STRATEGY ANALYSIS
FRAMEWORKS FOR
STRATEGY ORIENTATION
AND FOCUS

Ville Isoherranen
VILLE ISOHERRANEN

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FRAMEWORKS FOR STRATEGY ORIENTATION AND FOCUS

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Abstract

The primary research target of this dissertation is to develop new strategy analysis frameworks, focusing on analysing changes in strategic position as a function of variations in life cycle s-curve/time/typology/market share/orientation. Research is constructive and qualitative by nature, with case study methodology being the adopted approach. The research work is carried out as a compilation dissertation containing four (4) journal articles.

The theoretical framework of this dissertation is built from strategy analysis, as well as from strategy orientation and typology theories. Strategy analysis focuses to examining the strengths of business positioning; understanding the external and internal factors that influence a position or orientation. In strategy analysis, several frameworks or tools can be used. The SWOT, PEST, Five Forces, Four Corners, Value Chain, and Blue Ocean strategy profile analysis frameworks are introduced in this research. Strategy orientation or focus can be described as the underlying attributes of a company’s strategy, which directs decision making and orients the activities within a company towards a specific course. Using strategy orientation or focus as a means of innovating and guiding decision making fosters an environment conducive to strategizing, thereby facilitating the formulation of the actual strategies followed by the company. In this dissertation, the Miles and Snow (1978) strategy typology is introduced along with market orientation, product orientation, technology orientation, and customer orientation (focus).

This research contributes to existing literature in that it provides a set of strategy analysis frameworks. Each of the frameworks answers a specific research question within the research target. The frameworks created are life cycle with a strategy typology framework, four-way strategy orientation framework, strategy orientation framework with market share analysis, and orientation with a typology framework. All these frameworks can be used individually. Together, they build an analysis toolbox that can generate valuable information from analysis. The developed strategy analysis frameworks are tested with two case companies’ strategy materials taken from publicly available annual reports. The case companies are Nokia and Amer. Empirical results show that the developed strategy analysis frameworks can generate new information regarding case businesses strategy, and detect changes in strategic positions.

The theoretical implications of this dissertation contribute to research on strategy analysis, and are a result of combining the perspectives adopted in the strategy analysis frameworks with those of the strategy orientation domain, thereby creating new strategy orientation analysis frameworks. Areas for further research include the linkage of business success to orientations, transformation strategies, and consumer focus as elements of strategy formulation.

Keywords: market-oriented strategy, product-orientated strategy, Strategy analysis, Strategy analysis frameworks, strategy orientation
Isoherranen, Ville, Strategian analyysikehikot strategiseen suuntaumiseen.
Oulun yliopisto, Teknillinen tiedekunta, Tuotantotalouden osasto, PL 4610, 90014 Oulun yliopisto
Oulu

Tiivistelmä
Tämän tutkimuksen tavoitteena on kehittää uusia strategian analyysikehikoita, joitten tavoitteena on tutkia muutoksia strategisessa asemassa. Muutosten lähteenä voivat olla vaihtelut elinkaaren/ajan/typologian/markkinoasuuden tai orientaatio suhteen. Tutkimus on konstruktivistista ja laadullista, käyttäen case-tapaus menetelmää. Tutkimus on toteutettu julkaisuväitöskirjana, sisältäen neljä (4) tieteellistä julkaisua.


Tämän tutkimuksen tulokset luovat uutta tietoa strategisesta analyysistä. Tutkimus yhdistää strategia-analyysin ja strategisen orientaation tutkimusta, ja luo uusia strategisen suuntautumisen analyysikehikoita. Jatkokustannustyöskenteleminen voivat olla niin yrityksen liiketaloudellisen menetysten suhde strategiseen orientaatioon, muutosstrategiat sekä asiakaskeskaisemys osana strategian muodostamista.

Asiakasaineet: markkinasuuntautuminen strategia, strategia-analyysi, strategian analyysikehikot, strateginen suuntautuminen, tuotesuuntautuminen strategia
Acknowledgements

My interest in studying and school began to amplify in the latter part of complementary school from classes 7 to 9. This growing interest originated from the process of growing up and surviving the demands of the school world, or from the simple observation that learning new things is exciting. I have always loved reading and truly value my growing library. My GPA rose from 8.2 to 9.7 in three years of study. Today, that experience seems to reflect quite a remarkable change, one that transformed my life. I devoted hours of hard work, reading, writing, and most of all, concentration. The rise of my GPA continued in high school, where I earned a mark of 9.8 owing to my performance in different subjects and tests. I have never considered myself gifted. Mathematics and physics have always demanded hard work from me, and I found languages somewhat easier. Nevertheless, language was not the discipline I chose to pursue after high school and after years of military service.

My journey is the result of hard work, but it is also supported by luck and chance, as well as the right people in my life. My admission into university, I believe, was a product of both chance and encountering the right people at the right time. I remember reading an industrial engineering and management procedure at the University of Tampere. It was well crafted because it combined both business and technology. My admission into the University of Oulu was facilitated by two factors: the visit during Abipäivät at the University and the fact that my good friend Janne had twin brothers studying at the Oulu University Faculty of Technology. Thanks Janne for the accommodation and for being the trusted ‘co-driver’ during the car trip to the University exams! I would not have made it without you. Aila’s presentation during these days served as a warm invite to Tuta. Thanks Aila!

