Firm Core Business Processes and the Effect on Performance

FIRM CORE BUSINESS PROCESSES AND THE EFFECT ON PERFORMANCE

This study investigates firm's core business processes' effect on its performance. First, a conceptual model including the three core business processes, product development management, supply chain management and customer relationship management, and performance measures is constructed based on previous research and literature. The conceptual model consists of 16 research hypotheses. Second, empirical evidence is introduced to test the research hypotheses. Finally, the conceptual model is partly verified through the test of hypotheses.

The data used in this study was collected through use of a web-based questionnaire targeted to the upper management in Finnish companies. The questionnaire was sent to 15 941 decision makers, of which 1 157 completed the survey. Three multivariate data analysis techniques were used to address the research questions in empirical part of the study. First, a measurement model was constructed through use of a confirmatory factor analysis to confirm the theoretically proposed factor constructs. Second, a structural equation model was built to test part of the hypotheses. Third, a mediational analysis was conducted to test rest of the research hypotheses.

The findings of this study support the importance of core business process integration. It seems that one core business process directly driving the performance is the customer relationship management. However, both product development management and supply chain management are paramount for overall success of a firm. According to the results of this study the managers should attempt to integrate the firm's core business processes, by implementing cross-functional integration, customer driven development, and demand supply integration. These actions and implementations should help a firm in the pursuit of financial performance.

The study provides a generalized model that links core business processes and performance. A further study should be made to investigate underlying mechanisms how core business processes affect on performance.

KEYWORDS: Core business processes, strategic marketing, performance, PDM, product development, SCM, supply chain management, customer relationship management, CRM, structural equation modeling

YRITYKSEN YDINLIIKETOIMINTAPROSESSIT JA VAIKUTUS SUORITUSKYKYYN

Tutkimuksessa tarkastellaan yrityksen ydinliiketoimintaprosessien vaikutusta sen suorituskykyyn. Kirjallisuuskatsauksessa muodostetaan käsitemalli, joka sisältää kolme ydinliiketoimintaprosessia: tuotekehityksen johtaminen, toimitusketjun hallinta ja asiakassuhteiden johtaminen sekä tulosmittarit. Käsitemalli perustuu aikaisempaan kirjallisuuteen ja tutkimukseen. Käsitemalli koostuu 16 tutkimusoletuksesta. Tutkimusoletuksia testataan empiirisesti tilastollisin menetelmin. Työn lopussa käsitemalli osittain todennettiin perustuen oletuksien empiiriseen paikkansapitävyyteen.

Tutkimuksessa käytetty aineisto on kerätty suomalaisyritysten ylimmälle johdolle lähetetyn sähköisen kyselylomakkeen avulla. Kyselylomake lähetettiin 15 941 päättäjälle, joista 1 157 vastasi kyselyyn. Tutkimuskysymyksiä tarkasteltiin kolmen monimuuttujamenetelmän avulla. Ensin mittausmalli muodostettiin konfirmatorisen faktorianalyysin avulla, sillä varmennettiin teorian pohjalta muodostetut muuttujarakenteet. Sen jälkeen rakenneyhtälömallilla testattiin osaa tutkimusoletuksista. Lopuksi mediaatioanalyysia käytettiin loppujen tutkimusoletusten testaamiseen.

Tukimuksen tulokset osoittavat ydinliiketoimintaprosessien integroinnin tärkeyden. Tutkimuksen mukaan vain asiakassuhteiden johtaminen vaikuttaa suoraan tulokseen. Siitä huolimatta myös tuotekehityksen johtaminen ja toimitusketjun hallinta ovat välttämättömiä yrityksen menestyksen kannalta. Yrityksen johdon tulisi pyrkiä integroimaan ydinliiketoimintaprosessit keskenään soveltaen poikkitoiminnallista integraatiota, asiakaslähtöistä kehittämistä ja kysyntätarjontaintegraatiota. Näiden toimien pitäisi auttaa yritystä saavuttamaan paremman tuloksen.

Tutkimus esittää yleisen mallin, joka yhdistää yrityksen ydinliiketoimintaprosessit ja suorituskyvyn. Jatkotutkimus voisi tarkastella ydinliiketoimintaprosessien suorituskykyyn vaikutuksen taustalla olevia mekanismeja.

AVAINSANAT: Ydinliiketoimintaprosessit, strateginen markkinointi, suorituskyky, tuotekehitys, toimitusketjun hallinta, asiakassuhteiden johtaminen, rakenneyhtälömalli

Table of Contents

1. Introduction

This chapter begins by an introduction of the main focus points of this study, its background and context. This is followed by a definition of research problem and objectives. The scope and methodology of the study are discussed next. Finally, the outline and the structure of the study are presented.

1.1. Background

Both researchers and managers have sought a long time how marketing strategy affects firm's performance. There has been a distinct economic shift during the last few decades from manufacturing to information- and knowledge-driven services (Ramaswami, Srivastava and Bhargava 2009). Also Srivastava, Shervani and Fahey (1999) have recognized this marketplace shift from a product-dominated to a market-driven view. Firms need to recognize these shifts and act accordingly in order to remain competitive in current markets.

The resource-based view (RBV) of a firm argues that a firm is a collection of productive resources (Penrose 1959). Many scholars researching the RBV have argued which are the most important resources that create a competitive advantage for a firm (Hoskisson, Hitt, Wan and Yiu 1999). Srivastava, Fahey and Christensen (2001) have provided a framework that integrates marketing and the resource-based view and identified a number of ways how resources can be used to create customer value. According to Srivastava et al. (2001) the market-based assets and capabilities can be leveraged through market-facing or core business processes to deliver superior customer value or competitive advantages. Srivastava, Shervani and Fahey (1999) have distinguished three core business processes that are product development management (PDM), supply chain management (SCM) and customer relationship management (CRM). Ramaswami et al. (2009) discuss that these three market-facing business processes influence the firm's financial performance.

1.2. Research Problem and Objectives

The three core business processes, PDM, SCM and CRM, have been studied quite extensively in former research. However, their interrelation and supposed effect on performance have not

yet been empirically fully tested. This study aims to discover the conceptual relationships between firm core business processes and their associations to performance outcomes. The theoretical part of this study attempts to create a conceptual model that links these processes with each other, as well as, with the performance factors. The empirical part of the thesis tests the conceptual model and the hypotheses it is built upon. The main two research questions of this Master's thesis are:

- Do the core business processes affect the firm's performance positively?
- What is the core business processes mutual effect on each other and does mediation exist between them?

The primary two research objectives of this study are: First, to develop a conceptual model between the key constructs involved. Second, to verify the model developed and the hypotheses set in the context of Finnish firms operating in different industries.

1.3. Key Concepts of the Study

Key concepts on this study are the three core business processes, PDM, SCM and CRM and the two performance measures, market performance and financial performance. These concepts are defined briefly in this chapter and further definitions and conceptual model are developed in consequent chapters.

Product Development Management
Srivastava et al. (1999) define the PDM as a process that aims to create solutions that customers need and want. According to Ramaswami et al. (2009) a good PDM process should provide products that are unique and differentiated, enjoy market success, and developed in time efficient manner (Baker and Sinkula 1999, 2005).

Supply Chain Management
According to Srivastava et al. (1999) the SCM process incorporates acquisition of all physical, as well as nowadays increasingly informational, inputs. SCM process also contains the efficiency and effectiveness with which inputs are transformed into customer solutions, including also, the concurrent integration of customer requirements, internal processes and upstream supplier performance (Tan, Kannan, Handfield and Ghosh 1999).

Customer Relationship Management

According to Srivastava et al. (1999) the CRM process addresses all aspects of indentifying customers, creating customer knowledge, building customer relationships, and shaping their perceptions of the organization and its inputs. Furthermore, it builds customer relationships through rich and satisfactory experiences, and maximizes customer responses for optimal revenue and profit growth (Ramaswami et al. (2009).

Market Performance

In this study the market performance refers to the size and volume of the firm. It refers to such meters as firm's market share and turnover.

Financial Performance

The financial performance refers to the profitability, also known as business performance, measured with such meters as profits, ROI and ROA.

1.4. Methodology and Scope

The empirical part of this study is based on data collected from a survey conducted in Finland as a part of the StratMark research project during winter 2007-2008. Nearly 16 000 Finnish decision makers received an online questionnaire, from which 1 157 filled out the questionnaire, totaling to an individual response rate of 7.25%. The analysis unit of the study is a SME or a business unit within a larger firm. The questionnaire data covers broadly the current state of marketing in Finnish companies, including topics ranging from the role of marketing and marketing investments to marketing performance and productivity, the core business processes and management. This study concentrates on core business processes and performance measures as the main topic of interest.

This research can be divided into two parts. Accordingly, two main research methods are used to solve research problem and answer the research questions: literature review and analysis, and statistical analysis. Next, the methods are shortly described.

The first part, literature review and analysis are conducted to develop and test certain theory-based causal relationships between firm's core business processes and performance. Based on this, the literature review was seen as a rational preliminary research method. Because of the

relatively current field of research between the core business processes and performance, the literature review contains various previously developed frameworks and theories, and hypotheses developed upon them, which are finally integrated into one conceptual model. As stated before, this study attempts to develop a conceptual model of relationships between core business processes and performance based on previous research. However, it will not go through the earlier research thoroughly but rather touch it on relevant points.

The second part of the study is performed by means of statistical analysis methods applied to the research data. The empirical part tests the hypotheses, which the conceptual model is build of, developed in the literature review, thus, making the conceptual and empirical parts of the study closely interrelated. Not much research testing the relations between all three core business processes and performance have been done. In this study the statistical analysis methods used are confirmatory factor analysis (CFA), structural equation modeling (SEM), and mediational analysis, since these methods offer accurate and verifiable means to test the theory-based relationships in the field of strategic marketing from the data. The data analysis consists of three consequent parts. First, the CFA (Chapter 4.1.) is used to examine the validity of earlier formed factors and their indicators, and hence to test the goodness of fit between the measurement model and the data. Second, the SEM (Chapter 4.2.) is performed in turn to test the research hypotheses of this study suggesting direct relationships between constructs. And third, the mediational analysis (Chapter 4.3.) is used to test the hypotheses suggesting mediation between constructs.

Even though, the conceptual model developed in the literature review is considered universal, the empirical study and findings are limited to context of Finland.

1.5. Structure

Chapter 2 builds up a theoretical foundation for the research hypotheses and the conceptual model build upon the hypotheses. First, the RBV is introduced in length and provided the framework which integrates marketing to RBV. Second, each core business process is defined and the hypotheses connected on each of them are developed. Third, the performance

4

measures are introduced, as well as, the hypotheses related to them. Fourth and last, the conceptual model is developed from the hypotheses introduced earlier in this chapter.

Chapter 3 describes the research methods used in this study. In this chapter the research data and variables are describe and different methods used in the statistical analysis are introduced and explained.

Chapter 4 presents the statistical analysis results of the study, regarding CFA measurement model, SEM, and mediational analysis.

In Chapter 5, the results are further analyzed and interpreted on the basis of the theory in Chapter 2. The findings are summarized and their fit on conceptual model is discussed. Finally, the implications for managers and future research are given.

2. Literature Review and Hypotheses Development

This chapter provides the theoretical background of the study. In this chapter the hypotheses are developed and reported. It is divided into four interrelated sections. The first section describes resource based view, a firm theory that constitutes the theoretical foundation for this study. Second section is comprised of three subsections that each introduces one of the core business processes. Third section covers theoretical base of both market and financial performance. Fourth and last section introduces the conceptual model synthesized from the theoretical input in previous sections.

2.1. Resource-Based View

The significance of the resource-based view (RBV) was recognized when Wernerfelt's (1984) article "A Resource-Based View of the Firm" was selected in 1994 as the best paper published in the *Strategic Management Journal* (Hoskisson, Hitt, Wan and Yiu 1999). According to Hoskisson et al. (1999) "the central premise of the RBV addresses the fundamental question of why firms are different and how firms achieve and sustain competitive advantage".

The founding idea of viewing a firm as a bundle of resources was first devised by Edith Penrose in 1959. According to Penrose a firm is a collection of productive resources – "A firm is more than an administrative unit; it is also a collection of productive resources the disposal of which between different uses and over time is determined by administrative decision" (1959, p.24). She also defined resources as "the physical things a firm buys, leases, or produces for its own use, and the people hired on terms that make them effectively part of the firm" (Penrose 1959, p. 67). Penrose (1959) argued that each firm gets its unique character rather from the heterogeneity, not homogeneity, of the productive services available or potentially available from its resources. The basis of RBV is the notion that firms attain a unique character by virtue of their heterogeneous resources (Hoskisson et al. 1999). Particularly significant for this study is, that Penrose (1959) also related the linkage between material and human resources to firm performance.

According to Hoskisson et al. (1999) the researchers have been developing and defining resource-based concepts, and seeking to relate how resources can improve firm's competitive

advantage. According to Wernerfelt (1984) the evaluation of firms in terms of their resources can lead to insights that differ from the traditional perspective. Firm's resources can be defined at the given time as those, tangible or intangible, assets which are semi-permanently tied to the firm (Wernerfelt 1984). Wernerfelt (1984) also came up with two analogies, one to entry barriers and other to the growth-matrix. Wernerfelt (1984) examined the relationship between and profitability in terms of resource position barriers, he proposed that the first mover advantage is an attractive resource that should generate high returns in markets dominated by resource in question. In analogy to the growth-share matrix, a resource-product matrix was utilized as a way to examine the balance between the exploitation of existing resources and the development of new ones.

In attempt to explain differences in firm's resources realized superior firm performance various researches developed more specified theories to extend Wernerfelt's (1984) work. Rumelt (1984) based his theory on the assumption of resources heterogeneity, according to him firms may start as homogeneous, but with "isolating mechanism", they become differentiated in certain way that their resources cannot be perfectly imitated. According to Barney (1986b) that the difference in resource factors is their "tradeability", a tradeable factor is one that can be specifically indentified and its monetary value can be determined thorough a "strategic factor market". Dierickx and Cool (1989) proposed that resources can be differentiated into two distinct types, either asset flows or asset stocks. According to them the economic rent sustainability is explained in terms of resources with limited strategic substitutability by equivalent assets and time compression diseconomies for firms trying to imitate resources of another firm. A group of other researchers focused on examining specific resources which facilitate in pursuit of sustainable competitive advantage. The resources that they have examined were: response lags (Lippman and Rumelt 1982), routines (Nelson and Winter 1982), functionally based distinctive competencies (Hitt and Ireland 1985, 1986; Hitt, Ireland and Palia 1982; Hitt, Ireland and Stadter 1982; Snow and Hrebiniak 1980), unique combination of business experience (Huff 1982; Prahalad and Bettis 1986; Spender 1989), organizational culture (Barney 1986a; Fiol 1991), invisible assets that are difficult to imitate by their nature (Itami 1987), organizational learning (Teece, Pisano and Shuen 1997), entrepreneurship (Nelson

1991; Rumelt 1987), and human resources (Amit and Schoemaker 1993), among other resources.

Barney (1991) presented a framework that is more concrete and comprehensive for identification of the needed characteristics of firm resources in order to generate sustainable competitive advantage. He proposed four criteria that would assess the economic implications of the resources: value, rareness, inimitability, and substitutability. Value is the extent to which the firm's combination of resources fits with the external environment, in order to firm's ability to exploit opportunities and/or neutralize threats. Rareness is the physical or the observed physical rareness of the resources in the factor markets. Inimitability refers to the continuation of imperfect factor markets via information asymmetry so that resources are not possible to be obtained or recreated by other firms without a cost disadvantage. The fourth, criteria refers to the framework's consideration whether the organizations are substitutable by competitors.

Barney's framework received a criticism from Black and Boal (1994). They argued that it does not account for bundles of resources, and that the framework treats resources as singularly distinct factors. Some researchers suggested that resources are nested by factor networks that have specific interrelationship (e.g. Black and Boal 1994; Grant 1991), to remedy this lack in Barney's framework, and that the dynamic interrelationships among the resources should be examined. According to Robins (1992) these firm specific relationships generate quasi-rents since the tradeable factors have their value bid away. Amit and Schoemaker (1993) came up with an extension to the framework in which such value that include the sub-dimensions of an external link overlapping with strategic industry factors and internal complementarity. They expanded rareness to include scarcity and low tradeability, among with physical and perceived physical attributes. Amit and Schoemaker (1993) divided inimitability into inimitability and limited sustainability. As well, was organization configuration was divided into appropriability and durability.

More recently, the RBV researchers have become more specialized. First, according to Montgomery (1995) rigidities in acquiring resources could be different from the rigidities in shedding resources; as well some resources may have negative value by crating core rigidities

(Leonard-Barton 1992). Second, there has been a controversy concerning the potential of the RBV to be a theory of the firm. Conner (1991) made a comparison with RBV and five fundamental approaches used in industrial organization economics: perfect competition model, Bain-type IO, the Schumpeterian and Chicago Schools of economics, and transaction cost economics. Mahoney and Pandian (1992) proposed a distinction between RBV and other organizational economics paradigms, including evolutionary economics, transaction cost economics, property rights theory, and positive agency theory. Both Conner (1991) and Mahoney and Pandian (1992) came to a conclusion that RBV may form the kernel of a unifying paradigm for strategic management research. RBV presents a framework for increasing dialogue between scholars from different disciplines of the conversation of strategic management. In conclusion, sub-streams, such as strategic leadership and the knowledge-based view of the firm, have emerged from RBV (Hoskisson et al. 1999).

Srivastava et al. (2001) developed a conceptual framework that facilitates integration of constructs central to RBV and marketing, also they illustrated how RBV and marketing can refine and extend each other's traditional frames of analysis. Srivastava et al. (2001) point out a number of issues that are related to how resources are used to create customer value and managing marketplace dynamics and uncertainty. They propose a framework of analysis that shows how to deliver superior customer value that result on competitive advantages and corporate performance by leveraging marketing specific resources via market-facing processes. This will in turn result in superior resources which in the future are able to foster market-based assets and capabilities (Srivastava et al. 2001). Srivastava et al. (2001) communicate an importance of marketing-specific resources as aid for connection from RBV to marketing. These resources need to be both marketing specific and potentially manifest at least some of the desired RBV attributes, and they are distinguished between assets, processes and capabilities (Srivastava et al. 2001).

 According to Barney (1991), Hunt and Morgan (1995), Mahoney and Pandian (1992), Srivastava et al. (2001), and Srivastava, Shervani and Fahey (1998) assets are organizational attributes that an organization can acquire, develop, nurture, and leverage for internal, as well as, external

9

purposes. Srivastava et al. (2001) divided market based assets into two related types: relational and intellectual. Relational assets are intangible and associated with external organizations that are not owned or fully controlled by the firm. Because these relationships are based on factors like trust and reputation, any organization can potentially develop these relations to point when they are relatively rare and difficult for competitors to replicate. Because of often intangible nature of these assets they are difficult to measure, and thus not nurtured. Intellectual assets refer to the internal knowledge of the organization that is intangible and embedded in individuals and processes. According to Srivastava et al. (2001) these market based assets would include: various classes and types of knowledge of the external and internal environment, know-how that is embedded into individuals' or units' skills, know-how to leverage intraorganizational relationships, and process-based capabilities. (Srivastava et al. 2001)

According to Davenport (1993) the conversion of assets into products or solutions for customers happens through processes which are a collection of interrelated work routines or tasks. Therefore, market based assets should be absorbed, transformed and leveraged as part of some organization process in order to convert them into products or solutions that customers desire, and as a result, generate economic value for the organization (Lehmann 1997, Srivastava et al. 1999). Srivastava et al. (2001) distinguish between market-facing or core operating processes such as product development management, supply chain management and customer relationship management, and noncustomer centric processes such as the acquisition, development and deployment of human resources. Marketing plays important role within each of these market-facing business processes because they are cross-functional. In this study the focus is on the core operating processes and the relations among them.

Srivastava et al. (2001) point out that both RBV and marketing recognize that that customer value originates and exists in external marketplace. This raises two central and interrelated questions, when making an effort to integrate RBV and marketing while focusing on generating customer value. Firstly, where do marketplace opportunities come from? And secondly, where do resources come from? According to Srivastava et al. (2001) the marketplace opportunities

manifest themselves as new products or solutions consisting of new combinations of attributes, benefits, attitudes, and network effects. Schumpeter (1934) and Rumelt (1987) state that "breakthrough" or "radical" new solutions or product concepts (Bower and Christensen 1995) require the managers a high level of risk-taking in addition to deliver fundamentally new elements of customer value based on a unique insight into inherently uncertain and complex market conditions. Hauser and Clausing (1988), and Von Hippel, Thomke and Sonnack (1999) point out that marketing's established intent and role centers on being able to see current, emerging, and potential world differently (Drucker 1983) that leads to identification, elaboration and translation of customers' needs which in turn converts into product specifications, often even before customers themselves are conscious of these needs (Day 1990). According to Penrose (1959) one fundamental aspect of RBV is that the organization's current portfolio of assets and capabilities limits the choice of products or solutions it is able to offer or to which markets it can enter, as well as the levels of profit it can realize (Wernerfelt 1984). Therefore, if organization attempts to form a strategy that creates a new marketplace space (Hamel and Prahalad 1994), since manifesting genuine entrepreneurial content (Rumelt 1987), as the discipline focuses on such breakthrough opportunities, marketing have to escape from the mental models (Senge 1990) underlying and reflecting in the organization's prevailing resource configuration. According to Srivastava et al. (2001, p. 786) there are three organizational challenges in the central of entrepreneurial strategy that fall into the domain of marketing:

1. Scanning and projecting current, emerging and potential environmental change.
2. Perceiving the outlines of potential opportunity lurking but rarely manifestly evident in such change.
3. Translating (perceived) opportunity into (potential) solutions that generate value for some set of customers.

A various platforms to link RBV and marketing present themselves while solving the abovementioned challenges (Srivastava et al. 2001). According to Drucker (1986) the origins of marketplace opportunities, and therefore customer value, could always be traced changes in

and around the firm's competitive context, such as: technology disruptions, economic fluctuations, demographic shifts, political and regulatory twists, social and cultural disturbances, and normal industrial dynamics. Because these changes take place over time an understanding of the emergent world is a continual work-in-progress. Acts of scanning, perceiving and translating require imaginative thinking and creative visioning both individually and in combination (Hamel and Prahalad 1994).

