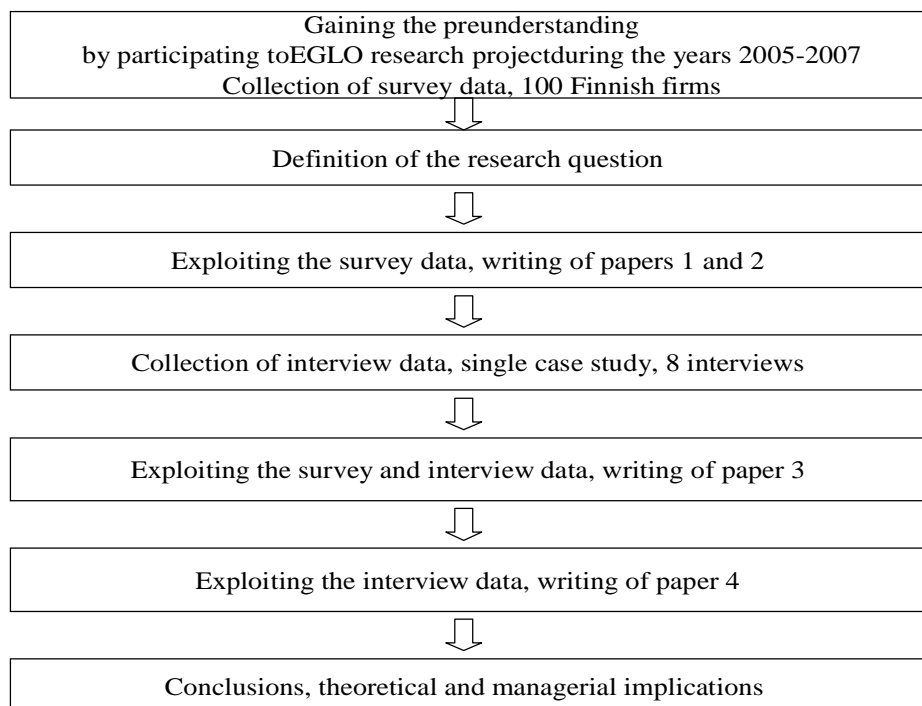


Figure 5. Research process

The research process of this thesis started during the EGLO project. After writing the two first papers based on the survey data, it became evident that more empirical evidence is required to answer the research questions and have a more comprehensive picture about the capabilities of SRM in a global company. Therefore, a single case study was performed next and research papers 3 and 4 were written. The conclusions and the theoretical and managerial implications of the whole research are compiled in Chapter 5.

4. SUMMARY OF THE PUBLICATIONS

This chapter introduces the key results of the empirical study. The empirical part includes four different research papers. The papers are complementary and define the constructing elements of SRM capability, present SRM capability in relation to strategy and firm performance, and clarify how SRM capability influences supply management integration in the context of global business. Each of the research papers aims to provide an answer to the research questions introduced in the first chapter. Table 4 summarizes the research questions of this thesis and publications in which each question is examined.

Table 4. Research questions and their links with the research papers

Research questions	P1	P2	P3	P4
<i>Q1: What are the constructing elements that form the capability of supplier relationship management?</i>	X			
<i>Q2: What is the effect of supplier relationship management capability on strategic supply management?</i>		X		
<i>Q3: What are the internally influencing factors of global supply management integration?</i>			X	X
<i>Q4: How is supplier relationship management capability linked to supply management integration?</i>			X	X

Table 5 presents an overview of the publications including the objectives, concepts, methodology and the main contribution of each one.