Years of study at the University of Oulu and my rapid graduation within three years (in my last year, I was a part-time employee at Nethawk Oy) are of course the result of diligence, but I want to thank Professor Harri Haapasalo, who said in one of his first presentations, that the best people graduate in three years. This statement motivated me to adhere to this timeline. Thanks Harri! My gratitude also goes to the many good friends that I made during my years at university. Thanks Jaakko, Juha-Matti, and many others. You have given me, and still continue, support both on and off from studies. I completed my master’s thesis at Nokia Networks on October 2002, just five months after receiving the
assignment. My endeavour has since then been followed by almost 10 years of various management and senior management positions at Nokia Corporation.

The idea of completing a doctoral dissertation has been alive since my graduation. Even before that, I remember looking at pictures of doctoral ceremonies and the actual dissertation of my late godmother Hilkka Ranta. Completing a dissertation seemed worth pursuing. The spark that finally drove me to do the work is my desire to thank Professor Pekka Kess, who introduced me to the world of strategic management, set the empirical material approach to this research, offered his time to support and review my work, and guided my journey through academic (and sometimes, non-academic) roads. Thank you Pekka!

This journey really began as a ‘walking journey’ in the old pilgrim’s route, El Camino do Santiago, in north-western Spain. With every stride (I walked more than 30 km during the best days, over 100 km in total), I recognised that I have something to contribute to the academic world. I found the determination to write a doctoral dissertation. This event triggered the process, whose result you read today. An indispensable guide to the practical art of writing during this voyage has been the step-by-step dissertation writing instruction material created by the Department of Industrial Engineering and Management.

Finally, the reason I accomplished all of the above is because I have the right people in my life, my ‘ecosystem’. First of all, I want to thank Mari for being my companion and source of support during military service, the years of university studies, and early parts of my career. The biggest gratitude goes to you for I would never have endured without your love and support (I would never be still here). Warmest thank you! My family, my mother Irma and father Aaro, has been the foundation of the life that I built. Thank you for giving me the opportunity to reach for my dreams. During the last years, I have been supported by my wife Maria, which I offer my humble thanks!

I also want to express gratitude to Nokia Oyj for supporting my studies as part the corporation’s personnel development activities in the form of a ‘long-term development agreement’. This program afforded me the time to write and pursue academic merits, as well as reap the rewards of the publication of my journal articles. Also my sincere gratitude goes to Professor Karl-Erik Michelsen and Dosent Tauno Kekälä for devoting their time to conduct pre-examination and review of the doctoral dissertation thus giving valuable feedback and comment to improve my work. Thank you!

Oulu, Finland, 20.2.2012

Ville Isoherranen
List of abbreviations and definitions

**Abbreviations**

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<th>Definition</th>
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<td>GSM</td>
<td>Global System for Mobile Communications</td>
</tr>
<tr>
<td>PEST</td>
<td>Political, Economic, Socio-cultural, Technology</td>
</tr>
<tr>
<td>R&amp;D</td>
<td>Research and Development</td>
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<tr>
<td>RQ</td>
<td>Research Question</td>
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<tr>
<td>SWOT</td>
<td>Strengths, Weaknesses, Opportunities, Threats</td>
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List of original publications


These articles have been published and underwent a double blind review. The author of this dissertation is the primary author of all the aforementioned original publications. The author is responsible for formulating the research questions, building the theoretical foundations, collecting and analysing the empirical materials, and articulating the research contribution. The co-author/s mainly provided feedback and handled the practical logistics involved in publication in academic journals.
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1 Introduction

1.1 Background and research environment

Research on strategic management has a long history, yet no single unified definition of strategy exists. Minzberg et al. (1998) define strategy as:

- a plan, which is a direction, a guide, or a course of action into the future;
- a pattern, which points to consistency of behaviour over time;
- a position, which places specific products in particular markets;
- a perspective, which refers to the fundamental manner of accomplishing goals; and
- a ploy, which is a specific manoeuvre intended to outwit competitors.

The fundamental aspects of what strategy brings to businesses are (Minzberg et al. 1998):

- strategy sets direction;
- strategy focuses effort;
- strategy defines the organisation; and
- strategy provides consistency.

Through the years, strategy has been classified by several scholars. The most common and widely used by business executives are those introduced by Porter (1985). The three main strategy categories defined by the author are intended to create and maintain competitive advantage:

- cost leadership strategy;
- differentiation strategy; and
- segmentation strategy.

These generic strategies are defined along two dimensions: strategic scope and strategic strength. Strategic scope is a demand-side dimension and looks into the size and composition of the market that the business is targeting. Strategic strength, on the other hand, is the supply-side dimension and examines the competencies of a firm.

The area of strategic management and thinking has been considerably influenced since Porter, inspiring works by Hamel & Prahalad (1994), with their core competencies approach, and Kim & Mauborgne (2005), who introduced the concept of the Blue Ocean strategy in which a company can create its own
business realm with very little competition, if any. Doz & Kosonen (2008) introduced the concept of Fast Strategy, in which the agility of a business under intense global competition is highlighted. Two schools of strategic thinking currently dominate: market-based (demand-based) strategies and product-based strategies. Examples of market-based strategies can be found from the perspective of Porter (1985) (differentiation or cost leadership), and those of product-based (core competencies) viewpoints are evident in the work of Hamel & Prahalad (1994).

The current research contributes to the field of strategic management and strategy analysis by analysing strategy characteristics, interdependencies, and success factors. It aims to build new analysis frameworks as literature synthesis, thereby creating new tools for detecting strategic focus or orientation, and the changes that such focus undergoes over time or as a factor of competitive position or market share. The analysis results should also prove valuable and serve as new knowledge on strategic management and analysis research. In particular, the analysis results for the mobile phone case material bring new background information to the highly topical and discussed strategic changes ongoing in the mobile phone industry.