Srivastava et al. 2001 suggest a need for a "knowing" process, in order to interact with, project, interpret, make sense of, and suggest action implications (Cook and Brown 1999), which is yielded from knowledge-based theory of the firm. They help to develop descriptions how emerging and breakthrough ideas emerge (Nonaka and Tackeuchi 1995) and as well how business opportunities evolve over time. This knowing process provides an insight into processes necessary to value creation that cannot be extracted from RBV (Srivastava et al. 2001). To develop and leverage "exploration" oriented market-based capabilities a firm needs to understand at least three critical implications while emphasizing knowing as a process intimately committed to and infused with both explicit and tacit learning about current, emerging and potential marketplace changes (Srivastava et al. 2001). First, scanning/projecting, perceiving, and transforming, may lead to a need for dramatic redesign and development of core customer-focused operating processes (Srivastava et al. 2001). Second, firms need to develop new subprocesses in order to extend the customer data and information reach of the existing core operating processes. Once again the electronic technologies affect on the growth of customer information. The raise of the Internet has created new forms of market research and has enabled real-time market experiments to test products and prices. For one thing this has lead to faster responses to market changes and detection of new product ideas (Srivastava et al. 2001). Third and last, fresh competence is required in managing new forms of collaboration, caused by newly designed operating processes, within organization's internal and external entities. According to Shapiro and Varian (1998) such things as changing customer situations, emerging technology connections, or even changes in rivals' solutions have produced a need to create flows of new knowledge within and across organizational boundaries. Because of this an integration of the combinations of tangible basic resources and

intangible processes and relationships are required by market management capabilities or competences. While this in turn, requires skilful and knowledgeable human resources that fit consistently together in a synergistic manner (Srivastava et al. 2001). Finally, the resources have to be turned into superior financial performance (Srivastava et al. 2001), which links on the central research problem in this study.

2.2. Core Business Processes and Market Based Assets and Capabilities

Srivastava et al. (1999) suggested three core business processes into which marketing efforts should be embedded to generate value for customers. These three processes are product development management (PDM) also called new product development (NPD), supply chain management (SCM), and customer relationship management (CRM). Srivastava et al. (1999) state that if marketing is to realize its potential contribution to the organization's marketplace and financial performance, it must connect to the three core business processes. Marketing must do so firstly, as a discipline and secondly individual marketing tasks must be connected to specific subprocesses, within each core business process. Srivastava et al. (1999) have noted certain marketplace shifts and emphasize five that they believe broadly characterize the competitive context. These shifts, as articulated by Srivastava et al. (1999, p. 170), are listed below:

1. A product focus is giving way to the need to address customer functionality.
2. Product differentiation is evolving into solution customization.
3. Transaction-based exchanges are being replaced by relationship-based customer intimacy.
4. Stand-alone competition is frequently giving way to networked rivalry.
5. Economies of scope and increasing returns are being added to economies of scale.

This study recognizes these abovementioned marketplace shifts and examines the changed business environment from that viewpoint. Ramaswami et al. (2009) propose that firm's market based assets and capabilities impact performance in three aforementioned market-facing business processes, which in turn, influence the financial performance of a firm.

2.2.1. Product Development Management

There are vast amounts of literature written concerning the product development management (PDM), processes and capabilities. This chapter attempts to summarize parts of this literature that discuss PDM from the perspective, and similar to it, of the resource based view (RBV). Furthermore, six hypotheses are presented in this chapter based on theories on cross-functional integration (CFI) and customer-driven development (CDD).

Ramaswami et al. (2009) state that the new product development process must aim to create solutions that, customers need and want; and should yield products that are unique and differentiated, enjoy market success, and are developed in a time-efficient manner (Baker and Sinkula 1999, 2005). Srivastava et al. (1999) state that PDM and new product development (NPD) refer to a process that aims to create solutions that customers need and want. For a firm to change into a market-driven PDM process involves shifting from designing the most technically advanced product into developing a solution that brings the superior value for the customer. Furthermore, this shift requires that the organization develops and leads some networks and participates in the others with the intent of spawning, nurturing, and devising solutions that otherwise would not be possible (Srivastava et al. 1999).

According to Ravindranath and Grover (1998) the success of the PDM and NPD depends on the concepts of effectiveness and efficiency. Effectiveness refers to the ability to conceptualize products that meet the needs of customers. Efficiency, in contrast, refers to the ability of firms to cost-efficiently produce new concepts. The ability of NPD to translate into superior organizational performance depends on both efficiency and effectiveness (e.g. Ravindranath and Grover 1998; Baker and Sinkula 2005). According to Olavarrieta and Friedmann (2008) and Deshpandé and Farley (2004) firm's performance is tied to its possession of marketing sensing skills to develop and foster innovativeness and imitation capabilities in an organization. Especially they highlight the importance of innovativeness as it has significant effect on both overall firm performance and new product performance. Langerak, Hultnik and Robben (2007) inform that proficiency in commercialization is positively associated with new product performance. While there is no evidence that predevelopment and development has direct effect on new product performance it should be noted that these two stages are closely

interrelated with commercialization. Also, the new product performance has positive effect on market and financial performance (Langerak et al. 2007).

According to Ramaswami et al. (2009) there are two important factors that define the quality of firm's NPD effort, cross-functional integration (CFI) and customer-driven development (CDD).

CFI captures the degree to which the development process id integrated across functional units within the firm and external partners outside the firm (Ramaswami et al. 2009). It enhances the quality of information transfer among functional units and improves the implementation of NPD activities, such as product design and launch (Song and Parry 1992). According to Song and Parry (1997) CFI has profound influence on project execution, technical proficiency, marketing proficiency, and relative product advantage. As well, it adds to the performance of the final product in the marketplace. Furthermore, CFI improves mass production capabilities and reduces the number of product-design changes as well as shortens the development cycle time and lessens the costs. Ramaswami et al. (2009) state that high levels of CFI ensure that unsuccessful new products are withdrawn from the markets sooner than later, thus decreasing project's financial losses. As stated before, the firms with higher level of CDD and CFI get better returns on their new products than their counterparts operating in same competitive space. These considerations lead to the following three hypotheses:

H1a: There is a positive relationship between product development management and supply chain management.

H1b: The effect of product development management on market performance is mediated by supply chain management.

H1c: The effect of product development management on financial performance is mediated by supply chain management.

CDD refers to the degree to which customers are involved with and drive the product development process. Souder, Buisson and Garrett (1997) state, that customer-focused new product management practices leads to superior performance. Ramaswami et al. (2009) suggest that today's firms do not restrict their customer interaction only on evaluation of needs

and gathering of new ideas. In truth, they involve the customer into actual design of the product itself. Often the manufacturer develops a prototype based on information from customers; the prototype may be incomplete or partially correct. After this the product prototype is tested on customer and feedback received. The improvements are carried out based on this feedback. This cycle is repeated until satisfactory solution is reached. Ramaswami et al. (2009) believe that impact of this cycle is may be felt as much on cycle time as on the ability of the firm to develop successful products. Gupta and Wilemon (1990) suggest that early market testing, testing the product concept early and testing it with active customer involvement is a good way to know if product is "right" for the customers and reduce cycle time. This also helps the companies to concentrate more carefully in designing of the product features that customers believe impart the product with distinctiveness. Marketing-customer interface relates to the capability of firms to successfully launch what they envision, and marketing-R&D interface relates to firms' capability to cost-efficiently produce what they envision (Baker and Sinkula 2005). For firms to develop unique and successful products, they need better insights into the needs of their customers, together with better capabilities for acting on those insights (Souder et al. 1997). According to Leenders and Wierenga (2002) being customer-driven may be ineffective if top management do not set up cross-functional processes, in which different functional areas cooperate by translating customer insights into successful products. This section leads into three hypotheses below:

H2a: There is a positive relationship between product development management and customer relationship management.

H2b: The effect of product development management on market performance is mediated by customer relationship management.

H2c: The effect of product development management on financial performance is mediated by customer relationship management.

Fang, Palmatier and Evans (2008) have presented an end-to-end model for new product development to understand how new product value is created and shared, that supports the aforementioned hypotheses. According to Henard and Szymanski (2001) the utilization of

16

innovation strategies and NPD to generate competitive advantage and above average financial performance have become have become increasingly popular lately, however many of these products fail to meet the expectations. Henard and Szymanski (2001) and Zipkin (2001) argue that this happens because the information regarding the "need" comes from the customer, but the information regarding "the solutions" resides within the seller. Terwiesch and Loch (1999) theorize thus, that key success factor in new product development is close linkage between customer and seller during the development process. Traditionally, upstream suppliers on B2B markets have asked their customers to participate into their NPD process, lately however the customers have recognized that they should actively participate on supplier's development efforts in addition to reduce costs and improve their product performance (Fang et al. 2008). Prahalad and Ramaswamy (2000, p. 80) discuss that: "Customers are fundamentally changing the dynamics of the marketplace. The market has become a forum in which consumers play an active role in creating and competing for value." Previous citation also links to the marketplace shift suggested by Srivastava et al. (1999). According to the research of Fang et al. (2008) the customer participation increases the effectiveness of the NPD process by enhancing information sharing and customer-supplier coordination. Fang et al. (2008) came to the conclusion that customer participation in NPD affects positively the overall performance of the product. If this is looked upon from the internal perspective of an organization it also supports the forth coming hypothesis linking SCM and CRM, as well as, the linking of both of these into PDM and performance measures.

2.2.2. Supply Chain Management

This chapter begins with a definition of the supply chain management (SCM), both from the view point of current discourse, as well as, from the perspective of more general theory. After that the theory behind formed hypotheses is elaborated by clarifying such concepts as demand chain management, demand supply integration, leading of a supply chain network, and information sharing with supply chain partners.

Srivastava et al. (1999) define SCM as one of the organization's three core business processes. They state that a SCM process incorporates acquisition of all physical, as well as nowadays increasingly informational, inputs. SCM process also contains the efficiency and effectiveness

with which inputs are transformed into customer solutions, including also, the concurrent integration of customer requirements, internal processes and upstream supplier performance (Tan, Kannan, Handfield and Ghosh 1999). The traditional non resource based view of SCM is according to Spekman, Kamauff Jr. and Myhr (1998) achieve lowest initial purchase prices while assuring supply by leveraging the supply chain. In the new paradigm the SCM is redefined as a process that designs, develops, optimizes and manages the internal and external components of supply system which includes material supply, transformation of materials and distribution of finished products or services to customer. In new competitive environment organizations should seek close, long-term relationships with one or two partners which depend much of their business onto one another (Spekman et al. 1998). Min and Mentzer (2000) discuss that SCM has been conceptualized with two different components, an integrative business philosophy and implementation actions. Ellram and Cooper (1990) argue that each member of a supply chain helps each other to improve competitiveness of the chain. Srivastava et al. (1999) suggest that the change to a market-driven SCM process needs shift from use of functionally best inputs at the cheapest possible prices to designing, managing and integrating supply chain with both suppliers and customers. The study by Green Jr., McGaughey and Casey (2006) indicates that a SCM strategy mediates a link between market orientation and organizational performance. Min and Mentzer (2000) link market orientation, relationship marketing and SCM. They argue that this lets an organization to gain differential advantage for supply chain by reducing investments and improving customer service.

Jüttner, Christopher and Baker (2007) attempt to indentify a new business model, named as demand chain management (DCM), aimed at combining the strengths of marketing and supply chain competencies, and creating value in marketplace. There are three key areas that DCM deals with: the integration between demand and supply processes, the structure between the integrated processes and customer segments, and the working relationships between SCM and marketing. Piercy (2002, p. 247) concluded that better coordination between SCM and marketing could define competitive superiority in new ways. While, traditional way is to start with a supplier/manufacturer and work forwards, the DCM seems to capture the synergies between SCM and marketing by indentifying customer needs and designing the chain to satisfy

these needs (Heikkilä 2002). Jüttner et al. (2007) discuss that SCM focuses on efficient supply and is cost-oriented and internally focused, when marketing is more concerned on revenue by focusing on a demand side of the company and is externally focused. Together these two evidently determine the organization's profitability, because one defines the demand and other fulfills it Jüttner et al. (2007). Esper, Ellinger, Stank, Flint and Moon (2010) elaborate the research on demand and supply integration. They argue that historically firms have invested resources to develop a core differential advantage in demand-focused processes or in supply-focused processes, but rarely for both of them. Furthermore, often this has created mismatches between demand, which is what customers want, and supply, that is what is available at marketplace. Often the demand-focused firms create their value through an emphasis on effectiveness, while not concentrating on efficiency, and supply-focused firms vice versa have their concentration in value making on efficiency but not so much at effectiveness (Christopher 2005; Christopher and Gattorna 2005; Jüttner et al. 2007). Esper et al. (2010) propose a conceptual framework integrating demand-focused and supply-focused processes that is based on a foundation of customer value creation and implements a knowledge management process. According to Grant (1996a, b) knowledge-based theories of the firm highlight the importance of leveraging market information and business intelligence to support and enhance performance. As stated previously the knowledge-based view is a sub-stream of RBV, which Srivastava et al. (2001) recognize as an important component in integration of RBV and marketing. Esper et al. (2010) suggest four different behavioral processes, based on the previous studies of knowledge management, that together facilitate the capture and leveraging of market information and business intelligence. These processes are listed below as Esper et al. (2010, p. 7) expressed them:

1. Knowledge generation, which involves recognizing market variables that may significantly impact the effectiveness and relevance of current and future organizational operations.
2. Knowledge dissemination, which is the process by which applicable market information and business intelligence is shared throughout the organization and relevant stakeholders.

3. Shared interpretation, which entails developing one or more commonly understood interpretations of market information and business intelligence for a unified, integrated response.

4. Knowledge application, which involves institutionalizing new market information and business intelligence by altering management behaviors and processes to enhance market effectiveness.

Esper et al. (2010) define demand side activities as the ones that relate on individuals and processes both internal and external of the focal organization, these activities are responsible for generating and maintaining demand. In contrast, the supply side activities are in relation to individuals and processes both internal and external to the focal organization that manage operational areas that support and supply the products and services necessary for demand fulfillment. In their framework Esper et al. (2010, p. 7) seek to identify two themes that they consider crucial for the concept of demand and supply integration: "(1) the strategic imperative for integrating demand and supply processes to create customer value; and (2) the importance of communication and integration within the firm to generate, disseminate, interpret, and leverage market information and business intelligence for operational planning and execution." Esper et al. (2010, p. 7) define demand and supply integration (DSI) as "the balancing of demand and supply market information and business intelligence through integrated knowledge management process to strategically manage demand and supply activities for the creation of superior customer value." The key elements of DSI are visualized in Figure 1.

Figure 1: A conceptual framework of demand and supply integration (Esper et al. 2010, p. 7)
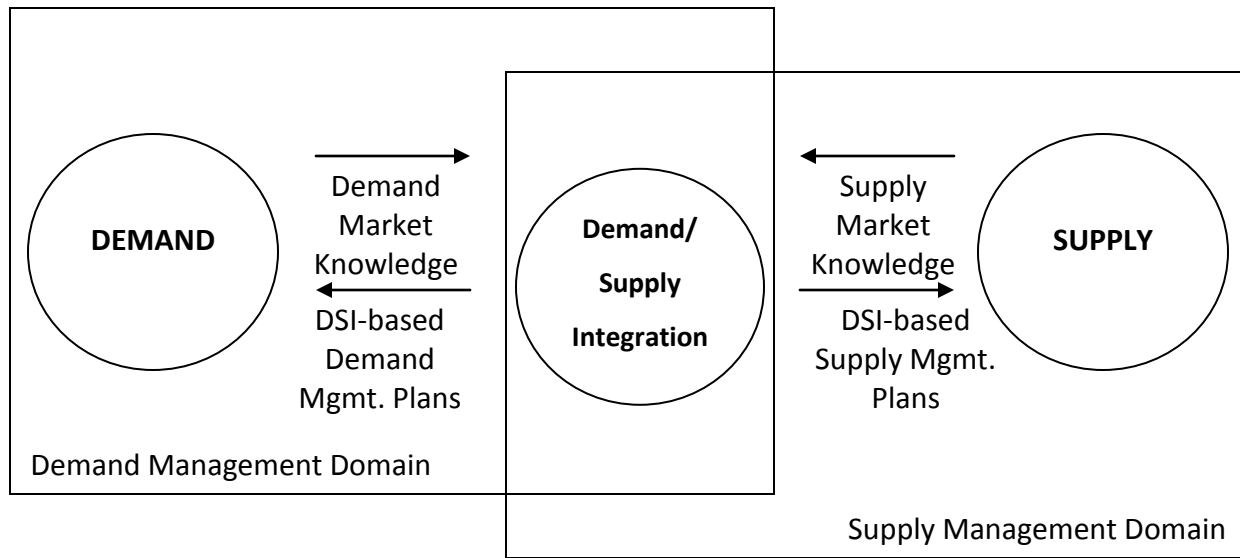
According to Esper et al. (2010) the implementation of DSI entails an execution of a series of strategic planning-oriented knowledge management processes for customer value creation. This series of processes begins with knowledge generation. At his stage the firm must first recognize that it possesses a current set of strategies and tactics related to demand and supply management. After this the study of demand and supply-side capabilities, constraints, opportunities and customer values perceptions should be done. When the knowledge is generated it is disseminated in the form of forecasts. Demand side knowledge dissemination is done through cross-functional and even cross-organizational meetings. On the other hand, the supply-side dissemination appears in the form of a capacity forecast. This forecast measures firm's own capacity as well as capacity availability and constraints of its supply network. After this the shared interpretation becomes possible. In this phase the demand and supply capabilities, constraints, and opportunities are evaluated in light of each other, and demand and supply are integrated both inter-functionally and inter-organizationally. The shared interpretation resulting from these activities can lead to effective decision-making. The final phase is the knowledge application that divides into two forms: demand planning and operational planning. Demand plans affect the results of decision-making taking internal effect to the DSI process. This is where the "traditional" marketing is applied to actively manage the demand, through implementing actions that influence demand by sales, marketing, and

channel partners. Also, tactics and strategy are applied according to the knowledge that resulted from shared interpretation. On the other hand, the operational planning involves strategic direction how to effectively execute such activities as production, procurement, inventory, transportation, and overall distribution network management. Moreover, it involves approaches for management of suppliers to receive support for planned and expected marketing initiatives of the firm. (Esper et al. 2010)

The paragraph above leads to the following three hypotheses:

H3: There is a positive relationship between supply chain management and customer relationship management.

H4b: The effect of supply chain management on market performance is mediated by customer relationship management.

H5b: The effect of supply chain management on financial performance is mediated by customer relationship management.

The aspects that have an effect on SCM performance are two folded according to Ramaswami et al. (2009). They identify two factors that affect SCM performance are the firm's capability in leading a supply chain network and its information sharing with supply chain partners. According to Poirier and Reiter (1996) the organizations are building something called "value-chain constellations", they consider these as organized networks of businesses that cooperate by sharing resources and rewards in addition of gaining on targeted markets and consumers. Major partner in the network needs to take the leadership role and coordinate efforts with other partners to maximize the customer value creation (Poirier and Reiter 1996). Sanders and Premus (2005) define the second factor as the use of information technology tools for processing and transmission of information essential for synchronous decision making. Use of technology can help firms to react and anticipate to the supply problems before they affect performance. Bowersox, Close and Stank (2000) aforementioned use of technology is based on information sharing, which is one of the most important factors for enhanced SCM performance. According to Scalet (2001) there are two types of information that can be shared

among supply chain members, they are demand and decisions. Scalet (2001) emphasizes the importance of transparency while handling the both types of information. Demand information transparency makes certain that suppliers would make right supplies at the right time. Decision information transparency helps suppliers to adjust their policies and processes to match better the product. In general the information transparency aids the firm to reduce supply chain cost and create a competitive advantage because of a stronger vendor relationship. However, many of the firms are reluctant to share information about them with external entities in fear that it may get into the wrong hands (Scalet 2001).

Previous paragraph leads to the subsequent two hypotheses:

H4a: There is a positive relationship between supply chain management and market performance.

H5a: There is a positive relationship between supply chain management and financial performance.

2.2.3. Customer Relationship Management
In this chapter an attempt has been made to define the customer relationship management (CRM) and how it affects performance. The theory is formed into two hypotheses in the end, supported by theories that explain how successful CRM process drives performance.

Boulding, Staelin, Ehret and Johnston (2005) define CRM as a collection of activities that seek to obtain and retain customers. These activities contain processes that aid co-creation of value and bring in customer information for organizational use. According to Grönroos (1991, p. 8) the role of marketing is to "establish, maintain and enhance relationships with customers and other parties at profit so the objectives of the parties involved are met." In more tangible terms, successful implementation of CRM requires "a cross-functional integration of processes, people, operations, and marketing capabilities that is enabled through information, technology, and applications" (Payne and Frow 2005, p. 168). According to Srivastava et al. (1999) CRM process addresses all aspects of indentifying customers, creating customer knowledge, building customer relationships, and shaping their perceptions of the organization and its inputs. The

strategic change into a market-driven CRM involves shifting from the working method that considers customer relationships only as means to sell, deliver, and service a product into one that promotes intimacy and sustainability in relations. This way the firm can learn about customer's needs and wants and how best to create, satisfy, and sustain them (Srivastava et al. 1999).

According to past research Ramaswami et al. (2009) propose three organizational abilities that can better the quality of firm's CRM, these are: selecting of high-value customers, capturing and using knowledge about such customers for development of customized offerings and personalized communication, and nurturing them by maximizing the value of their relationship with organization. Ramaswami et al. (2009) argue that the first step for a CRM process is to identify strategically significant customers for the firm. This is based on the concept that not all of the customers have equal value to the firm. In reality, while customers differ in their value to a firm the focusing on high-value customers will lead to preservation of the right customers. According to Collings and Baxter (2005) the high-value customers bring stability in the revenue and profitability streams of the firm or bring in higher revenue and profitability to the firm. Ramaswami et al. (2009) state that, the next step in the CRM process is to response to meeting the goals of these high-value customers. Kohli and Jaworski (1990) define the responsiveness as the action taken in response to business or market intelligence that is generated and disseminated, this also connects to the previously introduced DSM framework by Esper et al. (2010). Day (1994) argues that more effective response contributes to higher value creation for customers. According to Ramaswami et al. (2009) the third step in the CRM process is to manage customer relationships as assets (Gupta, Lehmann and Stuart 2004). Both resource-based view of the firm, Barney (1991), and the relationship marketing paradigm, Hunt and Morgan (1995), agree that the customer can be viewed as an asset. Based on these three abilities Ramaswami et al. (2009) empirically provide support for the proposition that CRM process drives performance. Furthermore, according to Mithas, Krishnan and Fornell (2005) the CRM process increases customer satisfaction that leads to higher performance. Also, Gummesson (1994) have shown that higher service quality has a direct link to performance,

while increasing efficiency as a result of interaction and designing the customer contact (Ryals 2005). Based on these previous studies the following two hypotheses have been formed:

H6: There is a positive relationship between customer relationship management and market performance.

H7a: There is a positive relationship between customer relationship management and financial performance.

2.3. Market Performance and Financial Performance

This chapter and its subchapters define the performance measures used in this study. Furthermore, it clarifies the difference between market and financial performance through the literature written upon it. The term market performance here refers to the market share and turnover of the firm. While the financial performance refers to the profitability, also known as business performance, measured with such meters as profits, ROI and ROA.