Table 5. Summary of the publications in this thesis

	Publication 1	Publication 2	Publication 3	Publication 4
Title	Supplier relationship management capability in global purchasing	The relationship between the organizational capabilities of supplier management and the firm's supplier orientation	Some issues of supply management integration	Matching purchasing maturity and supplier relationship management capabilities
Objective	To present the elements that form the internal capability of a firm to manage beneficially supplier relationships.	To show the relationship between supplier relationship management capabilities and strategic supplier orientation.	To present the internal factors that are positively related to supply management integration and contribute to the success of the integration project.	To match supplier relationship management capability to the maturity model of purchasing.
Concepts	Supplier relationship management, capability	Strategic supply management, supplier orientation, capability	Supply management integration, global supply management, internal factors	Value chain integration, maturity model, capability
Methodology	Quantitative, survey, confirmatory factor analysis	Quantitative, survey, linear regression analysis	Quantitative and qualitative, data from one case firm and from a survey, linear regression analysis	Qualitative, analysis of the interviews of the case firm, matching to the framework
Main Contribution	The paper clarifies the concept of supplier relationship management (SRM) and presents a model of SRM capability dimensions.	The results support insights about the strategic role of supply management, where supplier orientation can be a viable choice among the other strategic orientations.	The results support the insights that internal cooperation between the various functions and capabilities are contributors in supply management integration.	The study suggests that growth in supplier relationship management capabilities enables the movement towards value chain integration in a firm.

4.1. Supplier relationship management capability in global supply management

Overall objective

Previous studies concerning supplier relationship management have mostly concentrated on the typology of supplier relationships and the strategy how to manage these different relationship types. This paper focused on the issues of capability and the firm's internal resources and what their role is in supplier relationship management. The aim of the paper was to clarify the concept of SRM and identify the key elements constructing SRM capability. The objective was to develop a measurement aid for SRM capability, which could be used in future studies exploring the relations of SRM capabilities with the other concepts under scrutiny. Moreover, the aim was to provide information for managers about the capability elements that have influence on the management of supplier relations.

Main contribution

The paper improves the understanding of the meaning of internal capabilities in successful business relationships from the perspective of a globally buying company. The paper presents supplier relationships as an asset where organizational learning, knowledge and internal capabilities have an impact on the success. The more important it is for a firm to manage its suppliers, the more SRM capability to maintain relations is required. Managing supplier relationships can lead to the benefits of vertical integration without the costs of actual ownership (Carr and Pearson, 1999).

Based on the previous studies and existing literature, five key elements of SRM capability were identified: i) commitment to the relationship, ii) daily operations to maintain and manage buyer-supplier relationships, iii) deepening of trust, iv) active communication and v) ethical behavior. Hypotheses were established accordingly and elements were verified using confirmatory factor analysis. The results of the study

indicated that the latent variable, SRM capability, exists and can be constructed of the above-mentioned five major elements. If appropriate capabilities are recognized and developed further, changes in the firm's performance can be expected (Lawless et al., 1989). Thus, by identifying and developing SRM capabilities firms can improve their performance in supply management, which will in turn have effects on their overall performance. Therefore, the paper provided important information for managers about the capability elements constituting supplier relationship management.

4.2. The relationship between the organizational capabilities of supplier management and the firm's supplier orientation

Overall objective

Strategic orientations have been a widely researched area in the fields of marketing and management. Several studies have shown that firms successfully pursuing a specific orientation will show a better performance. Moreover, it has been showed that the firm's ability to learn and develop capabilities have a positive influence on the firm's orientation (e.g. Ruekert et al., 1992; Baker and Sinkula, 1999) However, there is not much research examining the role of orientations in supply management. The aim of this paper was to apply the concepts of strategic orientation and SRM capability in the field of supply management. The paper focused on the relationship between the firm's capability of managing suppliers and supplier orientation. The paper aimed to participate in the discussion on the strategic orientations and their links to firm performance.

Main contribution

In the supply management literature orientations have been defined according to the role of supply management in the organization from transactional orientation to the value chain integration (Van Weele and Rozemeijer, 1998). Relational orientation and long-

term orientation (Patnayakuni et al., 2006) have been stated to relate to supplier management.