1.2 Objectives and scope

The focus of this research is within strategic management, especially on the analysis of strategy. The environment of strategy analysis is the most interesting in the highly competitive, global high-technology areas, where the shifts in competitive advantage are rapid and gaining a leading position in the market is difficult or even impossible to secure.

The research questions as presented in the four journal articles that this dissertation compiles are listed in Table 1.
Table 1. Research questions from the journal articles.

<table>
<thead>
<tr>
<th>Article #</th>
<th>Research Questions (RQs)</th>
</tr>
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</table>
| I         | a) Does the case business follow the s-curve life cycle framework?  
            b) How does the case business strategy change in the different phases of the life cycle? What is the feasible framework for the analysis? |
| II        | a) What are the characteristics of the technology orientation, market orientation, customer focus, and product focus in strategy?  
            b) What is the framework to analyse this four-way orientation in the case business strategy? |
| III       | a) What is the framework for analysing strategy orientation vs. market share?  
            b) How does the case business strategy orientation change in relation to market share? |
| IV        | a) What is the framework for analysing strategy orientation with strategy typology?  
            b) How does the case business strategy orientation and typology change? |

The primary research target of this dissertation is to develop new strategy analysis frameworks, focusing on analysing changes in strategic position as a function of variations in life cycle s-curve/time/typology/market share/orientation.

The primary research target can be presented with the following research questions (RQs), which are based on the synthesis and summary of the questions taken from the journal articles:

RQ1: What analysis framework is feasible for examining the changes in strategy typology over a life cycle?

RQ2: What analysis framework is feasible for examining strategy orientation and its changes?

RQ3: What analysis framework is feasible for examining strategy orientation in relation to market share?

RQ4: What analysis framework is feasible for examining strategy orientation and typology?

The strategy analysis frameworks are based on the research questions, and devote special focus on the themes of change, transformation, technology focus, product focus, customer focus, and market orientation.
The purpose is to create such analysis tools and frameworks that can generate new information, clarity, and an indication of the key success factors for competitive strategy in fast-changing and disruptive high-technology markets. The cross-dependencies of different strategy orientations are analysed, especially the focus shift from one strategy position or orientation to another. The research focus and context are illustrated in Figure 1. This research does not aim to develop new strategies; rather, its focus is within strategy analysis. The analysis frameworks are essential tools for positioning strategy focus and then further building on the information derived through the frameworks.

Fig. 1. Research focus and context.

The first journal article responds to the first research question. The continuous flow of new products, the ever-shortening product life cycles, and disruptive new technologies are essential characteristics of global and vibrant telecommunications ecosystems. These attributes compel companies to adopt more efficient operations to succeed in this highly competitive market (e.g. Barczack 1995, Holmes & Campbell 2004, Mallic & Schroeder 2005). New technology adoption models and technology life cycles have been modelled as s-curves in many studies. These models indicate the different phases of the technology life cycle—from introduction to maturity—as well as the need for change for companies to remain successful (e.g. Rogers 1962, Christensen 1992,
Moore 2000, Cusumano et al. 2006) In the Internet age, many traditional product-oriented companies are searching for new growth opportunities from Internet services. Many strategies that were successful in previous life cycle phases have become the reasons for failure in the next (Moore 2000). This situation presents huge strategy creation challenges to many high-technology companies that were founded before the advent of the Internet. They need to analyse both the technology life cycle position, which is in many occasions the same as their company position, and their strategic position. The typology presented by Miles et al. (1978) was considered feasible basis for creating analysis tools linked to s-curves given its nature and because it has been referred to in many academic studies (e.g. Slater & Narver 1993).

The second article responds to the second research question. The increasing power of buyers in highly competitive markets forces companies to achieve a closer relationship with customers to maintain their business and create value-added solutions, thereby earning more revenue from their customer base (e.g. Whiteley 1991, Thompson 2000, Gailbraith 2005). Strategy creation in a highly competitive market has been discussed by Porter (1985), Hamel and Prahalad (1994), Moore (2000), and Kim & Mauborgne (2005). A technology-oriented company strategy is based on the technology assets or skills that a firm possesses. The goals of such companies are to push new technology to market and create a winning strategy by being the first to deploy this technology or by being the company that deploys the most advanced technology in the ongoing race of technology innovations (e.g. Hamel & Prahal 1994, Moore 2000). Market-orientated companies, focused on market pull, make a long-term commitment to understanding customer needs and therefore develop innovative solutions by discovering hidden customer needs and new markets (e.g. Slater & Narver 1998, Day 1995). Enterprises in all industry areas want to be more customer-centric. Customer focus in strategy can, for example, manifest as mass customisation or personalisation strategies (Tseng & Piller 2003). Customer focus can be seen as an organisational strategy to respond to customers’ expressed demands (Slater & Narver 1998). A product-focused strategy can be viewed as an internally focused company strategy that pursues competitive advantage by delivering cutting-edge products with excellent features that are based on a company’s core-competencies (e.g. Gailbraith 2005). This interesting four-way (technology orientation, technology push; market orientation, market pull; customer focus; and product focus) orientation and interaction of strategy focus has not been extensively examined in previous research; these concepts are discussed in the present work,
and an empirical study is conducted by analysing case business strategies with the constructed analysis framework.

The third article answers the third research question. Strategy orientation (technology orientation, technology push; market orientation, market pull; customer focus; and product focus) and its relationship to market share are discussed. The analysis frameworks are built from literature as synthesis. The empirical study is carried out by analysing case business strategies using the developed framework.

The fourth article answers the fourth research question. Strategy typology as presented by Miles et al. (1978) proposes four distinct types of strategy classification: prospectors, defenders, analysers, and reactors. Any of the first three can be successful in the market place, whereas the reactor strategy can be considered the failure to execute one of these strategies. In this study, the market-oriented and product-oriented strategy orientation frameworks are fitted to the context of Miles et al.’s (1978) strategy typology by building a synthesis framework of these theories. The empirical focus is to analyse two case businesses strategies by using the synthesised framework.