Varadarajan and Jayachandran (1999) discuss that much of research in marketing, strategic management, and industrial organization economics has focused on the relationship between market performance and financial performance. One of the first theories upon this domain was the structure-conduct-performance model introduced by Bain (1956). According to Bain's model there is a positive relationship between industry concentration and profitability. In the model the industry concentration (a structural characteristic) facilitates collusion among firms (the conduct) that should lead to superior performance. In contrast, Demsetz's (1973) efficiency perspective proposes that profitability is a function of efficiency differences among competitors. According to efficiency perspective the relationship between industry concentration and performance is caused by efficiency difference between firms and because of this is spurious. Jacobson (1988) argue that relationship between concentration and profitability is noncausal and is created by efficient firms achieving high market shares and profits. Furthermore, the empirical evidence supports the notion that market share results from efficiency, not from concentration, that relaters to profitability. Jacobson (1988) sums it up by stating that the relationship between market share and profitability is robust across different

definitions of market share, different sampling frames, and controls for accounting method variation. These findings have lead to the thinking that increasing the market share should become a normative strategy when obtaining superior performance (Varadarajan and Jayachandran 1999). However this is not the case, later critical inspection of the underlying logic has lead to a more balanced perspective. Varadarajan and Jayachandran (1999) have listed four arguments, as well as their limitations, in their study.

1. The quality explanation, when the information in the markets about product performance is uncertain and imperfect the higher market share signals superior quality to consumers. In these markets consumers often have greater confidence in high market share brands. However, in the markets where exclusivity is a prerequisite for high quality image, this explanation of market share-profitability relationship becomes unsubstantiated.

2. The market power explanation, businesses with a high market share can exercise more of their market power and gain profitability by, for example commanding price premiums, lowering costs by negotiating for more favorable terms with vendors, intermediaries, and retailers. On the other hand, it might be difficult for a firm with a high market share to hold onto their position unless they maintain their efficiency advantages by providing above average value to customers (Jacobson 1988).

3. The efficiency explanation, high market share is usually associated with scale and experience which help in achieving lower costs and this way enables a firm with high market share to earn higher profits than its competitors that have lower market shares (Jacobson 1988). However, this may not be true if the scale and experience effects are easily overcome or have minimal importance in the markets (Jacobson 1988). Also, if the innovation is more important to long-term profitability than efficiency effects (Scherer and Ross 1990).

4. The third-factor explanation, in addition to the structural characteristics of the markets and the marketing strategies that have been developed there is a third set of factors. This third set of factors is unobservable and could be such as luck, uncertainty, or

managerial insight. They might play a crucial role in aiding the firm to achieve a high market share and superior performance.

Evidence presented in previous chapter leads to following three hypotheses. First hypothesis states the already many times proven relationship between market share and profitability while two last ones argue that core business process efficiency leads to higher profitability when mediated by market share.

H8: There is a positive relationship between market performance and financial performance.

H5c: The effect of supply chain management on financial performance is mediated by market performance.

H7b: The effect of customer relationship management on financial performance is mediated by market performance.

2.4. Conceptual Framework

This chapter attempts to integrate the claims described previously into one all including conceptual model. It also revisits all the hypotheses introduced earlier.

Srivastava et al. (2001) proposed a framework that demonstrates how market-based assets and capabilities deliver superior customer value and competitive advantages via market-facing or core business processes. In turn, these value elements and competitive advantages can be leveraged into driving performance. Furthermore, Srivastava et al. (1999) concentrate on three processes, PDM, SCM and CRM, which create value to the customer and drive performance. In the context of PDM process Ramaswami et al. (2009) argue that there are two factors that are linked to PDM success. The first factor is customer-driven development that suggests a positive relationship between PDM and CRM processes, thus leading to hypotheses H2a, H2b and H2c. The second factor is the cross-functional integration that suggests hypotheses H1a, H1b and H1c, and reinforces hypotheses H2a, H2b and H2c. The theory strengthening the proposed hypotheses from the view-point of SCM is by Esper et al. (2010) who reduce three core business processes suggested by Srivastava et al. (1999) into two processes, demand and supply, which are engaged to reach the same goal. In the model of Esper et al. (2010) PDM rather becomes a

part of both demand and supply side activities. Also Esper et al. (2010) promote the need for processes' cross-integration among each other and marketing. This demand supply integration leads to the following three hypotheses H3, H4b and H5b. Also Ramaswami et al. (2009) contribute to theories concerning SCM process, information sharing and supply chain network leading, which can be formed into the hypotheses H4a and H5a. To drive CRM performance Ramaswami et al. (2009) propose three capabilities that a firm should concentrate on, focusing on high-value customers, responding to customer goals and building customer relationship assets. Also, Krishnan and Fornell (2005) propose that customer satisfaction drives performance and Gummesson (1994) have shown that higher service quality has a direct link to performance. These findings support the hypotheses H6 and H7a. Varadarajan and Jayachandran (1999) and Jacobson (1988) suggest a robust link between market performance and financial performance, proposing hypothesis H8. Their notions support also hypotheses H5c and H7b. Below in Figure 2 is the visualization of the conceptual model proposed for this study.

Figure 2: Theoretical framework of the study
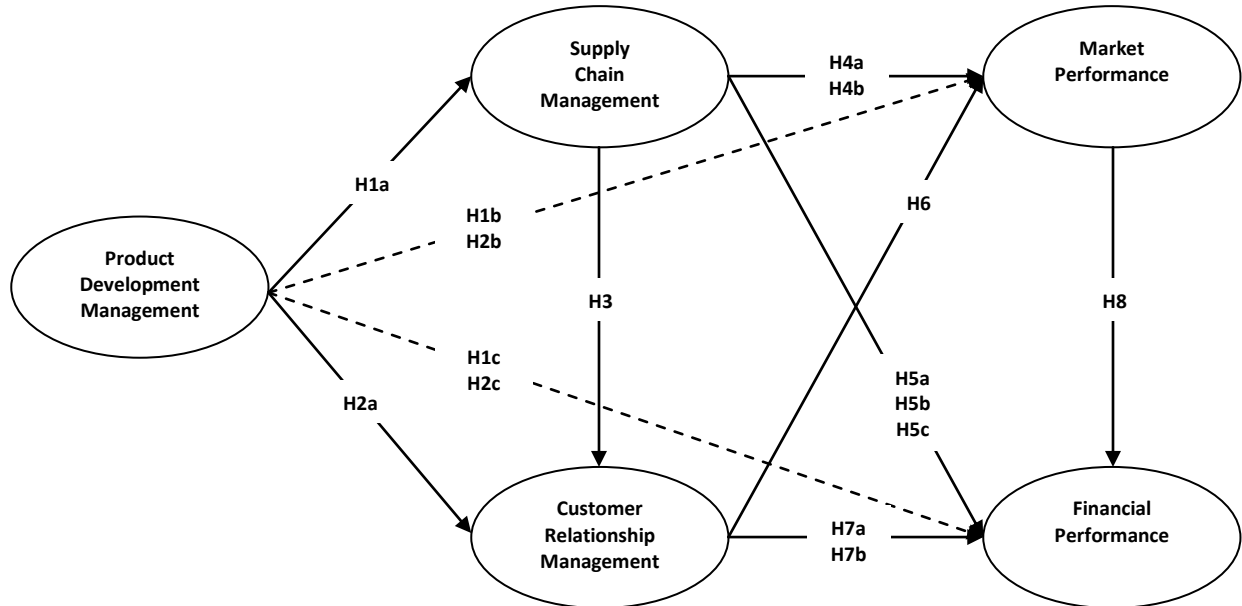
3. Research Methods

In this chapter is explained how the data is collected, what does the data consist of, how the variables are constructed and operationalized, and finally, which are the statistical analysis methods used in this study.

3.1. Collecting the Data

The data was collected through a broad national study about the current state of marketing, which was conducted within the StratMark research project. An online questionnaire was used to address the upper management of all Finnish firms consisting of more than 5 employees. To specify target population, an address directory including listings of both firms and individual decision makers was used as the sampling frame, provided by MicroMedia, a Finnish expert and service company specialized in direct marketing.

The draft of the questionnaire was made during fall and pilot-tested among the participants of the annual StratMark seminar held on January 24th 2008. The majority of the items included were directly adopted from previous – primarily based on studies and questionnaires by Ambler, Kokkinaki and Puntoni (2002), Srivastava et al. (1999), Vorhies and Morgan (2005), O'Sullivan et Abela (2007), Kazanjian (1988), Narver and Slater (1990), Clark, Abela and Ambler (2005) and Neill and Rose (2006). Although, most of the items were validated already in previous research a test version was sent to 114 managing directors, of which 34 completed the questionnaire. During the test-phase some misspellings were corrected and a few corrections were made into the wording of the questionnaire according to the comments. The analysis of the responses for the pilot-test did not bring forth a need for any improvements to contents of the questionnaire and it was considered adequate for the final data collection.

There were 8 thematic groupings of questions which the final survey contained, addressing the business environment and the respondent firm's position in it, the role of marketing, marketing impact and productivity, business processes and marketing, business processes and managerial challenges, the process of learning and development, marketing investments and background information. The original questionnaire used is presented in appendix A.

The final survey was conducted between January 18th and March 25th 2008. The questionnaire was sent to the whole target population defined in the sampling frame, consisting of the upper management from all Finnish firms with over 5 employees listed in the directory provided by MicroMedia. The final sampling frame is further described in Table 1.

Table 1: The sampling frame

Firm size (no employees)	Titles included in the sampling frame
All	Chief executive officers, group directors, commercial directors, purchasing directors
>5	Managing directors, owners, executive vice presidents, branch directors, directors, heads of department, departmental managers, marketing directors, sales directors, development directors
>10	Chairmen of the board, chief editors
>100	Hotel Managers

Entrepreneurs and governmental organizations were basically excluded from the population. The final target population consisted of 6 867 firms and 15 941 potential respondents.

Besides to an original invitation to participate to the study, delivered via e-mail, also three remainders were sent at two week intervals. In total, 1 157 responses were received from 1 099 different firms, totaling response rate of 7.25% in terms of respondents and 16.00% on the firm level. Considering the breadth and depth of the questionnaire and the high positions of respondents, the response rate surpassed all expectations and was considered more than reasonable.

3.2. Research Data

The collected data included 1 157 full responses, further described in tables 2 and 3 in terms of respondent branch and the number of personnel. Respective structure of Finnish firms in general, provided by Statistics Finland based on the most recent numbers from year 2008, is also presented in the tables for comparison.

Table 2: Respondents by branch

Statistics Finland			Survey	
Branch	Enterprises	%	Respondents	%
Agriculture, hunting, forestry and fishing	57 951	18,1	1	0,1
Industry	23 290	7,3	341	29,5
Construction	41 295	12,9	49	4,2
Trade	47 042	14,7	138	11,9
Hotels and restaurants	10 923	3,4	22	1,9
Transport, storage and communications	31 238	9,7	57	4,9
Financial intermediation and insurance	4 464	1,4	71	6,1
Real estate and renting activities	15 067	4,7	41	3,5
Technical services and other business activities	44 324	13,8	354	30,6
Other branches	45 358	14,1	83	7,2

As table 2 demonstrates, compared to Finnish firms in general, the branches of industry, financial intermediation and insurance and technical services and other business to business activities were emphasized in the study. In contrast, the branches of agriculture, hunting, forestry and fishing and construction were rather underrepresented. As the survey was targeted to firms with over 5 employees, this might reduce the representation of branches consisting of typically small enterprises. Table 3 represents the distribution of respondents relative to the size of the firm.

Table 3: Respondents by size of personnel

Statistics Finland			Survey		
Personnel	Enterprises	%	Personnel	Enterprises	%
0-9	302 989	94,4	1-10	179	15,5
10-49	14 866	4,6	11-50	400	34,6
50-249	2 441	0,7	51-250	298	25,8
250-499	363	0,1	251-500	89	7,7
500-	293	0,1	501-	190	16,4

As one can observe from table 3, respondents were emphasized on larger firms. The difference compared to the overall distribution shown in the figures of Statistics Finland can be partly explained by the starting point of study excluding all firms with less than 5 employees. As well, larger firms tend to hold more positions with adequate status for responding to the study and

may thus have received more invitations to participate. In despite of these distortions of distribution discussed above, the overall scope and representativeness of the data collected was considered quite extensive.

3.3. Construction and Operationalization of Variables

The construction of variables follows the division of StratMark research project. There are five constructs in total included in the empirical part of the study of which four are endogenous and one exogenous in nature. The endogenous constructs are supply chain management, customer relationship management, market performance and financial performance, whereas exogenous construct is product development management. The constructs of core business processes, PDM, SCM and CRM as suggested by Srivastava et al. (1999), consist of singular indicators that can be viewed as their sub-processes. All the latent variables of the study with initial set of observed variables related to them are presented at table 4. The removal of statistically insignificant or conflicting variables is presented in Chapter 4, after we have covered the techniques of performing such an operation. Cronbach's alpha coefficients, indicating the consistency of entire constructs, are presented in Appendix D.

3.3.1. Endogenous Variables

Endogenous latent variables are influenced by exogenous variables in the structural model, either directly or indirectly. Variation in values of endogenous variables is said to be explained by the model since all latent variables that influence them are included in the model specification (Byrne 1998). All the observed variables related to endogenous variables, and their corresponding codes are presented in Appendix B.

Supply Chain Management

Supply chain management refers to the variables related to the firm's ability to covert its physical and informational inputs into customer solutions in an efficient and effective manner (Srivastava et al. 1999). SCM relates to the firm's ability to manage its logistics and distributor and supplier relationships. The scale of SCM indicators reaches from 1 = "much worse than main competitors" to 7 = "much better than main competitors".

Customer Relationship Management

Customer relationship management process addresses all aspects of indentifying customers, creating customer knowledge, building customer relationships, and shaping their perceptions of the organization and its inputs (Srivastava et al. 1999). The scale of measurement for CRM indicators ranges from 1 = "much worse than main competitors" to 7 = "much better than main competitors".

Market Performance

Market performance is what Varadarajan and Jayachandran (1999) refer as the market share, in this study comprised of two relative measures, market share and turnover. Market performance measures were measured in relation to the principal competitors of the firm. Therefore, the indicators are competition-centered. Market performance scale reaches from 1 = "much worse than main competitors" to 7 = "much better than main competitors".

Financial Performance

Financial performance is possibly the area of this study that holds most interest. Financial performance variables were as well measured in relation to the main competitors of the firm. This is because, accounting treatments vary from firm to another and substantial industry effects on performance complicate the use of objective measures of performance thereby making their superiority over subjective measures illusory (Slater and Narver 1994). The scale of this set of indicators ranged from 1 = "much worse than main competitors" to 7 = "much better than main competitors".

3.3.2. Exogenous Variables

Exogenous latent variables are synonymous to independent variables which cause fluctuations in the values of other latent variables in the statistical model. The model does not explain changes in the values of exogenous variables (Byrne 1998). In this study the product development management is viewed as the sole exogenous variable construction. This is because it is the one area of firm's market based capabilities (MBC) that rationally has more effect on other core business processes than they in turn have on it. Once again, all the observed variables and their corresponding codes are presented in Appendix B.

Product Development Management

According to Srivastava et al. (1999) PDM is a process that aims to create solutions that customers need and want. Also variables of this construction are measured against firm's primary competitors. As well in this case the measurement ranges from 1 = "much worse than main competitors" to 7 = "much better than main competitors".

3.4. Methods of Statistical Analysis

Two confirmatory multivariate techniques were used to analyze the data. First a confirmatory factor analysis (CFA) was conducted to prove theoretical underlying dimensions of the data and to build a statistically valid and reliable measurement model to base further analysis, later on structural equation model (SEM) was conducted to test the hypotheses with a path model.

3.4.1. Confirmatory Factor Analysis

The main difference among exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) is in the nature of analyses, of which distinct principles are illustrated in Figure CFA (error terms of variables x_i are excluded for the sake of clarity). When EFA attempts to form any kind of a factor structure from the data input, the CFA in comparison has more stringent, theoretical rules to follow. According to Kline (2005, p. 71) EFA does not require a priori hypotheses about how indicators are related to underlying factors or even the number of factors. As in this study where the EFA was conducted to strengthen the theoretical assumptions, such as how the different variable patterns load into factors and is the amount of factors same as the dimensions assumed by theory. On contrast, in CFA, observed variables (indicators) can only load to certain factor and thus all associations between factors are not being analyzed. And since in this study the factor structure bases on previous studies (e.g. Srivastava et al. 1999, Varadarajan and Jayacahndran 1999, Ramaswami et al. 2009), it is more consistent to use CFA in model development and assesment. However, in order to assure the stability of definitive CFA model the EFA is also conducted. Given that in EFA all the indicators are allowed to correlate with every factor, having the same factor model by using both methods indicate good validity.

Figure 3: Differences of an EFA (left) and CFA model (Long 1983)
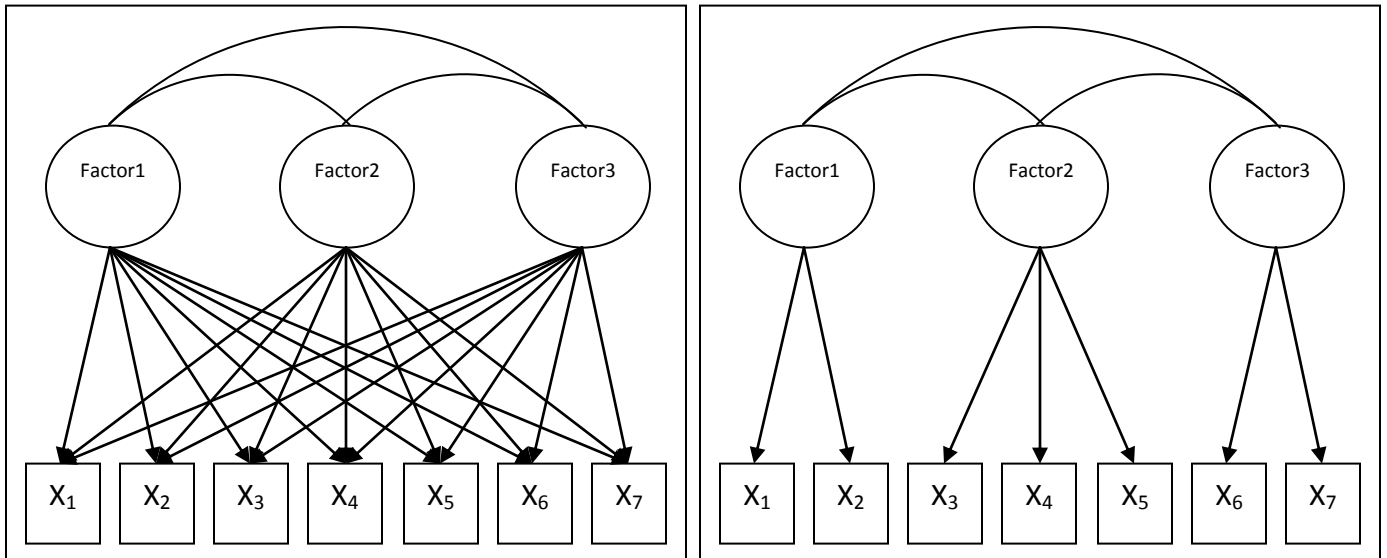
The technique of CFA analyzes a priori measurement models in which both the number of factors and their correspondence to the indicators are explicitly specified (Kline 2005, p.71). While the measurement model defines relations between the observed and unobserved variables it specifies the pattern by which each variable loads on a particular factor, or the extent to which the fatcor is reflected in the scores of that indicator.That is why, a measurement model can be seen as a structural model of presumed causal effects of latent variables on observed scores. (Byrne 1998, Kline 2005)

With CFA it can be observed if the model given in the beginning of analysis is supported by the data. In CFA the most interest hold the factor loadings and communalities that are fit statistics related to individual indicators. The way how a factor and an indicator are influenced by each other (both in direction and magnitude) can be described by the value of a factor loading. Thus, the loading is essentially a regression coefficient, either in standardized or unstandardized form. Commuality value gives an amount the model characteristics of the indicator can be explained by the data. (Kline 2005)

In case the researcher's a priori mesurement model is theoretically sound, the following pattern of results should be seen: (1) the indicators specified to measure a common underlying factor have comparatively high standardized loadings on that factor (e.g. > .60), and (2) estimated correlations between the factors are not exceptionally high (e.g. > .85). The first result indicates

indicates convergent validity, and the second discriminant validity (Kline 2005, p. 73). The overall CFA model's goodness of fit can be interpreted from certain model indices. These fit measures will be elaborated further on in this chapter.

The aim of the CFA was to confirm the factors formed in questionnaire and previously tested in EFA. The CFA was partially used to simplify the initial, comparatively complex model ad subsequent analysis. Consequently, the analysis also contains descriptive features, seeking to retain the nature and character of the original variables while concurrently reducing their number (Hair, Black, Babin and Anderson 2006). Whereas the use of several measures in a construct tends reduce the effect of measurement error in any individual indicator on the accuracy of the results (Kline 2005, p. 165), those indicators just barely providing statistical significance to the model can be well excluded. As well, this is supported by Hair et al. (2006) who state that the researcher should try to obtain highest possible case-per-variable ratio to minimize the chances of over-fitting the data.

However, this type of data reduction rationale cannot be always applied till the very end. If not, at the level of individual factors, model builder starts soon to run into a model identification problems. This is for the reason that standard CFA model that consists of two or more factors has to have at least two indicators per factor identified, Bollen (1989) referred to this condition as two-indicator rule. For CFA model to be identified, its number of free parameters must be less than or equal to the number of observations. (Kline 2005)

3.4.2. Structural Equation Modeling

Structural equation modeling (SEM) is a rational consequent technique for confirmatory factor analysis. This is because the structural model defines relations among the unobserved variables. Therefore, it specifies which latent constructs directly or indirectly influences changes in the values of other latent constructs in the model (Byrne, 1998). In truth, SEM is a combination of CFA and path (or, regression) analysis.

The list below describes some of the most important characteristics of SEM (Kline 2005, p.9-16)

1. SEM is a priori method and requires researchers to think in terms of models. But being a priori does not mean that it is exclusively confirmatory. Many applications of SEM are a blend of exploratory and confirmatory analyses.

2. The explicit representation of the distinction between observed and latent variables is characteristic of many structural equation models. This distinction makes it possible for researchers to test a wide variety of hypotheses.

3. SEM is mostly a large-sample technique (N > 200 can generally be considered large). The more complex the model, the bigger the sample.

Kline (2005, 63-65) suggests that the procedure of SEM consists of seven basic iterative steps:

1. Specify the model; the researcher's hypotheses are expressed in the form of SEM.

2. Determine whether the model is identified; different types of SEM must meet certain requirements in order to be identified. If a model fails to meet the relevant identification requirements, attempts to estimate may be unsuccessful.

3. Select measures of the variables represented in the model and collect, prepare, and screen the data.

4. Use a computer program to estimate the model.
    a. Evaluate model fit.
    b. Interpret the parameters.
    c. Consider equivalent models.