The study builds a model where the capabilities of supplier and supply management are assumed to relate positively to supplier orientation, which in turn will influence the firm's financial performance. The model is tested using linear regression analysis. The results confirm that there is a positive relationship between the capabilities of purchasing and supplier management and strategic supplier orientation. This indicates that firms with sufficient organizational capabilities in supply and supplier management may choose supplier orientation to be one of the guiding principles in their strategy-making. Moreover, a positive correlation between supplier orientation and the firm's financial performance was found. Thus, supplier orientation can be a viable choice among the other strategic orientations. These results strengthen the insights of the strategic role of supply management. Thus, it is possible that supply and supplier management capabilities can be value creating resources for a firm.

4.3. Some issues of supply management integration

Overall objective

In previous research it has been predicted that supply management strategies, such as supply management integration, information sharing and collaboration between supply chain members have a strong impact on organizations (Ogden et al., 2005). Especially, global firms have adopted the strategy of supply management integration and an apparent centralization trend is going on in the field of supply management. The centralization of the supply management function is often mentioned in the supply management literature in the meaning of control and coordination. However, the organizational design should reflect and follow the strategic decisions of top management, and it is thus a strategic action to improve the firm's competitiveness. The aim of the study was to examine what the factors are that have a positive influence on

the integration of global supply management. The relationships between the defined factors and supply management integration were analyzed by linear regression analysis using data from one hundred Finnish firms. Moreover, the study applied methodological and data triangulation by drawing a case study from the forest industry into the discussion.

Main contribution

The impact of internal cooperation in terms of supply management capabilities, cross-organizational teams and communication was found to be the main contributor to supply management integration. The finding supported the notions that supply integration is constituted of relational integration, process integration, information integration and cross-functional teams (Paulraj et al., 2006). However, it was found that even though cost effectiveness can be the main contributor for firms to integrate their supply management, it does not have an impact on the implementation of integration itself. Moreover, it was found that the high status of supply management in the hierarchy of the organization does not explicitly influence the integrated structure of supply management or the high internationality level. Instead, in the implementation of supply management integration the project management has a considerable role. Also, the environmental forces, such as a difficult economic situation in the industry, shape the attitudes towards global integration more favorable.

4.4. Matching purchasing maturity and supplier relationship management capabilities

Overall objective

Supply management is argued to perform three different roles in the organization: cost optimization, asset utilization and value creation (Axelsson et al., 2005a). The paper aimed to study the value creating role of supplier management. This was done through

the maturity model of purchasing (Van Weele and Rozemeijer, 1998). Generally, it is assumed that operating on a higher maturity level requires higher capabilities. The study aimed to identify the capabilities of supplier relationship management and match them to the framework of the maturity model. The objective was to find out how the value creating role of supply management is linked with supplier relationship management capability. The research problem was approached through a case study from the forest industry.

Main contribution

According to the collected interview data from the case company, it was obvious that the company has achieved a high maturity level from the functional perspective. The supplier relationship management controlled volumes and activities across factories, business units and divisions. The company is, however, only taking its first steps in the path of integration. Still, the capabilities of supplier relationship management are rapidly developing towards the diffusion of supplier information between firm functions and business units, the minimization of transaction costs, value creation through internal capabilities and external resources, and reducing risks of dependence and availability. Thus, growth in capabilities may enable a movement towards value chain integration.

It was found that the value creation role of purchasing depends highly 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 in order to achieve value chain integration, the capabilities of supplier relationship management and collaborative interaction with key suppliers is required. These findings support the previous notions that to increase the maturity of supply management, firms must apply structured working methods, and natural growth paths may not exist (Axelsson et al., 2005). Moreover, firms need to develop their SRM capability because the movement along the evolutionary path may happen too slowly in intense competition. The maturity of supply management in a specific company should be evaluated in a way that takes into account how well supply management is aligned according to the firm's strategy and business.