Table 2 summarises the articles and combines them with the synthesised research questions as presented in the objectives section.

<table>
<thead>
<tr>
<th>Article #</th>
<th>Title</th>
<th>Research question</th>
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<tbody>
<tr>
<td>I</td>
<td>Strategy change analysis using life cycle framework and strategy typology</td>
<td>RQ1</td>
</tr>
<tr>
<td>II</td>
<td>Strategy orientation analysis in the mobile phone case business</td>
<td>RQ2</td>
</tr>
<tr>
<td>III</td>
<td>Analysis of strategy focus vs. market share in the mobile phone case business</td>
<td>RQ3</td>
</tr>
<tr>
<td>IV</td>
<td>Analysis of strategy by strategy typology and orientation framework</td>
<td>RQ4</td>
</tr>
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1.3 Research approach

The research approach, with its positioning presented in Figure 2, is the constructive approach (Olkkonen 1993). Research is qualitative by nature, with case study methodology being the used approach.

The constructive approach is by nature normative. It searches for answers to problems related to management sciences. The essential parts of this approach are
creativity, innovation, and heuristics. The first two are associated with problem solving; that is, determining the answers to the research questions. A heuristic approach comes from the systematic, step-by-step development of the study and models, after which they are tested and the functionality of the presented solutions is improved. The case study approach is considerably related to this testing and improvement technique. It is the empirical component used to verify the applicability and actual functionality of solutions (Olkkonen 1993).

The phasing of the constructive research approach in this study roughly follows the phase model presented by Kasanen et al. (1993). The first step is to identify an interesting research problem (strategy analysis), gain pre-understanding of the topic (literature study), then initiate an innovation phase to construct the model that answers the research questions (analysis frameworks). After this, we proceed to testing the developed model (empirical case studies) and then closing with a theoretical feedback loop and discussion part.

![Fig. 2. Research approach (based on Kasanen et al. 1993).](image)

### 1.4 Research process and dissertation structure

The research is carried out as a compilation dissertation that contains four (4) journal articles. The research process is presented in Appendix 1.

The main research case is the Nokia mobile phones business, which is familiar to the researcher due to working history in various management positions in the company. The case business Nokia is an old Finnish company founded in
1865. In 1995, it focused on telecommunications, and on mobile phone products and services in 2007 when the network systems business merged with Siemens. Nokia Siemens Networks was then established. Nokia is the global leader in mobile telecommunications and has dominated the telecom market for years. In 2009, it shipped more than 430 million units of mobile devices, averaging at over 1.1 million units a day, consequently reaching an estimated market share of 35% of the mobile devices market. The transformation of Nokia from a company that comprises several different business areas (car tyres, cables, TVs, and industry electronics) to one that focuses on telecommunications has been remarkable. Nokia made a strategic decision to concentrate on one of its business areas, and was able to significantly grow because of this strategic choice. In particular, this choice has been followed by extensive sales growth for Nokia’s mobile phones, thereby earning the company a leading position in the mobile phone market. This success and growth make Nokia mobile phone business an interesting case example in studying strategy orientation during life cycle phases because of the company’s ability to maintain competitiveness. In addition, the ongoing transformation of Nokia from a mobile phone-focused company to a provider of Internet-based services also makes Nokia’s mobile phone business a relevant research case for strategy orientation in reference to life cycle position. Nokia’s strategy was extensively discussed by Doz & Kosonen (2008) from the viewpoint of strategic agility. Other academic papers written about Nokia cover topics that range from open innovation and innovation networks (Dittrich & Duysters 2007), to the fundamental change that Nokia brought to the telecommunications industry (Steinbock 2001).

The second case company, Amer, operates internationally, and focuses on marketing and manufacturing branded sports equipment. The parent company, Amer Group, is a publicly listed enterprise established in 1950. Amer has a long history of delving into multiple business areas, such as tobacco, sports and leisure goods, and car importing. The company divested its entire paper division in 1994, and sold its publishing and printing division. Later in the same year, Amer acquired sports equipment manufacturer Atomic to strengthen its position as a producer of branded sporting goods. The company has since then acquired several sports equipment companies. Amer’s most famous sports brands are Wilson, Atomic, and Salomon.

This study was initiated through a review of strategy literature, examining books published by strategy gurus and recent journal articles that contribute to strategy research. The review was important in acquiring an understanding of
strategic management because this research extends the theme of technology strategy research. The review phase was followed by the narrowing down of the research focus given that the realm of strategic management is large and multidimensional in nature. Strategy analysis was considered an interesting topic, especially given the transformations that characterise case businesses history. After topic selection, empirical data were collected from the case businesses, and the analysis frameworks were created on the basis of literature synthesis.

The empirical data from the case business Nokia consisted of 20 annual reports from years 1990 to 2009. A time span of nearly 20 years is regarded as sufficiently long in studying rapidly changing telecommunications markets and deriving extensive knowledge on case business strategy development. These reports were available in printed format in Finnish, and in electronic format both in Finnish and English. Both the printed and electronic versions were used to gain rich insight into case business strategy.

For Amer, empirical material that covers 1994 to 2008 was collected. A time span of almost 15 years is considered long enough to provide a perspective into the research. The annual reports were available in electronic format in English.

The rationale for selecting the annual reports as the source of empirical data was considered from several viewpoints. First, the annual reports are publicly available, making the research replicable. Second, the public availability of the annual reports guarantees that the facts and statements were subjected to public analysis, and reasonably ensures that the statements are reliable. Thirdly, as the empirical material is based on public annual reports no confidentiality issues should arise from using this material.