5. If necessary, re-specify the model; and evaluate the fit of the revised model to the same data.

6. Given a satisfactory model, accurately and completely describe the analysis.

7. Apply the results.

Structural equation modeling can be introduced with a help of the example by Jaccard and Wan (1996). They modeled how child's desire to achieve in school is affected by his or her parents' achievement orientation. The path diagram illustration of the model is illustrated below in Figure 4.

Figure 4: Example of SEM procedure (Jaccard and Wan 1996)
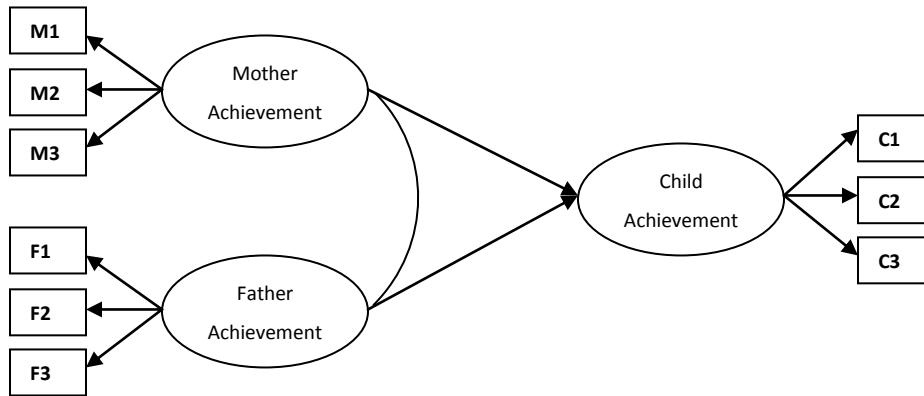
The main idea behind SEM is that any path diagram can be translated into a series of linear regression equations. In Figure 4, the latent variable Y (child achievement) is the dependent variable whereas X_1 (mother achievement) and X_2 (father achievement) are independent variables. Hence, the formal regression equation can be formulated as

$$Y = a + b_1X_1 + b_2X_2 + E$$

where a is the intercept, b_1 and b_2 are the regression coefficients and E is a residual term. Equation above focuses on the structural relations between latent variables and because of this is often referred as a structural model. (Jaccard and Wan 1996)

In comparison to the traditional multiple regression analysis, SEM has some distinctive and significant advantages. The use of multiple indicators for latent constructs allows estimation of regression coefficients in the context of an error theory for the observed measures. As well, it permits a formal analysis of the generalization of interaction analyzes across divergent measures.

Before the structural component of structural regression model can be evaluated a valid measurement model is needed (Kline 2005). According to Diamantopoulos and Siguaw (2000) determining of whether the data supports the structural model, three issues are of most relevance.

1. Signs of the parameters representing the paths between the latent variables indicate whether the direction of the hypothesized relationship is as supposed.

2. Magnitude of estimated parameters provides important information on the strength of the hypothesized relationships.

3. Square multiple correlations (R^2) for the structural equations indicate the amount of variance in each endogenous latent variable accounted for by the independent latent variables that are expected to impact upon it.

ML estimates for path models are interpreted as regression coefficients in multiple regression models. Indirect effects are estimated statistically as the product of direct effects that comprise them. As a result, total effect a variable to another is the sum of all direct and indirect effects (Kline 2005).

Although SEM clearly has advantages over other statistical analysis methods it still cannot serve as a substitute for poor measures. Furthermore, even though the SEM technique is both diversified and flexible, "the ability to analyze basically any kind of structural equation model across multiple samples further extends the range of hypotheses that can be tested in SEM" (Kline 2005). However, this does not mean that researchers should blindly rely on the results of the SEM analysis, meaning that these results should not be treated as a substitute for research professionalism. As stated by Jaccard and Wan (1996), most of the methodologists recommend that the number of indicators per construct to be at least three due to potential empirical under identification and consequent analytic complications. Over identified models, or those identified models with fewer parameters than observations, are preferred.

The basic statistic of SEM is covariance. This is since there are two main goals of the analysis: to understand patterns of correlations among a set of variables, and to explain as much of their variance as possible with the model specified by the researcher. The covariance between two variables, X and Y, can be calculated as follows:

$$cov_{XY} = r_{XY}SD_XSD_Y$$

where r_{XY} is the Pearson correlation between X and Y and where SD_X and SD_Y are their standard deviations. Covariance, known also as unstandardized correlation, because of this conveys more information as a single-number statistic than a correlation. (Kline 2005)

3.4.3. Mediational Analysis

According to Kenny, Kashy and Bolger (1998) SEM facilitates the estimation and testing of causal sequences, one particularly frequently occurring causal model in social psychology is a model proposing a mediational process. Although, this study is not on a field of a social psychology but marketing, this type of method is applicable as well in this case.

According to Baron and Kenny (1986) "a given variable may be said to function as a mediator to the extent that it accounts for the relation between the predictor and criterion". Baron and Kenny (1986) used a path diagram as a model for illustrating the causal chain (Figure 5).

Figure 5: The basic causal chain involved in mediation (Baron and Kenny 1986)
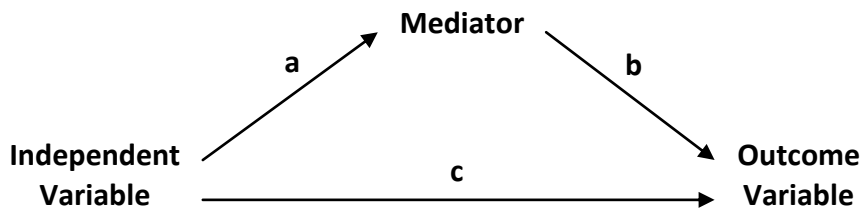
The model, in Figure 5, assumes a three-variable system that contains two causal paths feeding into the outcome variable: the direct impact of the independent variable (Path *c*) and the impact of the mediator (Path *b*). In model there exists as well a path from the independent variable to the mediator (Path *a*).

Variable is functioning as a mediator when it meets the three subsequent prerequisites: First, variations in levels of the independent variable significantly account for variations in the supposed mediator (i.e. Path *a*). Second, variations in the mediator significantly account for variations in the dependent variable (i.e. Path *b*). And third, when Paths *a* and *b* are controlled, a previously significant relation between the independent and dependent variables is no longer significant, the strongest display of mediation is occurring when Path *c* is zero. While regarding the last prerequisite one may envision a continuum. While Path *c* is reduced to zero, there is strong evidence for a single, dominant mediator. In case the residual Path *c* is not zero, this indicates the operation of multiple mediating factors. In a situation when Path *c* is significantly reduced, however not completely to zero, it demonstrates that a given mediator is indeed

potent, although not both a necessary and a sufficient prerequisite for an effect to occur. (Baron and Kenny 1986)

Judd and Kenny (1981) recommended that a series of regression models should be estimated, instead of ANOVA. The three abovementioned paths should be conducted as separated regression equations. In addition, separate coefficients for each equation should be estimated and tested. According to Baron and Kenny (1986) to establish mediation, the following condition must hold:

1. **Equation** The independent variable must affect the mediator.
2. **Equation** The independent variable must be shown to affect the dependent variable.
3. **Equation** The mediator must affect the dependent variable.

In the case that all of these conditions hold in the predicted direction, then the effects of independent variable towards the dependent variable must be less in the third equation than in second. For a perfect mediation the independent variable should have no effect when the mediator is controlled. (Baron and Kenny 1986)

Kenny et al. (1998) introduced a four-step procedure to conduct a mediational analysis. According to them these steps are the same regardless of which data-analytical method is used; because of this the aforementioned procedure is applicable and therefore also applied in this study. Below are presented the four steps of the procedure and the illustration (Figure 6), both adopted from Kenny et al. (1998):

Step 1. Show that the initial variable is correlated with the outcome. Use Y (the outcome variable) as the criterion variable in a regression equation and X (the initial variable) as a predictor – estimate and test path c in Figure 6(a). This step establishes that there is an effect that may be mediated.

Step 2. Show that initial variable is correlated with the mediator. Use M (the mediator) as the criterion variable in the regression equation and X as a predictor – estimate and test path a in Figure 6(b). This step essentially involves treating the mediator as if it were an outcome variable.

Step 3. Show that the mediator affects the outcome variable. Use *Y* as the criterion variable in a regression equation and *X* and *M* as predictors – estimate and test path *b* in Figure 6(b). It is not sufficient just to correlate the mediator with the outcome; the mediator and the outcome may be correlated because they are both caused by the initial variable *X*. Thus, the initial variable must be controlled in establishing the effect of the mediator on the outcome.

Step 4. To establish that *M completely* mediates the *X-Y* relationship, the effect of *X* on *Y* controlling for *M* should be zero – estimate and test path *c'* in the Figure 6(b). The effects in both Steps 3 and 4 are estimated in the same regression equation.

Figure 6: Basic Mediational Structure (Kenny et al. 1998)

(a)   (b)
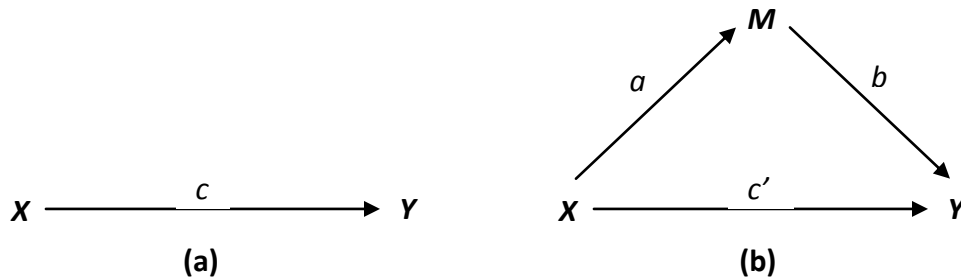
3.4.4. Statistical Tests

Various kinds of statistical tests are conducted when applying statistical methods. Some of these need be calculated by hand while others can be identified from structural equation model (SEM) program printouts. These are discussed next.

The fit of the structural model refers to the extent to which a hypothesized model is consistent with the data (Diamantopoulos and Siguaw 2000). The overall fit indices used in determining the statistical goodness of the achieved measurement and structural models include: root mean square error of approximation (RMSEA), goodness of fit index (GFI), non-normed fit index (NNFI), and comparative fit index (CFI). RMSEA is usually regarded as one of the most informative fit indices; it reveals how well the model, with unknown but optimally chosen parameter values, would fit the population covariance matrix if it were available. GFI shows how closely the model comes to perfectly reproducing the observed covariance matrix. Where

GFI is an example of absolute fit index, NNFI and CFI are relative fit indices (Diamantopoulos and Siguaw 2000). The instructions for calculation of these indices are presented in Appendix C.

Jaccard and Wan (1996) suggest a frequently used rule thumb according to which models that yield a GFI lower than 0.90 are of questionable fit. As well many other publications (such as Hair et al. 2006; Yli-Luoma 1996) state that the GFI values greater than 0.90 are typically considered good fit. Browne and Cudek (1993) and Diamantopoulos and Siguaw (2000) suggest that RMSEA values less than 0.08 imply adequate model fit and values below 0.05 imply good model fit. Jaccard and Wan (1996) discuss that CFI index has been found to be a well-behaving index of model fit. According to them models with a CFI less than 0.90 are suspect. Particularly, models yielding uniformly unacceptable values across the fit indices are suspect. Whilst the fit indices do not converge care must be taken in asserting the model (Jaccard and Wan 1996). This makes sense because different fit indices assess fit in different ways and for one to reach a judgment concerning the overall model fit one must rely on multiple criteria (Diamantopoulos and Siguaw 2000). Thus, a single fit index of bad value does not necessarily need to lead to rejection of a structural model.

Cross-validation of the structural equation model refers to the ability of the model to be invariant across two or more random samples from the same population. This assessment consists of testing the null hypothesis (H_0) that the model is identical across groups against alternative hypothesis (H_1) that the model is not identical across the groups. A chi-square difference test is used to test H_0 and H_1. The test statistic value for the test is merely the difference between the goodness-of-fit Chi-square test statistic values of the multiple group structural models under the null and the alternative hypotheses. The associated degrees of freedom are arrived at similarly (Mels 2005). In relation to comparing statistical significance of construct means among different samples, Student's t-test is used. Student's t-test helps in examining whether two samples are likely to have come from the same two underlying populations that have the same team. High probability (e.g. higher than 0.05) associated to two-tailed t-test indicates that sample means are statistically equal. (Hair et al. 2006)

Because of different types of random error, it is often necessary to evaluate different aspects of score reliability. The most frequently reported estimate of reliability is Cronbach's alpha (α). This statistic measures internal consistency reliability, the degree to which responses are consistent across the items within a single measure. If internal consistency reliability is low, the content of the items may be so heterogeneous that the total score is not the best possible unit of analysis for the measure. In general, reliability coefficients around 0.9 are considered excellent, values around 0.8 as very good and values around 0.7 adequate. (Kline 2005)

As well composite reliability and the average variance extracted are rather often used. These two reliability estimates combined are actually quite close substitutes to Cronbach's alpha. According to Diamantopoulos and Siguaw (2000) for calculation of a composite reliability value for each latent variable, information on the indicator loadings and error variances in completely standardized form are used. To calculate this reliability measure the following equation is used:

$$\rho_c = \frac{(\sum \lambda)^2}{(\sum \lambda)^2 + \sum_{}^{(\theta)}}$$

where ρ_c refers composite reliability, λ refers to indicator loadings, θ refers to indicator error variances and $\sum$ refers to summation over the indicators of the latent variable. Composite reliability values of greater than 0.6 are desirable. A complementary measure to composite reliability is the average variance extracted (ρ_v). This shows directly the amount of variance that is captured by the construct in relation to the amount of variance due to measurement error; values less than 0.5 indicate that measurement error accounts for a greater amount of variance in the indicators than does the underlying latent variable. Average variance extracted (ρ_v) can be calculated as below:

$$\rho_v = \frac{\sum \lambda^2}{\sum \lambda^2 + \sum_{}^{(\theta)}}$$

where λ, θ and $\sum$ are defined as above (Diamantopoulos and Siguaw 2000).

4. Results and Analysis

This chapter presents the results of applying statistical methods to the data. In this study a two-step method to test (1) the measurement model, and (2) the structural model was used. First, in assessing the measurement model, a confirmatory factor analysis (CFA) was conducted using LISREL8.8. These constructs are then used in SEM analysis.

4.1. Confirmatory Factor Analysis

The hypothesized indicators in each of the five factors, presented in section 3.2., were tested with a help of confirmatory factor analysis (CFA).

The primary step of the analysis was to evaluate a model containing all the relevant indicators of the questionnaire. The initial CFA model is illustrated in Figure 7. The results show that the overall model fit is unacceptable (value of RMSEA = 0.097). Comparative fit index (CFI) = 0.92 and non-normed fit index (NNFI) = 0.91 are both above the most often used threshold level of 0.90. Except for the goodness of fit index (GFI) = 0.77, which furthermore indicates that the model does not fit without further adjustments. Model fit can be improved by removing indicators that have low standardized loading or communality values from the model.

Figure 7: Initial CFA model (covariances between factors excluded)

Market Performance

K501

K506

K502

K503

K504

Financial Performance
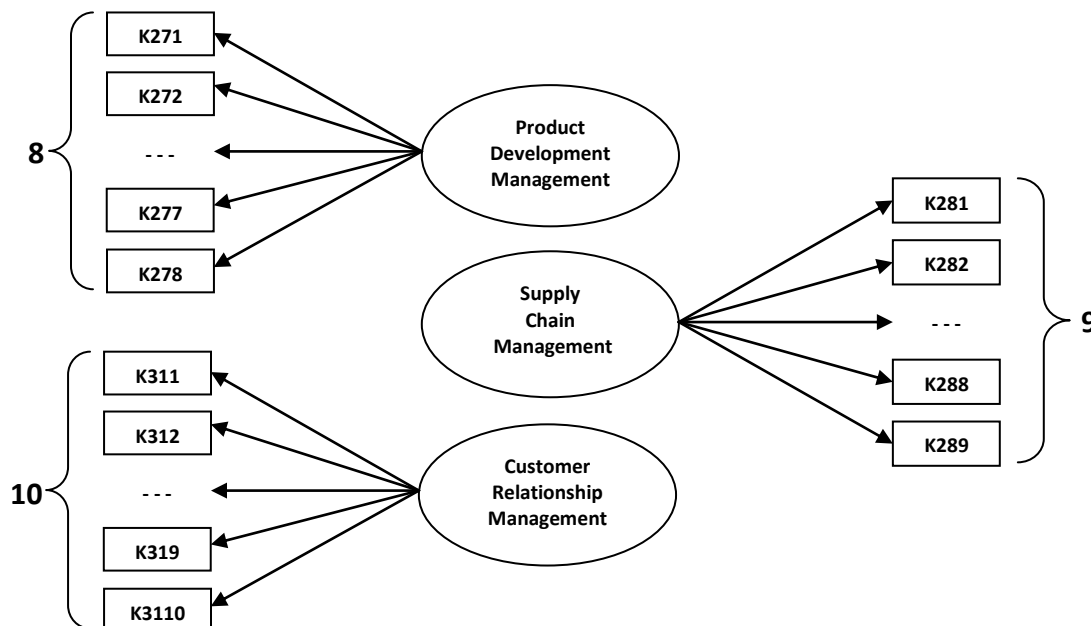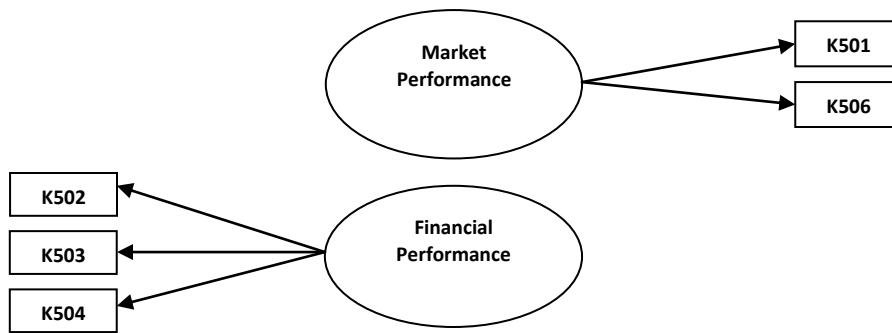
Development of CFA model was conducted firstly by excluding variables with relatively low standardized loadings and communalities, and secondly by trial-and-error basis to indentify adequate fit indices of the model. During the first iteration round variables K281, K289, K311, K318 and K3110 were excluded due to both relatively low loadings (<.50) and communalities (<.39), also variables K273, K274, K286 and K319 were excluded because of low communalities.

After the first round of iteration the goodness of fit indices were still relatively low, even though, eliminations during the first round caused some changes to the overall model and other indicators. During the second round both variables, K288 and K504 were excluded from analysis because of their bad effect on overall goodness of fit.

After excluding the second set of variables all the standardized loadings, communalities and fit indices were on acceptable level, loadings above .65 and communalities above .39. According to this, current model can be seen as the final one. To summarize, total amount of 11 indicators were left without further analysis and 21 remaining variables are those which are statistically most significant and without contradictory standardized loadings, and therefore to be focused on. Standardized loadings and communalities related to each final indicator are presented in Table 4.

Table 4: Final standardized indicator loadings and communalities

Indicator	Loading					Communality
K271	.72					.55
K272	.71					.51
K275	.71					.48
K276	.77					.61
K277	.74					.46
K278	.66					.39
K282		.79				.65
K283		.80				.60
K284		.69				.46
K285		.66				.41
K287		.70				.49
K312			.74			.45
K313			.75			.46
K314			.67			.42
K315			.77			.62
K316			.79			.66
K317			.68			.46
K501				.93		.92
K506				.94		.79
K502					.94	.99
K503					.83	.39

Correlations between latent variables are presented in Table 5. Because they are all significantly low, empirical support for the theoretical constructs exists and thereby number of factors (five) in the model is given.

Table 5: Correlation matrix of factor constructs

Construct	Mean	Standard Deviation	1	2	3	4	5
1. Product Development Management	3.33	1.33	1.00				
2. Supply Chain Management	2.98	1.52	.43	1.00			
3. Customer Relationship Management	3.10	1.09	.56	.52	1.00		
4. Market Performance	3.76	1.67	.28	.25	.34	1.00	
5. Financial Performance	3.46	1.41	.37	.35	.49	.56	1.00

It can be read form the LISREL output that the fit indicators of the final model are improved significantly from the earlier model phase, being now: RMSEA = .078; GFI = .89; NNFI = .95; and CFI = .96. All these values refer to adequate or good model fit, except maybe the GFI value that could be slightly higher. The final CFA model is illustrated in Figure 8.

Figure 8: Confirmatory factor analysis model
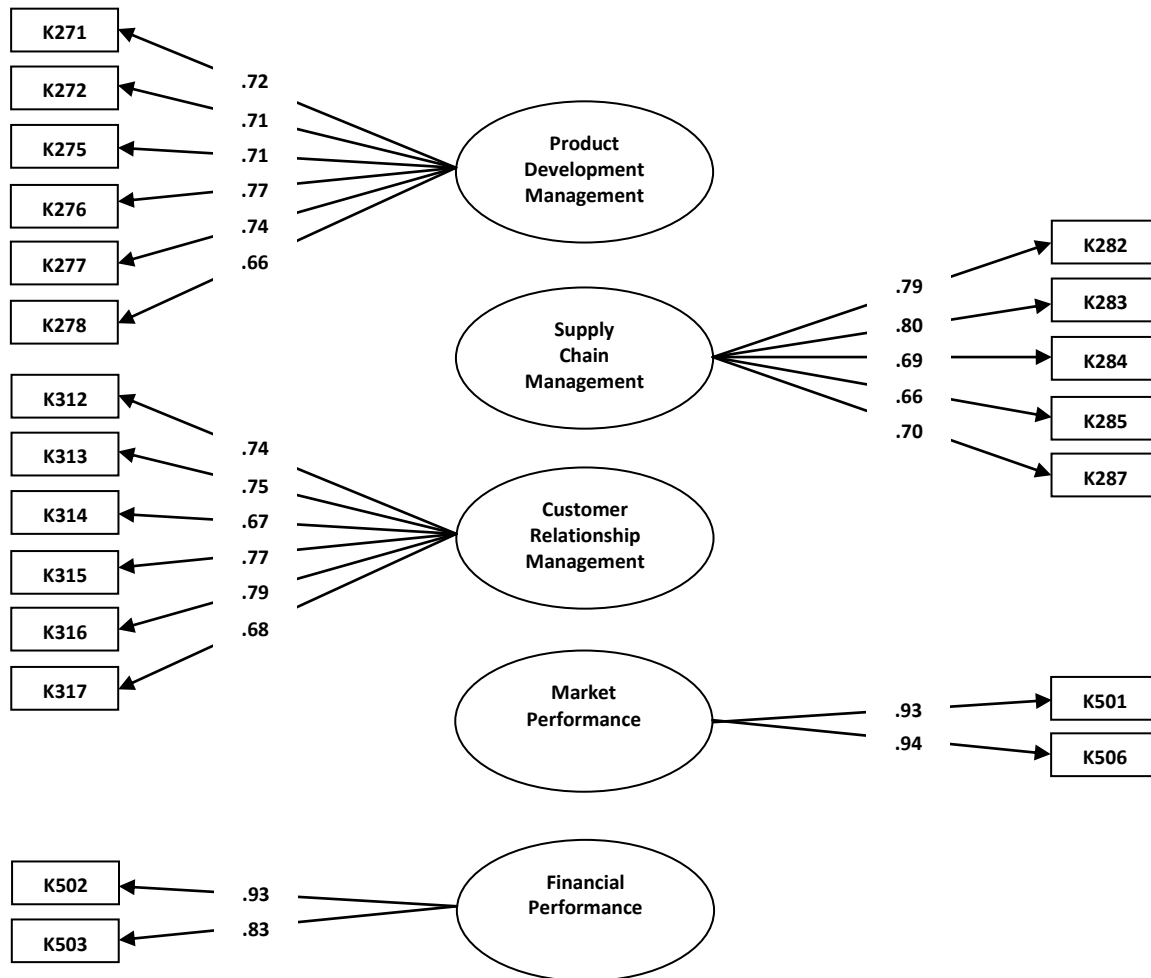
For testing the discriminant and convergent validity of the model just concluded at, exploratory factor analysis was conducted. Analysis, conducted with SAS Enterprise Guide, suggested a strong support to model validity because exactly the same factor constructs were indentified when the final set of analysis indicators were included without appointing them in to any particular factor. The detailed convergent and discriminant analysis can be found from Appendix D. Cronbach's alpha coefficients (α) (Appendix E), composite reliabilities (ρ_c) and average variances extracted (ρ_v) (in table 10) were without exceptions at satisfactory level: $\alpha >$ .7; $\rho_c >$ .6; $\rho_v >$ .5.