5. CONCLUSIONS

The purpose of this thesis was to shed light on the discussion about the integration of global supply management and strategic alignment in global firms by clarifying the role of SRM capability. The thesis aimed to narrow three research gaps identified from the supply management literature. Firstly, the role of capability was a clearly neglected issue in the studies of supplier relationship management (Ellram and Olsen, 1997; Cousins, 2002). Secondly, previous studies had not identified measurement tools and key elements for SRM capability (Quintens et al., 2006). Thirdly, the strategic fit and alignment of the supply management function to the global strategies of firms were a scanty researched area (Cavinato, 1999; Quintens et al., 2006). Moreover, supply management integration is an ongoing trend and a current topic in global firms (Johnson and Ivey, 2003; Richter, 2003; Atkinson, 2004; Ogden et al., 2005). Based on the found research gaps the main research question and four sub-questions were formed. The overall research problem was to examine *how supplier relationship management capability influences the firm's global competitiveness*.

5.1. Answering the research questions

The first sub-question was *what the constructing elements are that form the capability of supplier relationship management*. It was found that SRM capability is formed of five elements, which were i) commitment to the relationship, ii) daily operations to maintain and manage buyer–supplier relationships, iii) deepening of trust, iv) active communication and v) ethical behavior. The firms with organizational capability to manage supplier relationships are committed to develop their supplier relationships in a collaborative way, have an ability to coordinate their supply chains effectively, aim at trustful relations, communicate actively with their suppliers and follow valid supply processes. Global companies need to develop adequate capabilities to achieve and fulfill these SRM objectives. The finding supports the insights of Dosi et al. (2000), Makadok (2001) and Helfat and Peteraf (2003) that capability may fill the gap between the firm

management's intention and outcome. SRM capability can be included in the firm's capacity to deploy their resources by using organizational processes to achieve their goals.

The second sub-question was *what the effect of supplier relationship management capability is on strategic supply management*. It was found that SRM capability is positively related with supplier orientation. Based on the literature and statements about strategic orientations, supplier orientation was assumed to be an indicator of strategic supply management. As previous studies have shown, strategic supply may have an impact on the firm's financial performance (Carr and Smeltzer, 1997; Carr and Pearson, 1999); therefore it is possible that the global supply strategy mediates (Quintens et al., 2006a) the influence of SRM capability to the firm's financial performance. Thus, it is possible that SRM capability can be a value creating resource in a firm and may have a positive effect on the firm's global competitiveness through the mediating effect of strategic supply management.

The objective of the third sub-question was to clarify *what the internally influencing factors are in global supply management integration*. It was found that the most influencing factor in global supply management integration is internal cooperation in terms of supply management capabilities, cross-organizational teams and communication. This finding supported the notions of Paulraj et al. (2006) that supply integration constitutes relational integration, process integration, information integration and cross-functional teams. The found main advantages of integration were accumulated knowledge and increased negotiation power. This result is in line with the studies of Matthyssens and Faes (1997) and Faes et al. (2000).

The fourth sub-question aimed to answer *how supplier relationship management capability is linked to supply management integration*. It was found that growth in SRM capability may enable a movement towards supply management integration which is a prerequisite for value chain integration (Van Weele, 2002; Axelsson et al., 2005). Thus, to achieve value chain integration, the capabilities of supplier relationship management and collaborative interaction with key suppliers is required. Firms need to

systematically develop and acquire SRM capabilities because the movement along the evolutionary path may be too slow in intense competition.

Based on the previous studies on buyer–supplier relationships and the theoretical and empirical findings, SRM capability was found to be an enabler of how the objectives of SRM in global companies are met. Thus, the answer to the main research problem *how SRM capability influences the firm’s global competitiveness* is that the capabilities related to supplier relationship management reduce conflicts between integration and responsiveness in global supply management integration decisions. In addition, SRM capability has an impact on the performance of a global firm through strategic supply management. These results are parallel with the work of Luo (2002) stating that in addition to environmental and industry specific factors, there are internal factors such as capability, organizational need and strategic intent that affect the integration-responsiveness decisions in global companies. The results support the insights that resources are intangible assets (Penrose, 1959; Wernerfelt, 1984; Barney, 1991; Teece et al., 1997) and by acquiring and developing capabilities, which are required in a turbulent global business, firms are able to achieve competitive advantage.