The final phase involved conducting analysis using the developed analysis frameworks. The frameworks and the analysis results achieved by using them are presented in the research contribution chapter. The original journal articles are included at the end of this dissertation.
2 Theoretical framework

Strategic management can be regarded as built from three main components: strategy analysis, which seeks to understand the strategic position of an organisation; strategic choice, which is all about listing the possible scenarios for action, evaluating them, and choosing amongst alternatives; and strategy implementation, which focuses on planning the manner by which strategy is put into action, and managing the changes required (Johnson & Scholes 1993).

Fig. 3. Strategic management components (based on Johnson & Scholes 1993).

2.1 Strategy analysis

Strategy analysis pertains to analysing the strengths of business positioning; that is, understanding the external and internal factors that influence this position or orientation. In strategy analysis, several frameworks or tools can be used. The succeeding chapters introduce some of the most commonly used strategy analysis frameworks (Price 2003).
2.1.1 SWOT analysis

SWOT analysis (Figure 4) is a classical strategy analysis tool based on four fields: strengths, weaknesses, opportunities, and threats (Grant 1998, Dyson 2004). According to Hill & Westbrook (1997), SWOT analysis and strategic planning originated from the academics of Harvard Business School in the 1960s. In particular, these scholars defined good strategy as one that guarantees fit between the external situation of a company and its internal qualities and characteristics. This definition influenced SWOT framework in a way that advances the search for this fit as its core idea.

![Fig. 4. SWOT strategy analysis framework.](image-url)

The SWOT analysis framework has two distinctive parts. First, it looks into the internal strengths and weaknesses of a business, and then provides an external view of opportunities and threats (Luffman et al. 1996). The classification of items in this four-field framework can be aided by a question list specially designed for this purpose (Lindroos 2006). SWOT analysis is a simple tool for strategy analysis, but nevertheless presents certain challenges because of its structure: all attributes identified via analysis can be difficult to precisely fit to the pre-configured sections of the four-field analysis matrix. Point of view also heavily affects application and results. Some attributes can initially be viewed as threats but as lucrative business opportunities from a different angle (e.g. from other business units) (Grant 1998). In the analysis, several complementary SWOT
matrices can be used; for example, current and future states can be plotted to separate frameworks (Lindroos 2006). The SWOT analysis matrix can also be enhanced by introducing aspects of the latest management theories (Valentin 2001). The rating and selection of the items for classification under the SWOT categories can be based on numeric scores or weighting of items on the basis of their influence. The challenge, therefore, lies in ensuring an objective approach (e.g. Evans & Wright 2009, Hosseini-Nasab 2011). Several fields and organisations, such as universities and government offices, apply SWOT in strategy analysis (Metso 2011). Hill and Westbrook (1997), however, conclude that many SWOT applications show similar long lists of characteristics, generally meaningless descriptions, and the failure to prioritise these characteristics or verify selected points. These observations suggest that SWOT analysis is not a highly effectively approach. Its most worrying aspect is that its output is not properly used in subsequent stages of the strategy process, thereby casting doubt on the reasonableness of its use in strategy analysis. Additionally, current highly competitive and unstable markets present difficulties in using the SWOT framework with difficulties given the rapidly changing and dynamic nature of selected strengths or weaknesses. The reason SWOT analysis is extensively and continuously used is that it is straightforward and necessitates little preparation (Hill & Westbrook 1997).

2.1.2 PEST analysis

The PEST analysis framework considers political, economic, socio-cultural, and technological aspects (see Figure 5 for an example). The framework is composed of four segments. The first lists the political aspects that are considered in the analysis. The second, third, and fourth segments identify economic, socio-cultural, and technological features. A target company’s strategy is evaluated against these elements when performing strategy analysis (Johnson & Scholes 1993b).
PEST analysis can be applied in strategy analysis specifically as a tool for understanding the drivers of long-term change. The four aspects in this tool can help determine why and how these changes occur in an industry and what long-term trends underlie such variations. These themes comprise phenomena such as globalisation, convergence of consumer tastes, rapid technological changes, and so on. PEST analysis enables the examination of competitor differentiation within these aspects. This examination affords enterprises a thorough comprehension of how changes may affect competitive position in markets—a valuable advantage given that the effect of change can vary depending on company competencies, skills, and market position.

2.1.3 Five Forces analysis

One of the most well-known strategy analysis frameworks is Porter’s (1980) Five Forces analysis (Figure 6), which comprises five sections: power of suppliers, power of buyers, threat of new entrants, and threat of substitutes. These sections can be used in strategy analysis as views on how the competitive position and strategy of a firm is evaluated.
Fig. 6. Porter’s five competitive forces (based on Porter 1980).

Suppliers can command power over an industry by introducing price increases or by reducing quality level. Powerful suppliers can therefore introduce cost elements from which companies in the industry cannot recover, resulting in low profitability. The power of buyers comes in the form of demand for low prices and high quality, as well as inducing competition amongst firms. The threat of new entrants that bring new capacity and lower prices heavily influence a company’s strategy within the industry, similar to how the threat of substitute products draws part of demand away from the products that the industry produces. The actual potential of these entrants depends on many factors, such as barriers to entry, which are important issues in the analysis. All the five forces compete for a fixed pool of resources, and this competition determines the ability of any individual company to earn profits in the industry. Porter views the competition as a zero-sum game; thus, more of the outside forces become

Porter also states that the competitive situation of a firm is set primarily by competition within the industry itself. This industry rivalry depends on economic and industry structure; hence, various industries can have significantly different levels of internal competition. The outside forces that influence such competition are relatively important because they highlight the different abilities of the companies to respond to these forces (Porter 1980).