Table 6: Composite reliability and average variance extracted

Construct	Composite reliability	Average variance extracted
Product Development Management	.87	.52
Supply Chain Management	.85	.53
Customer Relationship Management	.87	.54
Market Performance	.93	.87
Financial Performance	.88	.79

4.2. Structural Equation Modeling

For an extension of the CFA, a structural equation model (SEM) analysis was conducted. Construction of the model, in which relationships between latent variables base on the theoretical part of the study, was primarily made up to end up with the following structural model (Figure 9).

Figure 9: Structural equation model
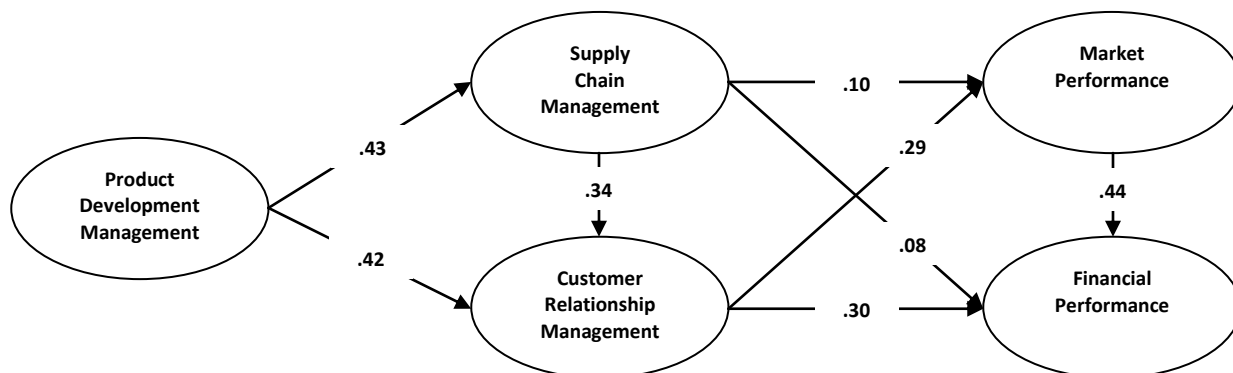
Inter-factor relationships (regression coefficients or betas) of the SEM are presented in the Table 7. All the links between the factors are statistically significant while using two-tailed significance level .01, except the link between supply chain management and financial performance which is significant at level of .05. All the links are positive, and because of that, coherent with underlying theory. The strongest links are those between market performance and financial performance (.44), product development management and supply chain management (.43), and product development management and customer relationship management (.42). It does not come as a surprise that hypothesis H8 has a strongest support in the analysis, since previous studies have already proven this link to be robust (Varadarajan and Jayachandran 1999). Both hypotheses that propose positive relationship between PDM and

other two core business processes, H1a and H2a, are strongly supported leading to a conclusion that the original assumption for choosing the PDM as an exogenous variable was correct. It seems that H3 is also well supported and in is this way maintaining the presumption that efficiently managed supply chain helps to maintain the customer relationships. CRM has a direct effect on both market and financial performance, H6 and H7a. On the other hand, hypotheses H4a and H5a show that SCM does not have such a strong effect on either of the performance measures. However, SCM's effect on the performance may be indirect.

Table 7: Standardized regression coefficients

Path		Regression coefficient
Product Development Management	-> Supply Chain Management	.43 ***
Product Development Management	-> Customer Relationship Management	.42 ***
Supply Chain Management	-> Customer Relationship Management	.34 ***
Supply Chain Management	-> Market Performance	.10 **
Supply Chain Management	-> Financial Performance	.08 *
Customer Relationship Management	-> Market Performance	.29 ***
Customer Relationship Management	-> Financial Performance	.30 ***
Market Performance	-> Financial Performance	.44 ***

* $p < .05$ (two-tailed); ** $p < .01$ (two-tailed); *** $p < .001$ (two-tailed)

Such as in CFA model, the structural equation model fit values are adequate, thereby implying acceptable general fit between the model and data; χ^2 = 1454.95 (with 181 degrees of freedom), RMSEA = .078, CFI = .96, NNFI = .95 and GFI = .89. Squared multiple correlations for structural equations are not very high, though: only .18 for supply chain management, .42 for customer relationship management, .12 for market performance and .43 for financial performance.

4.3. Mediational Analysis

The mediating effect of supply chain management, customer relationship management and market performance was examined by following loosely the analysis strategies of Baron and Kenny (1986) and Kenny et al. (1998), implemented through series of structural equation models reported in Tables 8, 9, 10, and 12. The variation of used analysis strategy was mainly adopted from Murray, Gao and Kotabe (2010), since it was not felt necessary to execute each step of aforementioned analysis strategy slavishly. Two structural models of the relationships

among product development management, supply chain management, customer relationship management, and performance (see Table 8) were estimated. Model 1 suggests that product development management has significant effects on both indicators of performance ($p < .001$). The results in Model 2 show that product development management is significantly related to supply chain management and customer relationship management ($p < .001$). Supply chain management is significantly related to financial performance ($p < .01$) but not on market performance. While, effect of product development management is reduced when supply chain management and customer relationship management are included in the model, it suggests that hypothesis H1b is not supported and H2b is supported by partial mediation, however, not strongly. Customer relationship management significantly affects both performance constructs ($p < .001$ for market performance and financial performance). This suggests quite strong partial mediation in both hypotheses H1c and H2c.

Table 8: Structural model of PDM, SCM, CRM and performance

	Model 1		Model 2			
	PDM – Performance		**PDM – SCM and CRM – Performance**			
	Market Performance	Financial Performance	Supply Chain Management	Customer Relationship Management	Market Performance	Financial Performance
Product Development Management	.31***(8.82)	.42***(12.41)	.47***(13.97)	.60***(17.47)	.08*(2.18)	.10*(2.50)
Supply Chain Management	-	-	-	-	.06(1.58)	.10**(2.78)
Customer Relationship Management	-	-	-	-	.29***(6.68)	.42***(9.72)

* $p < .05$ (two-tailed); ** $p < .01$ (two-tailed); *** $p < .001$ (two-tailed)

The mediating effect of customer relationship management on supply chain management – performance constructs relationship was tested using two models (see Table 9). According to Model 3 the supply chain management has significant effects on both market and financial performance. Model 4 shows that supply chain management is significantly related to customer relationship management ($p < .001$). Customer relationship management has significant effect on both market and financial performance ($p < .001$). The fact that the effect of supply chain management is reduced when customer relationship management is included in the model

proposes partial mediation in both hypotheses H4b and H5b. Partial mediation effect is strong in H4b and average in H5b.

Table 9: Structural model of SCM, CRM and performance

	Model 3		Model 4		
	SCM – Performance		**SCM – CRM –Performance**		
	Market Performance	Financial Performance	Customer Relationship Management	Market Performance	Financial Performance
Supply Chain Management	.29***(8.25)	.41***(11.65)	.56***(16.35)	.07*(1.96)	.12**(3.25)
Customer Relationship Management	-	-	-	.33***(8.32)	.47***(12.04)

* *p* < .05 (two-tailed); ** *p* < .01 (two-tailed); *** *p* < .001 (two-tailed)

Models 5 and 6 in Table 10 test the mediating effect of market performance on supply chain management – financial performance relationship. All the effects on both models are statistically significant at the probability level of *p* < .001. However, when market performance is included in Model 6 the effect of supply chain management on financial performance is slightly reduced, which suggest a partial mediation to some degree in hypothesis H5c.

Table 10: Structural model of SCM, market performance and financial performance

	Model 5	Model 6	
	SCM – Financial Performance	**SCM – Market Performance – Financial Performance**	
	Financial Performance	Market Performance	Financial Performance
Supply Chain Management	.41***(11.65)	.29***(8.25)	.23***(8.08)
Market Performance	-	-	.50***(17.48)

* *p* < .05 (two-tailed); ** *p* < .01 (two-tailed); *** *p* < .001 (two-tailed)

Models 7 and 8 in Table 11 test the mediating effect of market performance on customer relationship management – financial performance relationship. All the effects on both models are statistically significant at the probability level of *p* < .001. However, when market performance is included in Model 6 the effect of customer relationship management on financial performance is slightly reduced, which suggest a partial mediation to some degree in hypothesis H7b.

Table 11: Structural model of CRM, market performance and financial performance

	Model 7	Model 8	
	CRM – Financial Performance	CRM – Market Performance – Financial Performance	
	Financial Performance	Market Performance	Financial Performance
Customer Relationship Management	.54***(15.78)	.37***(10.30)	.35***(11.88)
Market Performance	-	-	.45***(15.38)

* $p < .05$ (two-tailed); ** $p < .01$ (two-tailed); *** $p < .001$ (two-tailed)

5. Discussion and Conclusions

This chapter begins with a discussion of the key results of the study. The result of each hypothesis will be reviewed in comparison to the theory presented in a literature review. After the key results, their implications on managerial actions in practice are reviewed in the next section. Subsequently, research limitations are described and the chapter concludes with the discussion for future research.

5.1. Key Results of the Study

In this chapter the analysis results are discussed more in-depth, clarifying how they are interpreted and linked with the theory. First, a summary of the hypotheses is provided, and second, the ramifications of the analysis results are discussed.

Table 12 presents a summary of the hypotheses and the level of support they have gotten. All the hypotheses representing a direct relationship between two constructs (H1a, H2a, H3, H4a, H5a, H6, H7a and H8) are roughly divided into two groups based on their regression coefficients in the SEM analysis, it should be noted that they are compared relatively between each other but not on any absolute scale. All the regression coefficients above .28 are viewed to represent a high statistical support for the hypotheses in question (H1a, H2a, H3, H6, H7a and H8), while those below .28 should yield medium or low support. However, the two hypotheses having lower regression coefficients than .28 have such low regression coefficients that they are considered to have low support (H4a and H5a). The hypotheses tested with mediational analysis (H1b, H1c, H2b, H2c, H4b, H5b, H5c and H7b) are divided into three different levels of support and one of them that does not have any support; also these hypotheses are compared with each other not on any absolute scale. It should be noted that all the mediations partial because the link between two original constructs does not disappear when mediating construct is brought between them in any of the cases, in this light even the high support does not mean that there is a full mediation effect. The level of support for the partial mediations was interpreted relatively from the amount how much the mediating constructs affects the link between the constructs which original relationship was tested for third party mediation. In terms of mediation analysis results the high support means that there exists a certain

mediational effect in the hypothesis (H4b), the medium support means that some mediation exists (H1c, H2c and H5b), the low support means that there is only slight or none significant mediation (H2b, H5c and H7b) and one hypothesis has no support at all (H1b).

Table 12: Summary of the hypotheses

Hypothesis	Path					Support
H1a	PDM		->		SCM	High
H1b	PDM	->	SCM	->	Market Performance	No support
H1c	PDM	->	SCM	->	Financial Performance	Medium
H2a	PDM		->		CRM	High
H2b	PDM	->	CRM	->	Market Performance	Low
H2c	PDM	->	CRM	->	Financial Performance	Medium
H3	SCM		->		CRM	High
H4a	SCM		->		Market Performance	Low
H4b	SCM	->	CRM	->	Market Performance	High
H5a	SCM		->		Financial Performance	Low
H5b	SCM	->	CRM	->	Financial Performance	Medium
H5c	SCM	->	Market Performance	->	Financial Performance	Low
H6	CRM		->		Market Performance	High
H7a	CRM		->		Financial Performance	High
H7b	CRM	->	Market Performance	->	Financial Performance	Low
H8	Market Performance		->		Financial Performance	High

In the second part of this chapter all the results of the hypotheses are reviewed through the theory and discussed how the results of the empirical analysis compare with the previous theory.

The support for the hypothesis H1a is strong, suggesting that firms with successful product development management (PDM) have also successful SCM management. Thus, concurring with need for a cross-functional integration (CFI) in a firm to drive supply chain management (SCM) through PDM that Ramaswami et al. (2009) promoted. However, the hypothesis H1b does not have any support what so ever, thus denying that SCM would better the PDM's effect on market performance. On the other hand, SCM seems to mediate PDM's effect on financial performance in the hypothesis H1c. Results of previous three hypotheses suggest that PDM together with successful SCM can drive firm's financial performance but not the market performance. From this perspective the CFI might help the company to reach relatively higher profits but not larger market share.

The hypothesis H2a has a strong support implying that efficient PDM positively affects customer relationship management (CRM). The hypotheses H2b and H2c suggest that involving the customer in PDM process (Baker and Sinkula 2005; Ramaswami et al. 2009; Souder et al. 1997) might lead to higher profits, though does not have significant effect on market performance.

Support for the hypothesis H3 is high, proposing that SCM is positively related to CRM, thus supporting the theories of Esper et al. (2010) and Jüttner et al. (2007) concerning demand and supply integration. For example, it is quite obvious that customer relations become easier to manage when customers are supplied more efficiently and in timelier manner. The results indicate that SCM does not affect either of the performance construct very much, the hypotheses H4a and H5a. However, according to results of the hypothesis H4b and H5b the CRM has a strong mediating effect between SCM and performance measures. Furthermore, it seems that CRM's mediating effect is even more visible between SCM and market performance. These findings support even further the need for demand and supply integration when a firm is pursuing superior market share and profits.

According to the results of the hypotheses H6 and H7a, the CRM has significant positive effect on both market and financial performance (Gummesson 1994; Mithas et al. 2005; Ramaswami et al. 2009). This promotes even further the successful handling of customer relations.

According to the hypothesis H8 there is a strong positive relationship between market performance and financial performance, which have already in previous research stated to be robust (e.g. Varadarajan and Jayachandran 1999). However, it is surprising to notice that the effects of SCM and CRM to financial performance are not much mediated by market performance. This result is in conflict notion that the core business process efficiency leads to relatively even higher profitability when market share is larger.

The overall results suggest that the conceptual model introduced in this work was mostly verified, except for the direct relationships between the SCM and performance constructs, the mediating effect of SCM and CRM between PDM and market performance, and market performance's mediating effect between core business processes and financial performance.

What new this model brought forth upon this field of research is the linkage between the core business processes and performance, and especially the analysis of the mediational effects between the different constructs.

5.2.   Managerial Implications

From the managerial perspective the findings of this study support even further the importance of core business process integration. It seems that one core business process directly driving the performance is the customer relationship management (CRM). However, both product development management (PDM) and supply chain management (SCM) are paramount for overall success of a firm. In this study the PDM was looked upon as a basis for other two core business processes, based on the thinking that the product or service must be first developed before any other action can take place. Although, SCM does not have strong direct effect on performance it has strong effect on performance when mediated by CRM. According to the results of this study the managers should attempt to integrate the firm's core business processes, by implementing cross-functional integration, customer driven development, and demand supply integration. These actions and implementations should help a firm in pursuit of financial performance.

5.3.   Limitations and Implications for Future Research

The quantitative method used for the study presents its own limitations. A qualitative study should be conducted to investigate the underlying dimensions of the variable constructs used in this study and to test the developed model.

A comprehensive general view was attempted to reach by conducting the present study on the basis of whole data collected, including all business sectors and industries. This study provides a much generalized view not investigating differences between different sectors or firm sizes. As discussed earlier the data used in this study consists only of Finnish firms, while the theory is quite general. It would be interesting to have a much larger international sample for more generalized empirical results or conduct a study to investigate if there are certain clusters of success and failures that can be identified by using these constructs as measurements.

References

Ambler, T., Kokkinaki, F., & Puntoni, S. (2002). Assessing marketing perfomance: The current state of metrics. *Center fo Marketing Working Paper* , 01-903.

Amit, R., & Schoemaker, P. J. (1993). Strategic assets and arganizational rent. *Strategic Management Journal , 14* (1), 33-46.

Bain, J. (1956). *Barriers to competition.* Cambridge, MA: Harvard University Press.

Baker, W. E., & Sinkula, J. J. (1999). The synergistic effect of market orientation and learning orientation on organizational performance. *Academy of Marketing Science , 27* (4), 411-427.

Baker, W. E., & Sinkula, J. M. (2005). Market orientation and the new product paradox. *Journal of Product Innovation Management , 22* (6), 483-502.

Barney, J. B. (1991). Firm resources and sustained competitive advantage. *Journal of Management , 17* (1), 99-120.

Barney, J. B. (1986a). Organizational culture: Can it be a source of sustained competitive advantage? *Academy of Management Review , 11* (3), 656-665.

Barney, J. B. (1986b). Strategic factor markets: Expectations, luck, and business strategy. *Management Science , 32* (10), 1231-1241.

Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychology research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology , 51* (6), 1173-1182.

Black, J. A., & Boal, K. B. (1994). Strategic resources: Traits, configurations and paths to sustainable competitive advantage. *Strategic Management Journal , 15* (Special Issue, Summer), 131-148.

Bollen, K. A. (1989). *Strutural equations with latent variables.* Wiley.

Boulding, W., Staelin, R., Ehret, M., & Johnston, W. J. (2005). A customer relationship management roadmap: What is known, potential pitfalls, and where to go. *Journal of Marketing , 69* (4), 155-166.

Bower, J. L., & Christensen, C. M. (1995). Disruptive technologies: Catching the wave. *Harvard Business Review , 73* (1), 43-53.

Bowersox, D. J., Closs, D. J., & Stank, T. P. (2000). Ten mega-trends that will revolutionize supply chain logistics. *Journal of Business Logistics , 21* (2), 1-16.

Browne, M. W., & Cudek, R. (1992). Alternative ways of assessing model fit. *Sociological Methods & Research , 21* (2), 230-258.

Byrne, B. M. (1998). *Structural equation modeling with LISREL, PRELIS, and SIMPLIS: Basic concepts, applications, and programming.* Lawrence Erlbaum Associates, Inc.

Christopher, M. (2005). *Logistics and supply chain management: Creating value-adding networks.* London: Prentice Hall, Financial Times.

Christopher, M., & Gattorna, J. (2005). Supply chain cost management and value-based pricing. *Industrial Marketing Management , 34* (2), 115-121.

Clark, B. H., Abela, A. V., & Ambler, T. (2005). Organizational motivation, opportunity and ability to measure marketing peformance. *Journal of Strategic Marketing , 13* (4), 241-259.

Collings, D., & Baxter, N. (2005). Valuing customers. *BT Technology Journal , 23* (3), 24-29.

Conner, K. R. (1991). A historical comparison of resource-based theory and five schools of thought within industrial organization economics: Do we have a new theory of the firm? *Journal of Management , 17* (1), 121-154.

Cook, S. D., & Brown, J. S. (1999). Bridging epistemologies: The generative dance between organizational knowledge and organizational knowing. *Organization Science , 10* (4), 381-400.

Davenport, T. H. (1993). *Process innovation: Reengineering work through information technology.* Boston, MA: Harvard Business School Press.

Day, G. S. (1994). *Market driven strategy: Process for creating value.* New York: The Free Press.

Demsetz, H. (1973). Industry structure, market rivalry, and public policy. *Journal of Law and Economics , 16*, 1-9.

Deshpandé, R., & Farley, J. U. (2004). Organizational culture, market orientation, innovativeness, and firm performance: An international research odyssey. *International Journal of Research in Marketing , 21* (1), 3-22.

Diamantopoulos, A., & Siguaw, A. (2000). *Introducing Lisrel.* SAGE Publications.

Dierickx, I., & Cool, K. (1989). Asset stock accumulation and sustainability of competitive advantage. *Management Science , 35* (12), 1504-1511.

Drucker, P. (1986). *Innovation and entrepreneurship: Practice and principles.* New York: Harper & Row.

Drucker, P. (1983). *Post-capitalist society.* New York: Harper Business.

Ellram, L. M., & Cooper, M. C. (1990). Supply chain management, partnerships, and the shipper - third party relationship. *International Journal of Logistics Management , 1* (2), 1-10.

Enterprises. (2008). Retrieved February 24, 2010, from Statistics Finland: http://www.stat.fi/tup/suoluk/suoluk_yritykset_en.html

Esper, T. L., Ellinger, A. E., Stank, T. P., Flint, D. J., & Moon, M. (2010). Demand and supply integration: a conceptual framework of value creation through knowledge management. *Journal of the Academy of Marketing Science , 38* (1), 5-18.

Fang, E., Palmatier, R. W., & Evans, K. R. (2008). Influence of customer participation on creating and sharing of new product value. *Journal of the Academy of Marketing Science , 36* (3), 322-336.

Fiol, C. M. (1991). Managing culture as a competitive resource: An identity-based view of sustainable competitive advantage. *Journal of Management , 17* (1), 191-211.

Grant. (1991). The resource-based theory of competitive advantage: Implications for strategy formulation. *California Management Review , 33* (3), 114-135.

Grant, R. M. (1996b). Prospering in dynamically-competitive environments: Organizational capability as knowledge integration. *Organization Science , 7* (4), 375-387.

Grant, R. M. (1996a). Toward a knowledge-based theory of the firm. *Strategic Management Journal , 17* (Winter Special Issue), 109-122.

Green Jr, K. W., McGaughey, R., & Casey, K. M. (2006). Does supply chain management strategy mediate the association between market orientation and organizational performance? *Supply Chain Management: An International Journal , 11* (5), 407-414.