It can be concluded that SRM capability influences the firm’s global competitiveness by exploiting the firm’s supplier relationships in the best possible way and by influencing the strategic decision-making of supply management. This conclusion is in line with the arguments of Cox and Lamming (1996) stating that supply management is strategic management of the firm’s external and internal resources.

5.2. Theoretical contributions

This study has focused on firms’ internal capabilities and global competitiveness in the field of supply management research and has structured theoretical frames for supplier relationship management research in the global context. The dissertation contributes to the literature on supplier relationships in three ways. Firstly, it aggregates the theoretical

and conceptual perspectives applied to SRM research. The studies of Olsen and Ellram (1997) and Cousins (2002) are comprehensive reviews about the studies on buyer–supplier relationships. However, this research collects the presented theoretical approaches and practical implications and draws a synthesis of them (see Chapter 2). Based on the synthesis of the theories and the portfolio approach, the objectives of SRM were defined, which were: i) the diffusion of supplier information between business units, ii) minimization of transaction costs, iii) value creation through internal capabilities and resources, iv) reducing the risks of supply dependence and availability and v) gaining competitive advantage from cooperative relationships.

Secondly, while most of the previous studies concerning supplier relationships have concentrated on the typologies of dyadic relationships between buyers and suppliers, this study has raised the questions of organizational issues and the firm’s internal capability. Thus, the study participates in the discussion on resources as a source of competitive advantage. The resource-based view was found to be a rarely applied theoretical view in SRM studies; therefore, this thesis expands the theoretical base of SRM research by taking into account the view of firm internal capabilities and resources.

Thirdly, given the lack of valid scales to measure capability this study provides a theoretical and empirically tested foundation for an SRM capability scale. The measurement of a latent phenomenon is extremely difficult, and thus, further development in capability measurement is required. Development of valid and reliable measurements enhances theory building in business research.

This dissertation strengthens the insights of the strategic role of supply management in global business. It is shown that research of supply management has become an essential part of business research. Because supply management is a relatively young discipline, the efforts to reinforce the theoretical foundations in the field of supply management are important for both the academics and practitioners.

5.3. Managerial implications

This study has some implications from which the supply managers in global firms might benefit. First of all, the study aims to enhance the management's ability to recognize and exploit the internal capability of a globally buying company in successful business relationships and in organizing global supply. By identifying and further developing their SRM capabilities firms may improve the performance of their supply management function, which can in turn affect their global competitiveness. Furthermore, in this thesis it is shown that the influence of SRM capability on the firm's global competitiveness is twofold. On the one hand it reduces decision conflicts between integration and responsiveness, and on the other hand it creates efficiency, which both have a positive influence on the firm's performance.

According to Quintens et al. (2006b), global supply management can be analyzed on three levels: the product, the firm/management and the network level. Applying the results of this study to these levels of analysis it is possible to say that on the product level, global SRM capability concentrates on the improvement of supplier performance. The buyer firm 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 commercial conditions. On the firm level the question is how to organize supplier relationship management and align it according to the firm's goals. The accumulation of supplier knowledge and management practices in a form of SRM capability eases these organizing decisions. On the network level the SRM capability contributes to the integration of the supplier network and helps to find synergy among the members of the network. Recognizing the different levels of analysis helps firms identify their SRM capability and shows how they can develop it further.