Porter’s strategy analysis framework is constrained by three factors, which stem from the definition of industry and competition as a zero-sum game. First, the idea that a customer or supplier’s advantage is always gained at the expense of a company dictates that in Porter’s model, a company should always stay ahead of its stakeholders to create competitive advantage. Second, the five forces are missing several influential factors and stakeholders in the analysis, such as governments or local communities. Third, Porter’s strategy analysis framework fails to differentiate companies on the basis of their characteristics, and therefore leaves unanswered questions as to the strategy analysis that is based on a company’s internal aspects, drivers, and organisational orientation (Werther & Chandler 2011).

2.1.4 Four Corners analysis

Another strategy analysis framework proposed by Porter (1980) is the Four Corners model, which focuses on understanding competitors’ strategies but can also be used for the ‘self-analysis’ of a company’s own strategy. An example of this framework is illustrated in Figure 7.
Fig. 7. Porter’s Four Corners analysis framework (based on Porter 1980).

The analysis framework is composed of four diagnostic components: future goals, current strategy, assumptions, and capabilities. Understanding these four components provides insight into competitors’ future strategies. Each component can carry a set of questions and characteristics for the purpose of analysis (Porter 1980).

The future goals section is derived from the important perspective that companies have different goals and thus pursue varied strategic moves. For example, a competitor’s financial goals reflect its current situation or whether it is looking to implement change. Leadership team background provides indications of goal setting and rewarding practices, and external constraints can signify whether a company can be more sensitive to certain players in the industry, such as government regulators (Porter 1980).
The assumptions section presents another interesting view of a competitor’s strategy. This perspective is related primarily to two aspects: a competitor’s assumptions about a rival company and a competitor’s assumptions on the industry and the other companies in it. This component can comprise questions and characteristic elements such as perceived industry forces and a company’s relative position regarding these. Similarly, beliefs about competitor goals have influence, as well as regional, cultural, and national differences, that may be seen as orientation towards product quality at the expense of unit cost (Porter 1980).

The third component of the analysis framework is a competitor’s current strategy, which may be explicit or implicit. The aspects to consider here are value creation path, business investment focus, and the overall statements of a company’s future direction. In the simplest manner, the strategy characteristics in this section can be regarded as built from key visible operating procedures that a competitor has in place (Porter 1980).

The fourth component is capabilities, which determine a competitor’s ability to respond to strategic moves or industry changes. This section can feature a wide list of characteristics to be used as bases for analysis. Some examples are marketing skills, overall education of the employees, company patents and copyrights, or the financial strengths of a competitor. A SWOT analysis type of approach can be used to gather information, which is then incorporated into this section to complete the Four Corners strategy analysis (Porter 1980).

When completed, the analysis framework can be used to plot the offensive and defensive scenarios of a competitor or if the analysis is intended for company self-assessment, it can focus on creating strategic positioning scenarios for the company (Porter 1980).

### 2.1.5 Value Chain analysis

Value Chain analysis, also introduced by Porter (1980), is an analytical tool designed to enable understanding of how primary and support activities can be used to create value. It is a starting point for comprehending company strengths and weaknesses, as well as internal capabilities. Value is the benefit that a customer is willing to pay for in purchasing a product or service (Pitts & Lei 2006) (Porter 1980).

Figure 8 illustrates an example of Value Chain analysis. Using this tool necessitates plotting company activities and understanding the initiatives that build a firm’s competitive capabilities. A value chain shows all the activities.
needed to create value for customers, either through a product or service. The Value Chain analysis tool therefore presents an opportunity to compare this ‘chain-of-events’ value chain with that of competitors, given valuable input for strategy analysis (Pitts & Lei 2006).

![Value Chain Analysis Diagram]

**Fig. 8. Example of Value Chain analysis tool (based on Porter 1980).**

Value chain activities are divided into primary and support activities. Primary activities are directly linked to the product or service that a company wants to sell to its customers. It basically involves transforming raw materials into consumer benefits. Support activities serve as a supplement to primary activities as a company carries out a set of tasks. Together, these make up a firm’s total value chain and its foundation for competitive advantage. For the purpose of strategy analysis, Value Chain analysis helps delineate different tasks and sequential activities, enabling strategic analysis of the competitiveness of each phase compared with that of rival companies. The analysis characteristics or evaluation criteria include cost, quality, and cycle time.
2.1.6 Blue Ocean strategy analysis

The Blue Ocean approach begins from the statement that a company must eliminate competition with its traditional rivals because this is the only way that a company can succeed in the future. Two conceptual frameworks should be determined: red oceans and blue oceans. Red oceans are existing known domains and markets, whereas blue oceans are those that are unknown or non-existent until they are discovered or created. In red oceans, the boundaries of different areas are defined and commonly accepted. The rules for competition are known (Kim & Mauborgne 2005).

When competing in the red ocean, a company focuses on obtaining a large a share as possible of existing market demand. When numerous offerings are available in the market, it becomes crowded and the possibilities for profit and growth are limited. Products become commonplace, and competition colours the sea red. Conversely, a blue ocean is characterised by a potential, unutilised market place, the creation of new demand, and potential for highly profitable growth. Some blue oceans are created at locations highly distant from current red oceans, but many are created by expanding current industry boundaries. Competition becomes irrelevant because no predefined rules exist (Kim & Mauborgne 2005).