Grönroos, C. (1991). The marketing strategy continuum: Towards a marketing concept for the 1990s. *Management Decision , 29* (1), 7-13.

Gummesson, E. (1994). Making relationship marketing operational. *International Journal of Service Industry Management , 5* (5), 5-20.

Gupta, A. K., & Wilemon, D. L. (1990). Accelerating the development of technology-based new products. *California Management Review , 32* (2), 24-44.

Gupta, S., Lehmann, D. R., & Stuart, J. A. (2004). Valuing customers. *Journal of Marketing Research , 41* (1), 7-18.

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2006). *Multivariate data analysis* (6th Edition ed.). New Jersey: Pearson Prentice Hall.

Hamel, G., & Prahalad, C. K. (1994). *Competing for the future: Breakthrough strategies for seizing control of your industry and creating the markets of tomorrow.* Boston, MA: The Harvard Business School Press.

Hauser, J. R., & Clausing, D. (1988). The house of quality. *Harvard Business Review , 66* (3), 63-73.

Heikkilä, J. (2002). From supply to demand chain management: Efficiency and customer satisfaction. *Journal of Operations Management , 20* (6), 747-767.

Henard, D. H., & Szymanski, D. M. (2001). Why some new products are more successful than others. *Journal of Marketing Research , 38* (3), 362-375.

Hitt, M. A., & Ireland, R. D. (1985). Corporate distinctive competence, strategy, industry and performance. *Strategic Management Journal , 6* (3), 273-293.

Hitt, M. A., & Ireland, R. D. (1986). Relationships among corporate-level distinctive competencies, diversification strategy, corporate structure and performance. *Journal of Management Studies , 23* (4), 401-416.

Hitt, M. A., & Stadter, G. (1982). Functional importance and company performance: Moderating effects of grand strategy and industry type. *Strategic Management Journal , 3* (4), 315-330.

Hitt, M. A., Ireland, R. D., & Palia, K. A. (1982). Industrial firms' grand strategy and functional importance: Moderating effects of technology and uncertainty. *Academy of Management Journal , 25* (2), 265-298.

Hoskisson, R. E., Hitt, M. A., Wan, W. P., & Yiu, D. (1999). Theory and research in strategic management: Swings of a pendulum. *Journal of Management , 25* (3), 417-456.

Huff, A. S. (1982). Industry influences on strategy reformulation. *Strategic Management Journal , 3* (2), 119-131.

Hunt, S. D., & Morgan, R. M. (1995). The comparative advantage theory of competition. *Journal of Marketing , 59* (2), 1-15.

Itami, H. (1987). *Mobilizing invisible assets.* Cambridge, MA: Harvard University Press.

Jaccard, J., & Wan, C. K. (1996). *Lisrel approaches to interaction effects in multiple regression.* SAGE Publications.

Jacobson, R. (1988). Distinguishing among competing theories of the market share effect. *Journal of Marketing , 52* (4), 68-80.

Judd, C. M., & Kenny, D. A. (1981). Process analysis: Estimating mediation in evaluation research. *Evaluation Research , 5*, 602-619.

Jüttner, U., Christopher, M., & Baker, S. (2007). Demand chain management-integrating marketing and supply chain management. *Industrial Marketing Management , 36* (3), 377-392.

Kazanjian, R. K. (1988). Relation of dominant problems to stages of growth in technology-based new ventures. *Academy of Management Journal , 31* (2), 257-279.

Kenny, D. A., Kashy, D. A., & Bolger, N. (1998). Data analysis in social psychology. In D. Gilbert, S. Fiske, & G. Lindzey, *Handbook of social psychology* (4th Edition ed., pp. 233-265). New York: MacGraw-Hill.

Kline, R. B. (2005). *Principles and practice of structural equation modeling* (Vol. 2nd Edition). The Guilford Press.

Kohli, A. K., & Jaworsi, B. J. (1990). Market orientation: The construct, research propositions, and managerial implications. *Journal of Marketing , 54* (2), 1-18.

Langerak, F., Hultnik, E. J., & Robben, H. S. (2007). The mediating role of new product development in the link between market orientation and organizational performance. *Journal of Strategic Marketing , 15* (4), 281-305.

Leenders, M. A., & Wierenga, B. (2002). The effectiveness of different mechanism for integrating marketing and R&D. *The Journal of Product Innovation Management , 19*, 305-317.

Lehmann, D. R. (1997). Some thoughts on the futures of marketing. In D. R. Lehmann, & K. E. Jocz, *Reflections on the futures of marketing* (pp. 121-135). Cambridge, MA: Marketing Science Institute.

Leonard-Barton, D. (1992). Core capabilities and core rigidities: A paradox in managing new product development. *Strategic Management Journal , 13* (Special Issue, Summer), 111-125.

Lippman, S. A., & Rumelt, R. P. (1982). Uncertain imitability: an analysis of interfirm differences in efficiency under competition. *The Bell Journal of Economics , 13* (2), 418-438.

Long, J. S. (1983). *Confirmatory factor analysis* (Vol. Series: Quantitative Applications in the Social Sciences). SAGE Publications.

Mahoney, J. T., & Pandian, J. R. (1992). The resource-based view within the conversation of strategic management. *Strategic Management Journal , 13* (5), 363-380.

Malhotra, N. K., & Birks, D. F. (2006). *Marketing Research: An Applied Approach* (Vol. 2nd European ed.). Essex, England: Pearson Education Limited.

Mels, G. (2005). *The analysis of continuous data from multiple groups.* Retrieved April 20, 2010, from SSI - Scientific Software International, Inc.: www.ssicentral.com/lisrel/techdocs/Session7.pdf

Min, S., & Mentzer, J. T. (2000). The role of marketing in supply chain management. *International Journal of Physical Distribution & Logistics Management , 30* (9), 765-787.

Mithas, S., Krishnan, M. S., & Fornell, C. (2005). Why do customer relationship management applications affect customer satisfaction? *Journal of Marketing , 69* (4), 201-209.

Montgomery, C. A. (1995). Of diamonds and rust: A new look at resources. In C. A. Montgomery, *Resources in an evolutionary perspective: A synthesis of evolutionary and resource-based approaches to strategy.* Norwell, MA and Dordrecht: Kluwer Academic.

Murray, J. Y., Gao, G. Y., & Kotabe, M. (2010). Market orientation and performance of export ventures: the process through marketing capabilities and competitive advantages. *Journal of the Academy of Marketing Science , Forthcoming*.

Narver, J. C., & Slater, S. F. (1990). The effect of a market orientation on business profitability. *Journal of Marketing , 54* (4), 20-35.

Neill, S., & Rose, G. M. (2006). The effect of strategic complexity on marketing strategy and organizational performance. *Journal of Business Research , 59* (1), 1-10.

Nelson, R. R. (1991). Why do firms differ, and how does it matter? *Strategic Management Journal , 12* (Special Issue, Winter), 61-74.

Nelson, R. R., & Winter, S. G. (1982). *An evolutionary theory of economic change.* Cambridge, MA: Harvard University Press.

Nonaka, I., & Takeuchi, H. (1995). *The knowledge creating company: How Japanese companies create the dynamics of innovation.* New York: Oxford University Press.

Olavarrieta, S., & Friedmann, R. (2008). Market orientation, knowledge-related resources and firm performance. *Journal of Business Research , 61* (6), 623-630.

O'Sullivan, D., & Abela, A. V. (2007). Marketing performance measurement ability and firm performance. *Journal of Marketing , 71*, 79-93.

Payne, A., & Frow, P. (2005). A strategic framework for customer relationship management. *Journal of Marketing , 69* (4), 167-176.

Penrose, E. T. (1959). *The theory of the growth of the firm.* New York: Wiley.

Piercy, N. (2002). *Market-led strategic change* (3rd ed.). Oxford: Butterworth-Heinemann.

Poirier, C. C., & Reiter, S. E. (1996). *Supply chain optimization: building the strongest total business network.* San Francisco: BerrettKoehler.

Prahalad, C. K., & Bettis, R. A. (1986). The dominant logic: A new linkage between diversity and performance. *Strategic Management Journal , 7* (6), 485-501.

Prahalad, C. K., & Ramaswamy, V. (2000). Co-opting customer competence. *Harvard Business Review , 78* (1), 78-87.

Ramaswami, S. N., Srivastava, R. K., & Bhargava, M. (2009). Market-based capabilities and financial performance of firms: insights into marketing's contribution to firm value. *Journal of the Academy of Marketing Science* (37), 97-116.

Ravindranath, M., & Grover, R. (1998). From embedded knowledge to embodied konowledge: New product development as knowledge management. *Journal of Marketing , 62* (3), 1-12.

Robins, J. A. (1992). Organizational considerations in the evaluation of capital assets: Toward a resource-based view of strategic investment by firms. *Organization Science , 3* (4), 522-536.

Rumelt, R. P. (1987). Theory, strategy and entrepreneurship. In D. J. Teece, *The competitive challenge* (pp. 137-158). Cambridge, MA: Ballinger Publishing.

Rumelt, R. P. (1987). Theory, strategy, and entrepreneurship. In D. J. Teece, *The competitive challenge* (pp. 137-158). Cambridge, MA: Ballinger Publishing.

Rumelt, R. P. (1984). Toward a strategic theory of the firm. In R. Lamb, *Competitive strategic management* (pp. 556-570). New Jersey: Prentice-Hall.

Ryals, L. (2005). Making customer relationship management work: The measurement and profitable management of customer relationships. *Journal of Marketing , 69* (4), 252-261.

Sanders, N. R., & Premus, R. (2005). Modelling the relationship between firm it capability, collaboration, and performance. *Journal of Business Logistics , 26* (1), 1-23.

Scalet, S. D. (2001, July 15). *Supply chain management guru Hau Lee on demand forecasting.* Retrieved July 21, 2010, from CIO: http://www.cio.com/article/30381

Scherer, F. M., & Ross, D. (1990). *Industrial market structure and economic performance.* Boston: Houghton Mifflin.

Schumpeter, J. A. (1934). *The theory of economic development.* Cambridge, MA: Harvard University Press.

Senge, P. (1990). *The fifth discipline: The art and practice of the learning organization.* New York: Doubleday Currency.

Shapiro, C., & Varian, H. R. (1998). *Information rules: A strategic guide to the network economy.* Boston: Harvard Business School Press.

Slater, S. F., & Narver, J. C. (1994). Does competitive environment moderate the market orientation-performance relationship? *Journal of Marketing , 58* (1), 46-55.

Snow, C. C., & Hrebiniak, L. G. (1980). Strategy, distinctive competence, and organizational performance. *Administrative Science Quarterly , 2*, 317-336.

Song, X. M., & Parry, M. E. (1997). The determinants of Japanese new product successes. *Journal of Marketing Research , 34* (1), 64-76.

Song, X. M., & Parry, M. E. (1992). The R&D-marketing interface in Japanese high-technology firms. *Journal of Product Innovation Management , 9* (2), 91-112.

Souder, W. E., Buisson, D., & Garrett, T. (1997). Success through customer-driven new product development: A comparison of U.S. and New Zealand small entrepreneurial high technology firms. *Journal of Product Innovation Management* (14), 459-472.

Spekman, R. E., Kamauff Jr, J. W., & Myhr, N. (1998). An empirical investigation into supply chain management. *International Journal of Physical Distribution & Logistics Management , 28* (8), 630-650.

Spender, J. C. (1989). *Industry recipes: An enquiry into the nature and sources of managerial judgement.* Oxford: Blackwell.

Srivastava, R. K., Fahey, L., & Christensen, H. K. (2001). The resource-based view and marketing: The role of market-based assets in gaining competitive advantage. *Journal of Management , 27* (6), 777-802.

Srivastava, R. K., Shervani, T. A., & Fahey, L. (1998). Market based assets and shareholder value: A framework for analysis. *Journal of Marketing , 62* (1), 2-18.

Srivastava, R. K., Shervani, T. A., & Fahey, L. (1999). Marketing, business processes, and shareholder value: An organizationally embedded view of marketing activities and the discipline of marketing. *Journal of Marketing* (Special Issue 1999), 168-179.

Tan, K.-C., Kannan, V. R., Handfield, R. B., & Ghosh, S. (1999). Supply chain management: an empirical study of its impact on performance. *International Journal of Operations & Production Management , 19* (10), 1034-1052.

Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal , 18* (7), 509-533.

Terwiesch, C., & Loch, C. H. (1999). Measuring the effectiveness of overlapping development activities. *Management Science , 45* (4), 455-465.

Varadarajan, P. R. (1999). Marketing strategy: An assessment of the state of the field and outlook. *Journal of the Academy of Marketing Science , 27* (2), 120-143.

Varadarajan, P. R., & Jayachandran, S. (1999). Marketing strategy: An assessment of the state of the field and outlook. *Journal of the Academy of Marketing Science , 27* (2), 120-143.

Von Hipple, E., Thomke, S., & Sonnack, M. (1999). Creating breakthroughs at 3M. *Harvard Business Review , 77* (5), 47-57.

Vorhies, D. W., & Morgan, N. A. (2005). Benchmarking marketing capabilities for sustainable competitive advantage. *Journal of Marketing , 69* (1), 80-94.

Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal , 5*, 171-180.

Yli-Luoma, P. V. (1996). *LISREL.* IMDL.

Zipkin, P. (2001). The limits of mass customization. *MIT Sloan Management Review , 42* (3), 81-87.

Appendix A – The StratMark Questionnaire

Markkinoinnin tila 2008

Yrityksen liiketoimintaympäristö ja asema päämarkkinoilla

Ensimmäisessä osiossa käsitellään edustamasi liiketoimintayksikön toimintaympäristöä ja asemaa päämarkkinoilla. Ellei erikseen mainittu, vastaa kaikkiin tämän kyselyn kohtiin liiketoimintayksikkösi ja valitsemasi päätoimialan näkökulmasta. Mikäli yrityksestäsi ei voida erottaa selkeästi toiminnaltaan tai markkinoiltaan poikkeavia yksiköitä, vastaa koko yrityksen näkökulmasta. Pienten yritysten kohdalla liiketoimintayksikkö ja yritys tarkoittavat yleensä samaa. Pyydämme teitä pyrkimään koko kyselyn ajan johdonmukaisuuteen siinä, mitä yrityskokonaisuutta vastauksenne koskevat. Mikäli edustat monikansallista tai globaalia yritystä, vastaa suomalaisen yksikön näkökulmasta. Mikäli yrityksesi toimii usealla toimialalla, vastaa pääasiallisen (yrityksellesi tärkeimmän) toimialan mukaisesti.

* K1: K1. Vastaajan nimi

Please write your answer here:

* K2: K2. Yhteystiedot

Please write your answer(s) here:

Sähköpostiosoite:

Puhelinnumero:

* K3: K3. Asema organisaatiossa (tehtävänimike)

Please write your answer here:

* K4: K4. Yrityksen ja edustamasi liiketoimintayksikön nimi

Please write your answer here:

* K5: K5. Mikä on liiketoimintayksikkösi pääasiallinen toimiala?

Please choose *only one* of the following:

- ☐ Maa-, riista-, metsä-, ja kalatalous
- ☐ Kaivostoiminta ja louhinta
- ☐ Elintarvikkeiden ja juomien valmistus
- ☐ Tekstiilien, vaatteiden, nahan ja nahkatuotteiden valmistus
- ☐ Puutavaran ja puutuotteiden valmistus
- ☐ Paperiteollisuustuotteiden valmistus, kustantaminen ja graafinen tuotanto
- ☐ Öljy- kumi- ja muovituotteiden sekä kemikaalien ja kemiallisten tuotteiden valmistus
- ☐ Ei-metallisten mineraalituotteiden valmistus
- ☐ Metallien jalostus ja metallituotteiden valmistus
- ☐ Koneiden ja laitteiden valmistus
- ☐ Elektroniikka- ja sähkötuotteiden valmistus
- ☐ Kulkuneuvojen valmistus
- ☐ Energia- ja vesihuolto
- ☐ Rakentaminen
- ☐ Moottoriajoneuvojen kauppa, korjaus ja huolto sekä polttoaineen vähittäismyynti
- ☐ Agentuuritoiminta ja tukkukauppa
- ☐ Vähittäiskauppa
- ☐ Majoitus- ja ravitsemistoiminta
- ☐ Kuljetus, varastointi ja tietoliikenne
- ☐ Rahoitus- ja vakuutustoiminta, pankit
- ☐ Kiinteistöalan palvelut ja vuokraustoiminta
- ☐ Tietojenkäsittelypalvelu
- ☐ Tutkimus ja kehittäminen
- ☐ Muu liike-elämää palveleva toiminta (B-to-B-palvelut)
- ☐ Julkinen hallinto ja maanpuolustus
- ☐ Koulutus
- ☐ Terveydenhuolto- ja sosiaalipalvelut
- ☐ Ympäristönhuolto
- ☐ Järjestötoiminta
- ☐ Virkistys- kulttuuri ja urheilutoiminta
- ☐ Other

* K6: K6. Mikä on edustamasi liiketoimintayksikön tuottamien hyödykkeiden ja palveluiden osuus sen liikevaihdosta? Vastaa siten, että eri vaihtoehtojen yhteenlasketuksi arvoksi tulee 100. Syötä arvo 0, mikäli ei liikevaihtoa.

Please write your answer(s) here:

Kulutushyödykkeet :

Tuotantohyödykkeet :

Kulutuspalvelut :

Yrityspalvelut :

Mikä seuraavista kuvaa parhaiten liiketoimintayksikkösi markkinoita tai päätoimialaa?

Please choose *only one* of the following:

- ☐ Uudet, kehittyvät markkinat
- ☐ Kasvavat markkinat: markkinat ovat vakiintuneet, mutta kasvavat tasaisesti
- ☐ Kypsät markkinat: markkinat ovat vakiintuneet, eikä merkittäviä muutoksia enää tapahdu
- ☐ Taantuvat markkinat: markkinoiden kasvu on kääntynyt laskuun

---

* K8: K8. Mikä seuraavista parhaiten kuvaa liiketoimintayksikkösi asemaa päämarkkinoilla?

Please choose *only one* of the following:

- ☐ Ainoa yritys markkinoilla
- ☐ Markkinajohtaja: suurin markkinaosuus
- ☐ Haastaja: toiseksi tai kolmanneksi suurin markkinaosuus
- ☐ Seuraaja: pienempi markkinaosuus

---

* K9: K9. Missä määrin seuraavat väittämät kuvaavat liiketoimintayksikkösi markkinoita ja toimialaa?

Please choose the appropriate response for each item:

	Täysin samaa mieltä	Samaa mieltä	Jokseenkin samaa mieltä	Ei samaa eikä eri mieltä	Jokseenkin eri mieltä	Eri mieltä	Täysin eri mieltä	En osaa sanoa
Kilpailu on kovaa	☐	☐	☐	☐	☐	☐	☐	☐
Uusien asiakkaiden tarpeilla on taipumus poiketa nykyisten asiakkaiden tarpeista	☐	☐	☐	☐	☐	☐	☐	☐
Asiakkaamme etsivät jatkuvasti uusia tuotteita/palveluita	☐	☐	☐	☐	☐	☐	☐	☐
Toimialan teknologinen kehitys on nopeata	☐	☐	☐	☐	☐	☐	☐	☐
Markkinoille tulee jatkuvasti uusia tuotteita/palveluita	☐	☐	☐	☐	☐	☐	☐	☐
Tuotteiden/palveluiden elinkaari markkinoilla on pitkä	☐	☐	☐	☐	☐	☐	☐	☐
Tuotekehitykseen kuluva aika on pitkä verrattuna tuotteen/palvelun elinkaareen markkinoilla	☐	☐	☐	☐	☐	☐	☐	☐

---

* K10: K10. Missä määrin olette eri tai samaa mieltä seuraavien liiketoimintayksikkönne strategiaan liittyvien väittämien kanssa?

Please choose the appropriate response for each item:

	Täysin samaa mieltä	Samaa mieltä	Jokseenkin samaa mieltä	Ei samaa eikä eri mieltä	Jokseenkin eri mieltä	Eri mieltä	Täysin eri mieltä	En osaa sanoa
Tavoitteenamme on puolustaa nykyistä markkina-asemaamme	☐	☐	☐	☐	☐	☐	☐	☐
Tavoitteemme on tasainen myynnin kasvu	☐	☐	☐	☐	☐	☐	☐	☐
Tavoitteemme on aggressiivinen myynnin kasvu ja markkinoiden hallinta	☐	☐	☐	☐	☐	☐	☐	☐
Pyrimme valtaamaan kokonaismarkkinat	☐	☐	☐	☐	☐	☐	☐	☐
Kohteenamme ovat kokonaismarkkinoilta valitut segmentit	☐	☐	☐	☐	☐	☐	☐	☐
Kohteenamme ovat kokonaismarkkinoilta valitut yksittäiset asiakkaat	☐	☐	☐	☐	☐	☐	☐	☐
Tarkoituksemme on erilaistaa tarjontamme kilpailijoiden tarjonnasta	☐	☐	☐	☐	☐	☐	☐	☐
Tavoitteemme on olla toimialamme kustannustehokkain yritys	☐	☐	☐	☐	☐	☐	☐	☐

Markkinoinnin rooli
Toisessa osiossa pureudutaan markkinoinnin tehtäväkenttään, asemaan ja rooliin liiketoimintayksikössä.

K11: K11. Miten kuvailisit markkinoinnin tehtäväkenttää liiketoimintayksikössäsi? Esimerkiksi, mitä tehtävänimikkeitä markkinoinnin suunnitteluun ja toteutukseen mielestäsi lukeutuu?

Please write your answer here:

K12: K12. Miten markkinoinnin tehtäväkenttää yksikössäsi tulisi kehittää?

Please write your answer here:

---

* K13: K13. Kuinka suuren prosentuaalisen osuuden liiketoimintayksikkösi henkilöstöstä voidaan laskea osallistuvan markkinoinnin ja/tai myynnin suunnitteluun tai toteutukseen?

Please choose *only one* of the following:

- ☐ < 20%
- ☐ 20-40 %
- ☐ 41-60%
- ☐ 61-80%
- ☐ > 80%
- ☐ En osaa sanoa

---

* K14: K14. Millainen on markkinoinnin ja tuotekehityksen suhde liiketoimintayksikössäsi?

Please choose *only one* of the following:

- ☐ Kyseessä ovat erilliset toiminnot
- ☐ Toiminnot tekevät yhteistyötä joillakin osa-alueilla
- ☐ Toiminnot tekevät yhteistyötä useimmilla osa-alueilla
- ☐ Tuotekehitystä ja markkinointia ei voida toimintoina erottaa toisistaan

---

* K15: K15. Millainen on markkinoinnin ja myynnin suhde liiketoimintayksikössäsi?

Please choose *only one* of the following:

- ☐ Kyseessä ovat erilliset toiminnot
- ☐ Toiminnot tekevät yhteistyötä joillakin osa-alueilla
- ☐ Toiminnot tekevät yhteistyötä useimmilla osa-alueilla
- ☐ Myyntiä ja markkinointia ei voida toimintoina erottaa toisistaan

---

* K16: K16. Kuinka vahva strateginen rooli markkinoinnilla on seuraavissa yksikkösi toiminnoissa?