The study emphasizes the strategic role of supply management. In global supply the significance of strategy is evident. Moreover, managers should notice the possible value creation role of supply management and utilize SRM effectively. In this study capability is found to be the enabler in efforts towards value chain integration. The experience and

capabilities of the purchasing staff are essential in cost optimization and asset utilization, but achieving value chain integration requires capabilities in supplier relationship management and collaborative interaction with key suppliers. Moreover, it has been shown that the value creation role of supply management depends highly on the future insights of the company management.

5.4. Limitations and future research

The validity and reliability of the study is evaluated in each publication separately. However, there are some limitations concerning this thesis which should be discussed here. The first limitation concerns the chosen methods. Even though the study applies mostly quantitative methods, the main research question refers to a more qualitative approach. To reduce this conflict, methodological and data triangulation were applied.

The second limitation concerns the quality and amount of collected empirical data. The sample size of one hundred Finnish firms is rather low. To increase the validity and generalize the results more firmly, a new study with a larger sample is recommended. In the survey, single respondents were used which may have led to a common respondent bias, although additional interview data was collected to increase the validity. Moreover, the respondents of the survey and the case company were Finnish companies, although large and with global activities. The national context may mean that generalizing the results to different countries and cultures may not be definitive.

Thirdly, the study was limited to an internal view of the firm. However, in global business external and environmental factors have a considerable role in creating strategies and organizing. Such factors as competition, market specificity, availability of workforce and its price, scarcity of raw materials and other resources were not taken into account in this study. Therefore, examining the external influencing factors on integration would be a logical continuation of this research. Moreover, in global business different national cultures create great challenges for the management. To find out about cultural effects on the capabilities of supply management and SRM, a

comparative study between different countries would be interesting from the global management point of view.

During this research some other propositions for future studies have emerged as well. The capability studies in the field of supply management are mostly conceptual and based on case studies, but the examination of the causal paths requires a large scale survey. Because of the lack of sound measurement instruments for the concepts more research is needed to develop appropriate measures and operationalizing of the concepts to be able to advance theories with quantitative methods. Moreover, it would be interesting to examine the influence of strategic supply management and supply management integration on the firm's global competitiveness with quantitative methods as a subsequent step.

Finally, this research process has raised another avenue for future research. The global supply integration studies can be linked to the examination of what the control mechanisms of global supply and supplier management are and how effective these control mechanisms are in different contexts. This could substantially expand the knowledge of organizing global business from the view of a buying company. Moreover, there are still some unanswered questions which can be combined with the studies concerning control mechanisms, such as how to measure capability, how to find the gaps in capability and which elements of capability are most relevant in different contexts. There is no doubt that the importance of the firm's internal resources and capabilities for their competitiveness needs to be highlighted also in these future studies.

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PART II: PUBLICATIONS

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1. Lintukangas Katrina (2009). Supplier Relationship Management Capability in Global Supply Management. Accepted for publishing in International Journal of Procurement Management in 2009, published 2011 in *International Journal of Procurement Management*, 4 (1), 1-19.
2. Lintukangas Katrina, Peltola Satu, Virolainen Veli-Matti (2008). The Relationship of Organizational Capabilities of Supplier Management to the Firm's Supplier Orientation. Proceedings of the 15th International Working Seminar on Production Economics (IWSPE), March 37, 2008, Innsbruck, Austria, Pre-prints volume 1, pages 301–310. Revised and further submitted version.
3. Lintukangas Katrina, Peltola Satu, Virolainen Veli-Matti (2009). Some Issues of Supply Management Integration, Article in Press, DOI 10.1016/j.pursup.2009.03.001. Published in *Journal of Purchasing and Supply Management*, 15 (4), 240-248.
4. Lintukangas Katrina (2008). Matching Purchasing Maturity and Supplier Relationship Management Capabilities. Proceedings of the 24th Industrial Marketing and Purchasing (IMP) conference, September 4–6, 2008, Uppsala, Sweden. Downloadable from the Internet www.impgroup.org: http://www.impgroup.org/paper_view.php?viewPaper=6748