The Blue Ocean strategy analysis tool constitutes two frameworks: the strategy profile and the value innovation framework, whose examples are illustrated in Figures 9 and 10. A strategy profile analyses the current nature of the market space; that is, in which areas competitors are investing and what the competition factors are. Using a strategy profile to plot consumers’ views on company outcomes in relation to the elements of market competition provides insight into company value graphs. Value graphs easily plot the relative position of competitors and the differences in companies’ strategic choices (Kim & Mauborgne 2005).
Fig. 9. Example of Blue ocean strategy profile analysis tool.

However, a company’s transition into a growth path does not happen through comparison with competitors or by offering products or services that slightly differ from those offered by competitors. Changes in strategy profile necessitate a shift in focus from competitor benchmarking and examining demands from existing customers to addressing the needs of non-customers. To succeed in shifting its focus, a company can use another analytical tool: the value innovation framework (Figure 10). To create new value graphs and eliminate the need to choose differentiation and cost focus, companies can use four questions: (1) What commonly accepted factors can be eliminated? (2) What factors should be minimised in relation to the standard approach? (3) What factors should be highlighted more strongly in the industry? (4) What new factors should be created in the industry? The first two questions help companies reduce the cost structure, and the last two facilitate focus on how to build and create new value for customers (Kim & Mauborgne 2005).

The Blue Ocean approach has been tested by Kim et al. (2007) for the practical steps companies can take to pursue blue oceans, and discussed by Siegemund (2008) in the context of small- and mid-sized companies.
Fig. 10. Blue Ocean strategy value innovation framework (based on Kim & Mauborgne 2005).

2.2 Strategy orientations

‘The young lieutenant of a Hungarian detachment in the Alps sent a reconnaissance unit into the icy wilderness. It began to snow immediately, and unexpectedly continued to snow for two days. The unit did not return. The lieutenant feared that he had dispatched his own people to death. However, on the third day the unit came back. Where had they been? How had they made their way? “Yes”, they said: “We considered ourselves lost and waited for the end. We did not have any maps, compasses or other equipment with which to ascertain our position or probable route out. But then one of us found an old tattered map in a seldom used pocket. That calmed us down. The map did not seem to quite fit the terrain but eventually we discovered our bearings. We followed the map down the mountain and after few wrong turns found our way”. The lieutenant borrowed the map and had a good look at it. “This isn’t a map of the Alps”, he said, “It is a map of the Pyrenees”’.

A strategy orientation or focus can be described as the underlying attributes of a company’s strategy, which directs decision making and orients the activities within the company towards a specific course. It serves as an avenue for innovation and guidance in decision making, thereby fostering an environment conducive to strategising and formulating the actual strategies followed by the company (Cummins et al. 2003).

2.2.1 Strategy typology

Miles et al. (1978) and Miles and Snow (1978) proposed four distinct types of strategy classification: defenders, prospectors, analysers, and reactors. The classification is based on the assessment of how a company responds to the following challenges:

- entrepreneurial, which defines an organisation’s product–market domain;
- engineering, which focuses on technology choice and production and distribution processes; and
- administration, which involves the formalisation, rationalisation, and innovation of an organisation’s structure and policy processes.

**Defenders** are companies that have a stable set of products or services, and compete primarily on the basis of price, quality, and service. Defenders face the entrepreneurial problem of how to maintain a stable share of the market; hence, they function best in stable environments. A common solution to this problem is cost leadership, and these organisations achieve success by specialising in particular areas and using established and standardised technical processes to maintain low costs. Defenders also tend to be vertically integrated to achieve cost efficiency. These organisations encounter the administrative problem of having to ensure efficiency; thus, they require centralisation, formal procedures, and discrete functions. Because their environments change gradually, defenders can rely on long-term planning. The defender strategy entails a decision not to aggressively pursue new markets but rather a drive to seal off a portion of the total market to create stable, hard-to-enter domains for competitors.

**Prospectors** are defined as companies that enjoy a leading position in the market and have a very broad product–market definition. Prospector organisations face the entrepreneurial problem of locating and exploiting new product and market opportunities. These organisations thrive in changing business environments that have an element of unpredictability, and succeed by constantly
examining the market in a quest for new opportunities. Moreover, prospectors have broad product or service lines and often promote creativity over efficiency. They face the operational problem of not being dependent on any one technology. Consequently, prospector companies prioritise new product and service development and innovation to satisfy new and changing customer needs and demands, as well as to create new demands. The administrative problem encountered by these companies is how to coordinate diverse business activities and promote innovation. Prospectors solve this problem by adopting decentralisation, employing generalists (not specialists), having few levels of management, and encouraging collaboration amongst different departments and units. The prospector strategy can be seen as the most aggressive of the four. For prospectors, having a reputation as an innovator both in product and market development is important.

Companies that have the characteristics of both the aforementioned classifications are called *analysers*, and they seek a balance between stable and changing domains. Because analyser organisations share characteristics with prospectors and defenders, they are confronted with the entrepreneurial problem of how to maintain their shares in existing markets, as well as how to identify and exploit new market and product opportunities. These organisations contend with the operational problem of maintaining the efficiency of established products or services, whilst remaining flexible enough to pursue new business activities. Consequently, they seek technical efficiency to maintain low costs, but also emphasise new product and service development to remain competitive under market changes. The administrative problem that these companies struggle with is how to manage technical efficiency and competitiveness. Similar to prospector organisations, analyser organisations cultivate collaboration amongst different departments and units. They are characterised by balance—that between being a defender and prospector organisation—and the drivers of strategy for these companies are minimising risk whilst maximising opportunities for profit.