Please choose the appropriate response for each item:

	Erittäin vahva rooli	Vahva rooli	Keskivahva rooli	Heikko rooli	Ei roolia	En osaa sanoa
Ylin johto	☐	☐	☐	☐	☐	☐
Sisäinen viestintä	☐	☐	☐	☐	☐	☐
Ulkoinen viestintä	☐	☐	☐	☐	☐	☐
Sijoittajasuhteiden hallinta	☐	☐	☐	☐	☐	☐
Tutkimus- ja kehitystoiminta	☐	☐	☐	☐	☐	☐
Logistiikka, tilaus- ja toimitusketjun hallinta	☐	☐	☐	☐	☐	☐

---

* K17: K17. Millainen on markkinoinnin ja ylimmän johdon suhde yksikössäsi?

Please choose *only one* of the following:

- ☐ Markkinointi ei ole ylimmän johdon erityisen huomion kohteena muihin toimintoihin verrattuna
- ☐ Markkinointi on raportointivastuussa ylimmälle johdolle
- ☐ Ylin johto osallistuu aktiivisesti markkinoinnin suunnitteluun ja toteutukseen
- ☐ Markkinoinnin suunnittelu ja toteutus ovat ylimmän johdon ensisijaisia prioriteetteja
- ☐ Other _____

Markkinoinnin vaikuttavuus ja tuloksellisuus

Kolmannessa osiossa keskitytään markkinoinnin vaikuttavuuden ja tuloksellisuuden seurantaan liittyviin aiheisiin. Osiossa käsitellään mm. mittauskäytäntöjä, niiden tarkoituksenmukaisuutta sekä mittaamiseen liittyviä haasteita.

* K18: K18. Seurataanko liiketoimintayksikössäsi säännöllisesti markkinoinnin tavoitteiden saavuttamista?

Please choose *only one* of the following:

- ☐ Yes
- ☐ No

[Only answer this question if you answered 'Yes' to question 'K18 ']

K19: K19. Millä tasolla tavoitteiden saavuttamista seurataan?

Please choose *all* that apply:

- ☐ Vuositasolla
- ☐ Kvartaalitasolla
- ☐ Kuukausitasolla tai useammin

71

☐ Projektitasolla

---

* K20: K20. Raportoidaanko markkinoinnin tuloksellisuutta yrityksen ulkopuolisille tahoille (esim. vuosikertomuksessa tai muissa tilinpäätöstiedotteissa)?

<u>Please choose *only one* of the following:</u>
☐ Yes
☐ No

[Only answer this question if you answered 'Yes' to question 'K20 ']

K21: K21. Missä ja miten markkinoinnin tuloksellisuutta raportoidaan yrityksen ulkopuolelle?

<u>Please write your answer here:</u>

K22: K22. Mihin markkinoinnin tuloksia liiketoimintayksikössäsi verrataan?

<u>Please choose *all* that apply:</u>
☐ Lähimpiin kilpailijoihin
☐ Edellisiin vuosiin tai seurantajaksoihin
☐ Asetettuihin taloudellisiin tavoitteisiin
☐ Asetettuihin ei-taloudellisiin tavoitteisiin
Other: ☐

K23: K23. Markkinoinnin tuloksellisuuden mittarit: mitkä seuraavista mittareista ovat liiketoimintayksikössäsi käytössä? Mitkä mittarit ovat/olisivat mielestäni keskeisimpiä seurattavia? Mikäli vastauksesi löytyy sarakkeesta 'Ei vastausta', tulkitsemme tilanteen siten, että yksikössäsi ei seurata kyseistä mittaria, etkä myöskään pidä sitä keskeisenä mittarina.

K23a: K23a. Kuluttajan/loppukäyttäjän ajatuksia/asenteita ja tunteita seuraavat mittarit

<u>Please choose the appropriate response for each item:</u>

	Käytössä, keskeinen	Käytössä, ei keskeinen	Ei käytössä, keskeinen
Tunnettuus (spontaani/autettu/yhteensä)	☐	☐	☐
Merkittävyys (keskeisyys, tärkeys)	☐	☐	☐
Koettu laatu / arvostus (kuinka korkealle arvotettu)	☐	☐	☐
Kuluttaja-/käyttäjätyytyväisyys (odotusten täyttyminen)	☐	☐	☐
Relevanssi kuluttajalle/loppukäyttäjälle ("minulle sopiva tuotemerkki")	☐	☐	☐
Imago / persoonallisuus / identiteetti (voimakkuus)	☐	☐	☐
(Koettu) erilaistuminen (ero muihin brandeihin)	☐	☐	☐
Sitoutuminen / ostoaikomus (ilmaistu oston todennäköisyys)	☐	☐	☐
Muut asenteet, esim. mieltymys (useita mahdollisia indikaattoreita)	☐	☐	☐
Tieto (Kokemukset tuotteen ominaisuuksista)	☐	☐	☐

K23b: K23b. Kuluttajan/loppukäyttäjän käyttäytymistä seuraavat mittarit

<u>Please choose the appropriate response for each item:</u>

	Käytössä, keskeinen	Käytössä, ei keskeinen	Ei käytössä, keskeine
Käyttäjien (asiakkaiden) kokonaismäärä	☐	☐	☐
Uusien käyttäjien lukumäärä	☐	☐	☐
Uskollisuus / pysyvyys (esim. montako % osti sekä tänä että viime vuonna)	☐	☐	☐
Hintaherkkyys / -jousto (mikä tahansa myyntimäärien herkkyyden mittari)	☐	☐	☐
Promootion johdosta tehdyt ostot	☐	☐	☐
Tuotteiden määrä käyttäjää kohden (kuinka laajalti loppukäyttäjä hyödyntää tarjoomaa)	☐	☐	☐
Leadien määrä / tiedustelut (uusien prospektien lukumäärä)	☐	☐	☐
Konversioprosentti (leadista myyntiin)	☐	☐	☐
Loppukäyttäjiltä tulevien valitusten määrä (loppukäyttäjien tyytymättömyyden taso)	☐	☐	☐

K23c: K23c. Väliportaan asiakkaiden/jälleenmyyjien suhteen laatua ja ominaisuuksia seuraavat mittarit

<u>Please choose the appropriate response for each item:</u>

	Käytössä, keskeinen	Käytössä, ei keskeinen	Ei käytössä, keskeinen
Jakelu / saatavuus (esim. myymälöiden lukumäärä)	☐	☐	☐
Asiakastyytyväisyys	☐	☐	☐
Asiakasvalitusten määrä	☐	☐	☐

K23d: K23d. Markkinasuoriutumista kilpailijoihin verrattuna seuraavat mittarit

Please choose the appropriate response for each item:

	Käytössä, keskeinen	Käytössä, ei keskeinen	Ei käytössä, keskeinen
Markkinaosuus (osuus markkinasta myyntimäärän mukaan)	☐	☐	☐
Suhteellinen hinta (esim. osuus myynnin arvosta/osuus myynnin määrästä)	☐	☐	☐
Markkinaosuuden uskollisuus (osuus vaatimukset täyttävien tuotteiden joukossa)	☐	☐	☐
Markkinapeitto (osuus ostajista tietyllä aikavälillä)	☐	☐	☐
Suhteellinen kuluttajatyytyväisyys (tyytyväisyys suhteessa kilpailijoihin)	☐	☐	☐
Suhteellinen koettu laatu (koettu laatu suhteessa laatujohtajaan)	☐	☐	☐
Osuus kaikesta markkinointiviestinnästä (osuus kategoriasta)	☐	☐	☐

K23e: K23e. Innovoinnin tuloksellisuutta seuraavat mittarit

Please choose the appropriate response for each item:

	Käytössä, keskeinen	Käytössä, ei keskeinen	Ei käytössä, keskeinen
Uusien tuotteiden lukumäärä tietyllä aikavälillä (uusien tuotteiden lanseeraukset)	☐	☐	☐
Liikevaihto uusista tuotteista (liikevaihto, myynti)	☐	☐	☐
Uusien tuotteiden kate (myyntikate)	☐	☐	☐

K23f: K23f. Taloudellista tuloksellisuutta seuraavat mittarit

Please choose the appropriate response for each item:

	Käytössä, keskeinen	Käytössä, ei keskeinen	Ei käytössä, keskeinen
Myynti (arvo ja/tai määrä)	☐	☐	☐
Alennus-% (alennukset ja hyvitykset % myynnistä)	☐	☐	☐
Myyntikatteet (kokonaistuotto-% vuotuisesta myynnistä)	☐	☐	☐
Markkinointipanostukset (esim. mainonta, PR, promootiot)	☐	☐	☐
Liikevoitto / kannattavuus (tulos ennen veroja)	☐	☐	☐
Omistaja-arvo	☐	☐	☐
Taloudellinen lisäarvo (EVA)	☐	☐	☐
Sijoitetun pääoman tuottoaste (ROI)	☐	☐	☐
Asiakkaan elinkaariarvo (customer lifetime value, CLV)	☐	☐	☐

* K24: K24. Arvioi yksikkösi kykyä mitata suoriutumista seuraavien osa-alueiden kohdalla.

Please choose the appropriate response for each item:

	Erittäin hyvä	Hyvä	Melko hyvä	Ei heikko eikä hyvä	Melko heikko	Heikko	Erittäin heikko	Ei relevantti meille
Kuluttajan/loppukäyttäjän ajatukset/asenteet ja tunteet	☐	☐	☐	☐	☐	☐	☐	☐
Kuluttajan/loppukäyttäjän käyttäytyminen	☐	☐	☐	☐	☐	☐	☐	☐
Väliportaan asiakkaiden/jälleenmyyjien suhteen laatu ja ominaisuudet	☐	☐	☐	☐	☐	☐	☐	☐
Suoriutuminen suhteessa kilpailijoihin	☐	☐	☐	☐	☐	☐	☐	☐
Innovoinnin tuloksellisuus	☐	☐	☐	☐	☐	☐	☐	☐
Taloudellinen tuloksellisuus	☐	☐	☐	☐	☐	☐	☐	☐

* K25: K25. Mitkä ovat suurimmat esteet/haasteet markkinoinnin mittaamiselle?

Please choose *all* that apply:

- ☐ Riittävää rahoitusta ei ole saatavilla
- ☐ Johdon ajan puute
- ☐ Ei tukea muilta yksiköiltä
- ☐ Osaamisen puute
- ☐ Kannustimien puute
- ☐ Aineiston puute
- ☐ Sitoutumisen puute
- ☐ Yhdenmukaisuuden puute mittauksissa eri aikoina

Other: _____

* K26: K26. Mikä on yksikkönne ylimmän johdon arvio markkinoinnin tämänhetkisestä tuloksellisuudesta?

Please choose *only one* of the following:

- ☐ Erittäin hyvä
- ☐ Hyvä
- ☐ Keskitasoa
- ☐ Heikko
- ☐ Erittäin heikko
- ☐ En osaa sanoa

Liiketoimintaprosessit ja markkinointi

Neljännessä osiossa pyydämme sinua arvioimaan liiketoimintayksikkösi suoriutumista eri liiketoiminnan osa-alueilla tärkeimpiin kilpailijoihin nähden.

* K27: K27. Arvioi liiketoimintayksikkösi suoriutumista tuotekehityksen ja innovoinnin osalta tärkeimpiin kilpailijoihin verrattuna.

Please choose the appropriate response for each item:

	Huomattavasti parempi kuin kilpailijoilla	Parempi kuin kilpailijoilla	Jonkin verran parempi kuin kilpailijoilla	Ei eroa kilpailijoihin nähden	Jonkin verran heikompi kuin kilpailijoilla	Heikompi kuin kilpailijoilla	Huomattavasti heikompi kuin kilpailijoilla	Ei relevantti meille	En osa sano
Kyky kehittää uusia tuote- tai palveluideoita	☐	☐	☐	☐	☐	☐	☐	☐	☐
Uusien liiketoimintamallien hyödyntäminen	☐	☐	☐	☐	☐	☐	☐	☐	☐
Ulkoisten sidosryhmien ja liiketoimintaverkoston hyödyntäminen tuotekehitysvaiheessa	☐	☐	☐	☐	☐	☐	☐	☐	☐
Yhteistyö ja tiedonjako muiden toimintojen kanssa	☐	☐	☐	☐	☐	☐	☐	☐	☐
Ideoiden nopea kaupallistaminen	☐	☐	☐	☐	☐	☐	☐	☐	☐
Tuote- tai palveluinnovaatioiden määrä	☐	☐	☐	☐	☐	☐	☐	☐	☐
Uusien tuotteiden tai palveluiden menestyksekäs lanseeraaminen	☐	☐	☐	☐	☐	☐	☐	☐	☐
Tutkimus- ja kehitysinvestointien tuloksellisuus	☐	☐	☐	☐	☐	☐	☐	☐	☐

* K28: K28. Arvioi liiketoimintayksikkösi suoriutumista tilaus- ja toimitusketjun johtamisen osalta tärkeimpiin kilpailijoihin verrattuna.

Please choose the appropriate response for each item:

	Huomattavasti parempi kuin kilpailijoilla	Parempi kuin kilpailijoilla	Jonkin verran parempi kuin kilpailijoilla	Ei eroa kilpailijoihin nähden	Jonkin verran heikompi kuin kilpailijoilla	Heikompi kuin kilpailijoilla	Huomattavasti heikompi kuin kilpailijoilla	Ei relevantti meille	En osa sano
Informaatio- ja viestintäteknologian (ICT) käyttö	☐	☐	☐	☐	☐	☐	☐	☐	☐
Parhaiden jakelijoiden hankkiminen ja pitäminen	☐	☐	☐	☐	☐	☐	☐	☐	☐
Parhaiden toimittajien hankkiminen ja pitäminen	☐	☐	☐	☐	☐	☐	☐	☐	☐
Asennuksen ja ylläpidon hallinta	☐	☐	☐	☐	☐	☐	☐	☐	☐
Tilausten käsittely	☐	☐	☐	☐	☐	☐	☐	☐	☐
Tehokas laskutus ja maksuehdot	☐	☐	☐	☐	☐	☐	☐	☐	☐
Logistiikan ja varastojen hallinta	☐	☐	☐	☐	☐	☐	☐	☐	☐
Huolto-/palvelutuen tarjoaminen jakelijoille	☐	☐	☐	☐	☐	☐	☐	☐	☐
Toimitusvarmuus	☐	☐	☐	☐	☐	☐	☐	☐	☐

* K29: K29. Arvioi liiketoimintayksikkösi suoriutumista markkinointiviestinnän ja myynnin osalta tärkeimpiin kilpailijoihin verrattuna.

Please choose the appropriate response for each item:

	Huomattavasti parempi kuin kilpailijoilla	Parempi kuin kilpailijoilla	Jonkin verran parempi kuin kilpailijoilla	Ei eroa kilpailijoihin nähden	Jonkin verran heikompi kuin kilpailijoilla	Heikompi kuin kilpailijoilla	Huomattavasti heikompi kuin kilpailijoilla	Ei relevantti meille	En osa sano

e

Suhdetoimintataidot (PR)	☐	☐	☐	☐	☐	☐	☐	☐
Mainoskampanjoiden ja promootioiden suunnittelu	☐	☐	☐	☐	☐	☐	☐	☐
Mainoskampanjoiden kehittäminen ja toteuttaminen	☐	☐	☐	☐	☐	☐	☐	☐
Myynnin johtamisen suunnittelu- ja kontrollijärjestelmät	☐	☐	☐	☐	☐	☐	☐	☐
Myyntihenkilöstön tehokkuuden mahdollistava koulutus	☐	☐	☐	☐	☐	☐	☐	☐
Tarkoituksenmukainen myynnin tuki	☐	☐	☐	☐	☐	☐	☐	☐
Kyky hinnoitella tehokkaasti tuotteita tai palveluita	☐	☐	☐	☐	☐	☐	☐	☐

Liiketoimintaprosessit ja liikkeenjohdolliset haasteet

Viidennessä osiossa jatkamme liiketoiminnan osa-alueiden arviointia liiketoimintayksikössäsi. Tämän lisäksi pyydämme sinua arvioimaan liikkeenjohdollisia haasteita ja niiden merkittävyyttä.

* K30: K30. Arvioi liiketoimintayksikkösi suoriutumista markkinavetoisen suunnittelun osalta tärkeimpiin kilpailijoihin verrattuna.

Please choose the appropriate response for each item:

	Huomattavasti parempi kuin kilpailijoilla	Parempi kuin kilpailijoilla	Jonkin verran parempi kuin kilpailijoilla	Ei eroa kilpailijoihin nähden	Jonkin verran heikompi kuin kilpailijoilla	Heikompi kuin kilpailijoilla	Huomattavasti heikompi kuin kilpailijoilla	Ei relevantti meille	En osaa sanoa
Kyky segmentoida tehokkaasti ja valita oikeat kohdemarkkinat	☐	☐	☐	☐	☐	☐	☐	☐	☐
Markkinoinnin johtamisen taidot ja prosessit	☐	☐	☐	☐	☐	☐	☐	☐	☐
Markkinointiresurssien tehokas jakaminen	☐	☐	☐	☐	☐	☐	☐	☐	☐
Markkinointistrategioiden toteuttaminen käytännössä	☐	☐	☐	☐	☐	☐	☐	☐	☐
Laadulliset markkinatutkimusmenetelmät	☐	☐	☐	☐	☐	☐	☐	☐	☐
Määrälliset markkinatutkimusmenetelmät	☐	☐	☐	☐	☐	☐	☐	☐	☐
Markkinatutkimustaitojen hyödyntäminen tehokkaiden markkinointiohjelmien kehittämiseksi	☐	☐	☐	☐	☐	☐	☐	☐	☐
Brandin johtamisen taidot ja prosessit	☐	☐	☐	☐	☐	☐	☐	☐	☐
Asiakastiedon keruu ja hallinta	☐	☐	☐	☐	☐	☐	☐	☐	☐
Kilpailijatiedon keruu ja hallinta	☐	☐	☐	☐	☐	☐	☐	☐	☐
Kilpailijoiden hinnoittelun seuranta ja muutoksiin reagointi	☐	☐	☐	☐	☐	☐	☐	☐	☐

* K31: K31. Arvioi liiketoimintayksikkösi suoriutumista asiakkuuksien johtamisen osalta tärkeimpiin kilpailijoihin verrattuna.

Please choose the appropriate response for each item:

	Huomattavasti parempi kuin kilpailijoilla	Parempi kuin kilpailijoilla	Jonkin verran parempi kuin kilpailijoilla	Ei eroa kilpailijoihin nähden	Jonkin verran heikompi kuin kilpailijoilla	Heikompi kuin kilpailijoilla	Huomattavasti heikompi kuin kilpailijoilla	Ei relevantti meille	En osaa sanoa
Asiakastietojärjestelmän hallinta (CRM)	☐	☐	☐	☐	☐	☐	☐	☐	☐
Asiakassuhteiden säilyttäminen	☐	☐	☐	☐	☐	☐	☐	☐	☐

Yrityksen tarjooman ja asiakkaiden tarpeiden vastaavuus, asiakastuntemus	☐	☐	☐	☐	☐	☐	☐	☐	☐
Potentiaalisten uusien asiakkaiden tunnistaminen	☐	☐	☐	☐	☐	☐	☐	☐	☐
Asiakaspalvelun suunnittelu ja toteutus	☐	☐	☐	☐	☐	☐	☐	☐	☐
Asiakaskohtaamisten suunnittelu ja toteutus	☐	☐	☐	☐	☐	☐	☐	☐	☐
Kyky vastata asiakkaiden tiedusteluihin ja pyyntöihin nopeasti	☐	☐	☐	☐	☐	☐	☐	☐	☐
Tuotteiden ja palveluiden ristiinmyynti	☐	☐	☐	☐	☐	☐	☐	☐	☐
Tuotteiden ja palveluiden lisämyynti	☐	☐	☐	☐	☐	☐	☐	☐	☐
Kannattamattomien asiakassuhteiden lopettaminen	☐	☐	☐	☐	☐	☐	☐	☐	☐
Asiakastyytyväisyys	☐	☐	☐	☐	☐	☐	☐	☐	☐

K32: K32. Mitkä koet markkinointistrategian implementoinnin keskeisimmiksi haasteiksi edustamassasi yksikössä?

Please write your answer here:

```



```

* K33: K33. Missä määrin seuraavat haasteet ovat tällä hetkellä liiketoimintayksikkösi liikkeenjohdon huomion ja resurssien kohteena?

Please choose the appropriate response for each item:

	Erityisen huomion kohde			Keskimääräisen huomion kohde			Vähäisen huomion kohde	Ei relevantti meille
Uuden tuotteen tai sovelluksen kehittäminen	☐	☐	☐	☐	☐	☐	☐	☐
Taloudellisten resurssien ja tuen hankkiminen	☐	☐	☐	☐	☐	☐	☐	☐
Ulkopuolisten asiantuntijoiden tai hallituksen jäsenten hankkiminen	☐	☐	☐	☐	☐	☐	☐	☐
Tuotetuki tai asiakaspalvelu	☐	☐	☐	☐	☐	☐	☐	☐
Pätevän henkilökunnan hankkiminen	☐	☐	☐	☐	☐	☐	☐	☐
Tarkoituksenmukaiset välineet ja toimitilat	☐	☐	☐	☐	☐	☐	☐	☐
Luotettavien myyjien ja toimittajien verkoston kehittäminen	☐	☐	☐	☐	☐	☐	☐	☐
Kysyntää vastaavien määrien tuotanto	☐	☐	☐	☐	☐	☐	☐	☐
Myyntitavoitteiden saavuttaminen	☐	☐	☐	☐	☐	☐	☐	☐
Johdon osaamisen ja kykyjen laajuus ja taso	☐	☐	☐	☐	☐	☐	☐	☐
Kustannusten kontrollointi	☐	☐	☐	☐	☐	☐	☐	☐
Organisatoristen roolien, vastuiden ja käytäntöjen määrittely	☐	☐	☐	☐	☐	☐	☐	☐
Johdon tietojärjestelmien kehittäminen	☐	☐	☐	☐	☐	☐	☐	☐
Kannattavuus- tai markkinaosuustavoitteiden saavuttaminen	☐	☐	☐	☐	☐	☐	☐	☐
Laajentuminen uusille maantieteellisille alueille	☐	☐	☐	☐	☐	☐	☐	☐
Hallinnollisen taakka ja byrokratia	☐	☐	☐	☐	☐	☐	☐	☐
Taloudellisten järjestelmien ja sisäisen kontrollin kehittäminen	☐	☐	☐	☐	☐	☐	☐	☐
Aseman vakiinnuttaminen tuote-/markkinasegmenteissä	☐	☐	☐	☐	☐	☐	☐	☐
Asiakkaiden tarpeiden selvittäminen ja tyydyttäminen	☐	☐	☐	☐	☐	☐	☐	☐
Systemaattinen kilpailijoiden analysointi	☐	☐	☐	☐	☐	☐	☐	☐

Oppiminen, kehittyminen ja kehittäminen

Kuudennessa osiossa tarkastellaan markkinatiedon keräämiseen, jakamiseen ja hyödyntämiseen liittyviä käytäntöjä.

* K34: K34. Kuinka hyvin seuraavat väittämät kuvaavat tilannetta liiketoimintayksikössäsi?

Please choose the appropriate response for each item:

	Täysin samaa mieltä	Samaa mieltä	Jokseenkin samaa mieltä	Ei samaa eikä eri mieltä	Jokseenkin eri mieltä	Eri mieltä	Täysin eri mieltä	Ei relevantti meille
Myyntihenkilöstömme jakaa säännöllisesti tietoa kilpailijoidemme strategioista liiketoimintayksikkömme (yrityksemme) sisällä	☐	☐	☐	☐	☐	☐	☐	☐
Liiketoimintamme tavoitteita ohjaa ensisijaisesti asiakastyytyväisyys	☐	☐	☐	☐	☐	☐	☐	☐
Vastaamme ripeästi kilpailutoimiin, jotka uhkaavat meitä	☐	☐	☐	☐	☐	☐	☐	☐
Seuraamme jatkuvasti asiakassuuntautuneisuuttamme ja sitoutumistamme asiakkaiden tarpeiden palvelemiseen	☐	☐	☐	☐	☐	☐	☐	☐
Kaikkien toimintojemme ylin johto tapaa säännöllisesti nykyisiä ja mahdollisia asiakkaita	☐	☐	☐	☐	☐	☐	☐	☐
Jaamme avoimesti tietoa onnistuneista ja epäonnistuneista asiakaskokemuksista kaikkien toimintojen kesken	☐	☐	☐	☐	☐	☐	☐	☐
Strategiamme kilpailuedun saavuttamiseksi perustuu asiakkaiden tarpeiden ymmärtämiseen	☐	☐	☐	☐	☐	☐	☐	☐
Kaikki toimintomme (esim. markkinointi/myynti, tuotanto, T&K, rahoitus/laskentatoimi, jne) on integroitu palvelemaan kohdemarkkinoidemme tarpeita	☐	☐	☐	☐	☐	☐	☐	☐
Liiketoimintastrategioitamme ohjaavat uskomuksemme siitä, miten voimme tuottaa suurempaa arvoa asiakkaillemme	☐	☐	☐	☐	☐	☐	☐	☐
Mittaamme asiakastyytyväisyyttä järjestelmällisesti ja tiheästi	☐	☐	☐	☐	☐	☐	☐	☐
Kiinnitämme paljon huomiota myynnin jälkeiseen palveluun	☐	☐	☐	☐	☐	☐	☐	☐
Ylin johtomme keskustelee säännöllisesti kilpailijoidemme vahvuuksista ja strategioista	☐	☐	☐	☐	☐	☐	☐	☐
Kaikki esimiehet ymmärtävät, miten jokainen voi myötävaikuttaa asiakasarvon luomiseen liiketoiminnassamme	☐	☐	☐	☐	☐	☐	☐	☐
Keskitymme asiakkaisiin, joiden kohdalla voimme saavuttaa kilpailuetua	☐	☐	☐	☐	☐	☐	☐	☐
Jaamme resursseja muiden liiketoimintayksiköiden kanssa	☐	☐	☐	☐	☐	☐	☐	☐

* K35: K35. Missä määrin seuraavat markkinatiedon tuottamista käsittelevät väittämät kuvaavat tilannetta liiketoimintayksikössäsi?

Please choose the appropriate response for each item:

	Täysin samaa mieltä	Samaa mieltä	Jokseenkin samaa mieltä	Ei samaa eikä eri mieltä	Jokseenkin eri mieltä	Eri mieltä	Täysin eri mieltä	Ei relevantti meille
Tapaamme asiakkaamme vähintään kerran vuodessa selvittääksemme, minkälaisia tuotteita tai palveluita he tarvitsevat tulevaisuudessa	☐	☐	☐	☐	☐	☐	☐	☐
Tuotantohenkilöstömme on suorassa yhteydessä asiakkaisiin oppiakseen, kuinka palvella heitä paremmin	☐	☐	☐	☐	☐	☐	☐	☐
Teemme paljon sisäistä markkinatutkimusta	☐	☐	☐	☐	☐	☐	☐	☐
Olemme hitaita havaitsemaan muutoksia asiakkaittemme tuotemieltymyksissä	☐	☐	☐	☐	☐	☐	☐	☐
Suoritamme vähintään kerran vuodessa loppukäyttäjille suunnatun kyselyn arvioidaksemme tuotteittemme ja palvelujemme laatua	☐	☐	☐	☐	☐	☐	☐	☐
Jututamme tai tutkimme usein henkilöitä, jotka voivat vaikuttaa loppukäyttäjiemme ostokäyttäytymiseen (esim. vähittäismyyjät, jakelijat)	☐	☐	☐	☐	☐	☐	☐	☐
Keräämme toimialatietoa epävirallisin keinoin (esim. lounaat toimialatuttujen kanssa, keskustelut liikekumppanien kanssa)	☐	☐	☐	☐	☐	☐	☐	☐

Kilpailijatietoa tuotetaan itsenäisesti useilla osastoilla	☐	☐	☐	☐	☐	☐	☐	☐
Olemme hitaita tunnistamaan perustavalaatuisia muutoksia toimialallamme (esim. kilpailu, teknologia, lainsäädäntö)	☐	☐	☐	☐	☐	☐	☐	☐
Tarkastelemme aika ajoin liiketoimintaympäristössämme tapahtuvien muutosten (esim. lainsäädäntö) vaikutusta asiakkaisiin	☐	☐	☐	☐	☐	☐	☐	☐

Markkinointiin kohdistuvat panostukset

Seitsemännessä osiossa tarkastellaan markkinointiin kohdistuvia panostuksia ja niiden painotuksia ja taustalla vaikuttavia tekijöitä.

K36: K36. Mistä kuluista yrityksesi markkinointibudjetin loppusumma muodostuu (esim. mainos- ja viestintäkulut, myyntikulut, PR, palk jne.)?

Please write your answer here:

```



```

* K37: K37. Millaisissa tilanteissa liiketoimintayksikkösi tekee eniten markkinointiin kohdistuvia uusia panostuksia? Valitse seuraavista vaihtoehdoista 1-3 tärkeintä.

Please choose *all* that apply:

☐ Kilpailun kiristyessä
☐ Uusille tuotealueille mentäessä
☐ Uusille markkina-alueille mentäessä
☐ Kun yrityksellä on mennyt hyvin ja sille on kertynyt varallisuutta
☐ Kun menee heikosti ja yritys tarvitsee tuloja ja asiakkaita
☐ Kun yrityksen strategiassa korostuvat kasvutavoitteet
☐ Uusia panostuksia tehdään tasaisesti, taloudellisesta tai markkinatilanteesta juurikaan riippumatta
☐ En osaa sanoa

* K38: K38. Tehdäänkö liiketoimintayksikkösi taseeseen merkittäviä markkinointi-investointeja?

Please choose *only one* of the following:
☐ Yes
☐ No

K39: K39. Kuinka suuria olivat liiketoimintayksikkösi viimeisimmän tilikauden panostukset seuraavilla liiketoiminnan osa-alueilla suhtees yksikön liikevaihtoon (prosenteissa mitattuna)?

Please write your answer(s) here:

Tuotekehitys (asiakastarpeet, ratkaisut, testaus, sisäisten ja ulkoisten yhteistyöverkostojen hallinta):
```
```

Tilaus- ja toimitusketjun hallinta (hankinta-, tuotanto- ja toimitusprosessit, kanavien hallinta):
```
```

Asiakassuhteiden hallinta (markkinatieto, markkinointiviestintä, asiakaspalvelu, myynti, jne.):
```
```

* K40: K40. Arviolta kuinka suuria olivat liiketoimintayksikkösi viimeisimmän tilikauden panostukset suhteessa liikevaihtoon seuraavilla liiketoiminnan osa-alueilla tärkeimpiin kilpailijoihinne verrattuna?

Please choose the appropriate response for each item:

	Huomattavasti suurempia kuin kilpailijoilla	Suurempia kuin kilpailijoilla	Jonkin verran suurempia kuin kilpailijoilla	Ei eroa kilpailijoihin nähden	Jonkin verran vähäisempiä kuin kilpailijoilla	Vähäisempiä kuin kilpailijoilla	Huomattavasti vähäisempiä kuin kilpailijoilla	En osa sanc
Tuotekehitys (asiakastarpeet, ratkaisut, testaus, sisäisten ja ulkoisten yhteistyöverkostojen hallinta)	☐	☐	☐	☐	☐	☐	☐	☐
Tilaus- ja toimitusketjun hallinta (hankinta-, tuotanto- ja toimitusprosessit, kanavien hallinta)	☐	☐	☐	☐	☐	☐	☐	☐

Asiakassuhteiden hallinta
(markkinatieto,
markkinointiviestintä,
asiakaspalvelu, myynti, jne.)

□ □ □ □ □ □ □ □

Taustatiedot

Kahdeksannessa ja viimeisessä osiossa kysytään vielä muutamia tietoja edustamaasi yritykseen ja asemaasi liittyen. Tiedot käsitellää
ehdottoman luottamuksellisesti, ja tuloksia raportoitaessa vastaukset jaotellaan kokonaisuuksiin, joista yksittäiset yritykset eivät ole
tunnistettavissa. Yksittäisten yritysten tietoja ei raportoida.

---

* K41: K41. Omistusmuoto

Please choose *only one* of the following:
□ Osakeyhtiö
□ Julkinen osakeyhtiö
□ Other [_____]

K42: K42. Yrityksen perustamisvuosi

Please write your answer here:
[_____]

---

* K43: K43. Kuinka suuri on suurimpien omistajien yhteenlaskettu omistusosuus edustamassasi liiketoimintayksikössä?

Please choose the appropriate response for each item:

	< 5%	5-10%	11-20%	21-50%	> 50%	En osaa sanoa
Suurin omistaja	□	□	□	□	□	
5 suurinta omistajaa	□	□	□	□	□	□
10 suurinta omistajaa	□	□	□	□	□	□
20 suurinta omistajaa	□	□	□	□	□	□

---

* K44: K44. Mikä on edustamassasi yrityksessä ulkomaisen omistuksen osuus?

Please choose *only one* of the following:
□ 0%
□ < 25%
□ 25-50%
□ 51-75%
□ > 75%
□ 100%
□ En osaa sanoa

---

* K45: K45. Työntekijöiden lukumäärä liiketoimintayksikössäsi

Please choose *only one* of the following:
□ 1-5
□ 6-10
□ 11-20
□ 21-50
□ 51-100
□ 101-250
□ 251-500
□ > 500
□ En osaa sanoa

---

* K46: K46. Yrityksellä on toimintaa

Please choose *only one* of the following:
□ Paikallisesti
□ Kansallisesti
□ Lähialueilla (Pohjoismaat, Baltia, Venäjä)
□ Euroopan laajuisesti
□ Maailmanlaajuisesti

[Only answer this question if you answered 'Euroopan laajuisesti' or 'Lähialueilla (Pohjoismaat, Baltia, Venäjä)' or 'Maailmanlaajuisesti' to question 'K
']
K47: K47. Toiminta-aika kansainvälisillä markkinoilla (vuotta)

Please write your answer here:
[_____]

[Only answer this question if you answered 'Lähialueilla (Pohjoismaat, Baltia, Venäjä)' or 'Euroopan laajuisesti' or 'Maailmanlaajuisesti' to question 'K
']
* K48: K48. Kansainvälisiltä markkinoilta tulevan liikevaihdon osuus

Please choose *only one* of the following:
- ☐ < 10%
- ☐ 10-50%
- ☐ 51-90%
- ☐ > 90%
- ☐ En osaa sanoa

K49: K49. Vastaa kysymyksiin 49a-49h viimeisen julkistetun tiedon mukaisesti.

---

* K49a: K49a. Liikevaihto (EUR)

Please choose *only one* of the following:
- ☐ Alle 350 000
- ☐ 350 000 - 2 milj.
- ☐ 2 milj. - 10 milj.
- ☐ 10 milj. - 50 milj.
- ☐ 50 milj. - 100 milj.
- ☐ 100 milj. - 250 milj.
- ☐ 250 milj. - 500 milj.
- ☐ 500 milj. - 1000 milj.
- ☐ Yli 1000 milj.
- ☐ En osaa sanoa

---

* K49b: K49b. Liikevoittoprosentti

Please choose *only one* of the following:
- ☐ Alle -50%
- ☐ -50% - (-25%)
- ☐ -25% - (-15%)
- ☐ -15% - (-8%)
- ☐ -8% - (-3%)
- ☐ -3% - 0%
- ☐ 0% - 3%
- ☐ 3% - 8%
- ☐ 8% - 15%
- ☐ 15% - 25%
- ☐ 25% - 50%
- ☐ Yli 50%
- ☐ En osaa sanoa

---

* K49c: K49c. Sijoitetun pääoman tuottoprosentti (Return on investment, ROI)

Please choose *only one* of the following:
- ☐ Alle -25%
- ☐ -25% - (-10%)
- ☐ -10% - 0%
- ☐ 0% - 5%
- ☐ 5% - 10%
- ☐ 10% - 15%
- ☐ 15% - 20%
- ☐ 20% - 25%
- ☐ 25% - 30%
- ☐ 30% - 40%
- ☐ Yli 40%
- ☐ En osaa sanoa

---

* K49d: K49d. Kokonaispääoman tuottoprosentti (Return on Assets, ROA)

Please choose *only one* of the following:
- ☐ Alle -25%
- ☐ -25% - (-10%)
- ☐ -10% - 0%
- ☐ 0% - 5%
- ☐ 5% - 10%
- ☐ 10% - 15%
- ☐ 15% - 20%
- ☐ 20% - 25%
- ☐ 25% - 30% En osaa sanoa
- ☐ 30% - 40%
- ☐ Yli 40%
- ☐ En osaa sanoa

---

* K49e: K49e. Markkinointiin sijoitetun pääoman tuottoprosentti (MROI, ROMI)

Please choose *only one* of the following:
- ☐ Alle -25%
- ☐ -25% - (-10%)
- ☐ -10% - 0%
- ☐ 0% - 5%
- ☐ 5% - 10%
- ☐ 10% - 15%
- ☐ 15% - 20%
- ☐ 20% - 30%
- ☐ 30% - 40%
- ☐ Yli 40%
- ☐ En osaa sanoa

---

* K49f: K49f. Markkinaosuus

Please choose *only one* of the following:
- ☐ Alle 1%
- ☐ 1% - 3%
- ☐ 3% - 5 %
- ☐ 5% - 10%
- ☐ 10% - 20%
- ☐ 20% - 35%
- ☐ 35% - 50%
- ☐ Yli 50 %
- ☐ En osaa sanoa

[Only answer this question if you answered 'Julkinen osakeyhtiö' to question 'K41 ']

* K49g: K49g. M/B-suhdeluku (market-to-book)

Please choose *only one* of the following:
- ☐ Alle 0,25
- ☐ 0,25 - 0,5
- ☐ 0,5 - 1
- ☐ 1 - 2
- ☐ 2 - 4
- ☐ 4 - 8
- ☐ 8 - 16
- ☐ Yli 16
- ☐ En osaa sanoa

[Only answer this question if you answered 'Julkinen osakeyhtiö' to question 'K41 ']

* K49h: K49h. P/E-luku (price-per-earnings)

Please choose *only one* of the following:
- ☐ Alle 5
- ☐ 5 - 10
- ☐ 10 - 12,5
- ☐ 12,5 - 15
- ☐ 15 - 17,5
- ☐ 17,5 - 20
- ☐ 20-25
- ☐ 25-30
- ☐ Yli 30
- ☐ En osaa sanoa

---

* K50: K50. Pyydämme vielä arvioimaan, miten yksikkösi menestys suhteutuu tärkeimpiin kilpailijoihin nähden?

Please choose the appropriate response for each item:

	Huomattavasti suurempi kuin kilpailijoilla	Suurempi kuin kilpailijoilla	Jonkin verran suurempi kuin kilpailijoilla	Ei eroa kilpailijoihin nähden	Jonkin verran pienempi kuin kilpailijoilla	Pienempi kuin kilpailijoilla	Huomattavasti pienempi kuin kilpailijoilla	En osaa sano
Liikevaihto	☐	☐	☐	☐	☐	☐	☐	☐
Suhteellinen liikevoitto edelliseltä tilikaudelta	☐	☐	☐	☐	☐	☐	☐	☐
Sijoitetun pääoman tuottoprosentti (ROI)	☐	☐	☐	☐	☐	☐	☐	☐
Kokonaispääoman tuottoprosentti (ROA)	☐	☐	☐	☐	☐	☐	☐	☐
Markkinointiin sijoitetun pääoman tuottoprosentti (MROI /ROMI)	☐	☐	☐	☐	☐	☐	☐	☐
Markkinaosuus	☐	☐	☐	☐	☐	☐	☐	☐
M/B-ratio	☐	☐	☐	☐	☐	☐	☐	☐

| P/E-luku | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |

* K51: K51. Mikä on yksikkönne ylimmän johdon arvio liiketoiminnan tämänhetkisestä menestyksellisyydestä?

Please choose *only one* of the following:

☐ Erittäin hyvä
☐ Hyvä
☐ Keskitasoa
☐ Heikko
☐ Erittäin heikko
☐ En osaa sanoa

Submit Your Survey.

Appendix B – List of Indicators per Factor

The bolded indicators are those included in final structural model.

Indicator	Product Development Management
K271	**Ability to develop new products/services**
K272	**Exploitation of new business models**
K273	Exploitation of external stakeholders and business networks in product development stage
K274	Cooperation and information sharing with other operations
K275	**Rapid commercialization of ideas**
K276	**Amount of product or service innovations**
K277	**Successfully launching new products/services**
K278	**R&D performance**

Seven-point scale ranging from 1 = "much worse than main competitors" to 7 = "much better than main competitors"

Indicator	Supply Chain Management
K281	Use of information and communication technology (ICT)
K282	**Attracting and retaining the best distributors**
K283	**Attracting and retaining the best suppliers**
K284	**Managing customer services, such as installation and maintenance to enable product use**
K285	**Order processing**
K286	Billing, rebates, and terms
K287	**Designing and managing internal and external logistics**
K288	Providing high levels of service support to distributors
K289	Delivery reliability

Seven-point scale ranging from 1 = "much worse than main competitors" to 7 = "much better than main competitors"

Indicator	Customer Relationship Management
K311	Customer database management
K312	**Customer relationship retention**
K313	**Delivering what your customers want**
K314	**Identifying potential new customers**
K315	**Developing and executing customer service programs**
K316	**Developing and executing customer encounters**
K317	**Degree of responsiveness to customer enquiries and requests**
K318	Cross-sale of products and services
K319	Up-sale of products and services
K3110	Terminating non-profitable customer relationships

Seven-point scale ranging from 1 = "much worse than main competitors" to 7 = "much better than main competitors"

Indicator	Market Performance
K501	**Turnover**
K506	**Market share**

Seven-point scale ranging from 1 = "much worse than main competitors" to 7 = "much better than main competitors"

Indicator	Financial Performance
K502	**Profits**
K503	**Return on investment (ROI)**
K504	Return on assets (ROA)

Seven-point scale ranging from 1 = "much worse than main competitors" to 7 = "much better than main competitors"

Appendix C – Goodness of Model Fit Indexes

All fit index descriptions are adapted from Kline (2005).

RMSEA = $\sqrt{\dfrac{\hat{\delta}_M}{df_M\,(N-1)}}$

where δ_M = max(χ^2_M − df_M, 0). RMSEA can be interpreted as "error of approximation". Value of zero indicates the best fit and higher values indicate worse fit.

GFI = $1 - V_{res} / V_{tot}$

where V_{res} refers to unexplained variability in sample covariance matrix and V_{tot} to total variability in sample covariance matrix. GFI is analogous to a squared multiple correlation (R^2); GFI = 1.0 indicates perfect model fit, and GFI > 0.9 indicates good fit.

NNFI = $1 - NC_M / NC_B$

where NC refers to normed chi-square in researcher's model (M) and in independence model (B). The bigger the NNFI, the better.

CFI = $1 - \hat{\delta}_M / \hat{\delta}_B$

where δ_M and δ_B estimate the non-centrality parameter of a non-central chi-square distribution for, respectively, the researcher's model and the baseline model. CFI = 1.0 means that $\chi^2_M < df_M$ and not that the model has perfect fit.

Appendix D – Discriminant and Convergent Validity

Validity of the final model

Construct	Variable	Factor1	Factor2	Factor3	Factor4	Factor5
		Rotated Factor Pattern				
Product Development Management	K271	0.03	0.15	**0.70**	0.07	0.11
	K272	0.04	0.21	**0.65**	0.13	0.08
	K275	0.02	0.23	**0.65**	0.08	-0.05
	K276	0.04	0.13	**0.75**	0.09	0.08
	K277	0.05	0.23	**0.64**	0.13	0.14
	K278	0.04	0.15	**0.57**	0.20	0.02
Supply Chain Management	K282	0.03	0.11	0.11	**0.79**	0.06
	K283	0.04	0.19	0.20	**0.72**	0.11
	K284	0.03	0.13	0.11	**0.66**	0.01
	K285	0.04	0.27	0.11	**0.57**	0.04
	K287	0.04	0.13	0.09	**0.68**	0.02
Customer Relationship Management	K312	0.06	**0.61**	0.17	0.17	0.10
	K313	0.06	**0.59**	0.27	0.17	0.08
	K314	0.03	**0.57**	0.26	0.11	0.10
	K315	0.05	**0.74**	0.18	0.17	0.12
	K316	0.07	**0.75**	0.20	0.18	0.13
	K317	0.05	**0.65**	0.12	0.15	-0.04
Market Performance	K501	0.11	0.10	0.11	0.07	**0.94**
	K506	0.10	0.18	0.12	0.07	**0.85**
Financial Performance	K502	**1.84**	0.20	0.14	0.11	0.26
	K503	**0.38**	0.33	0.16	0.15	0.29

Appendix E – Item-to-total Correlations and Cronbach's Alphas

Correlations and alphas for the final model

Construct	Variable	Correlation with Total	Cronbach's Alpha
Product Development Management	K271	0.64	
	K272	0.63	
	K275	0.63	0.85
	K276	0.69	
	K277	0.65	
	K278	0.56	
Supply Chain Management	K282	0.69	
	K283	0.66	
	K284	0.62	0.84
	K285	0.59	
	K287	0.65	
Customer Relationship Management	K312	0.64	
	K313	0.66	
	K314	0.59	0.86
	K315	0.69	
	K316	0.71	
	K317	0.60	
Market Performance	K501	0.85	0.92
	K506	0.85	
Financial Performance	K502	0.88	0.93
	K503	0.88	