*Reactor* organisations do not have a systematic strategy, operational driver, or structure, and exhibit inconsistent and unstable actions. They are not prepared for the changes that they face in their business environments. If a reactor organisation has a defined strategy and structure, it is no longer appropriate for the environment it currently occupies. Reactors have no proactive strategy. They react to events as they occur and their response is inappropriate for the situation. Miles *et al.* (1978) identified three reasons organisations become reactors:
- Top management may not have a clearly articulated organisational strategy.
- Management does not fully shape the organisational structure and processes to fit a chosen strategy.
- Management tends to maintain the organisation’s current strategy–structure relationship despite overwhelming changes in environmental conditions.

The failure to execute defender, prospector, or analyser strategies can transform an organisation’s strategy into a reactor approach.

The Miles and Snow typology has been subjected to numerous investigations and wide-ranging academic discussion. One of the most relevant studies is Slater and Narver’s (1993) analysis of typology and product market performance. The authors provided guidance for managers in businesses with different strategy orientations, and challenged the reactor definition.

**2.2.2 Market orientation in strategy**

Brem and Voigt (2009) defined market pull as that ‘characterised by unsatisfied customer that creates new demand, which requires problem solving’. The impulse comes from individuals or groups that express their demands; this impulse is then used in directing focus towards company targets, resources, and activities so that the demand can be satisfied. Day (1994) listed market-driven company features as a set of beliefs that prioritises customer interest, the ability to generate and use information about customers and competitors, and the ability to coordinate resources for customer value creation. The author added that market orientation represents superior skills in understanding and satisfying customers. According to Day (1998), market-driven companies comprehensively understand their markets, so that they can identify valuable customers. Thus, these companies can make strategic choices and implement these consistently. Examples of such choices are customer requirement prioritisation that is in favour of the most valuable customers or the service levels offered to these consumers. The characteristics of market-driven organisations that follow a market-oriented strategy are as follows: they (1) offer superior solutions and experience; (2) focus on customer value and the ability to convert customer satisfaction into loyalty; (3) energise employees; (4) anticipate competitor moves through intimate market understanding, viewing marketing as an investment and not as costs; (5) and leverage brand assets (Day 1998). Customer value is the fundamental benefit perceived by a buyer/customer; it is a benefit that the customer is willing to invest in by purchasing the service or
product. Slater and Narver (1995) described market orientation as the continuous collection of target customers' needs and competitors' capabilities, indicating that a market-oriented strategy drives the operational mode and organisation of a company to enable the collection and analysis of customer needs. This description is consistent with that of Hartline et al. (2000), who defined ‘market orientation to be organisational culture that creates effectively and efficiently superior value to buyers and thus excellent business performance’. Slater and Narver (1998) described the market-oriented approach as a ‘long-term, proactive, commitment to understand customer needs, both expressed and latent, and develop innovate solutions for ensuring high customer value’. At the same time, market-oriented companies understand that different types of customers provide different levels of information and that customer voice is only one source of information for strategy formulation. This perspective of balance is a significant part of market-oriented strategy execution given that it prevents the loss of company profitability or the over execution of customisation efforts, which can lead to the loss of company identity and branded assets. The sustainable competitive advantage achieved by the market-oriented strategy can be regarded as being based on intimate knowledge of customers; the ability to select which customers to serve; the capability to offer them a unique product or service that was designed on the basis of customer knowledge; and the ability to efficiently and effectively deliver such product or service, as supported by strategy focus.

2.2.3 Product orientation in strategy

The largest difference in perspectives between product- and market-oriented companies is that the strategy of the former is driven by identifying as many uses and customers for its product as possible, whereas that of the latter focuses on listening to its customer in an effort to determine the most suitable products and then integrating these for value-added solutions (Galbraith 2002). Galbraith (2002, 2005) defined the characteristics of product-centric companies from 13 different viewpoints. For the strategy orientation, the most important is the point of view that highlights goals, main offerings, value creation routes, customer definitions, organisational setup, reward priorities, priority setting bases, and pricing. Galbraith (2002) also stated that the goal of product-centric companies is to create the best product for its customers. Best product is defined as that which is clearly distinguished from those of competitors and can be sold-in for the customer using these rationales. The value creation route comprises cutting-edge
products, useful features, and new applications. Organisations are built around product creation given that product business units (for example) exist. The organisational setup focuses on product profit centres, and the reward focuses on market share, amongst others. Top management focuses on product reviews; the logic is that more product features and capabilities also create more value, thereby driving sales. Priority setting of strategic actions is therefore based on a portfolio of products, an approach that corresponds to the product-oriented point of view as its main offering. The highest customer priority is given to the most valuable customers, who use the new features and applications created by a product-oriented company. This approach is important because the product-oriented strategy fundamentally focuses on the creation of competitive advantage via ultimate product capabilities, making the adoption of new features essential. Customers want to take advantage of feature richness, and this desire prevents them from considering other options with fewer features or products that lack applications. Thompson (2000) described the transformation journey of an inward-focused product-driven company via a market-focused company into a customer-centric enterprise. The characteristics of a company focused on core competencies, with a certain inward-focus, can also be identified as part of a product-oriented company’s strategy (e.g. Hamel & Prahalad 1994).

The aspects of organisational setup and reward priorities, together with the measurement principles of success, are essential aspects to consider. A product-oriented company measures its success by market share position, number of new products created, and the capability to lead by latest product features and top-end applications.

In this research, a product-focused or product-centric strategy is considered synonymous to a product-oriented strategy.

2.2.4 Technology orientation, technology push in strategy

Technology push is a term used for the approach in which technological innovation is pushed to the market beginning from internal development via production to the marketing function. In the ‘market pull’ approach, the signal for development starts from expressed market needs (Martin 1994). This approach is illustrated in Figure 11.

Given the nature of this approach, the technology orientation in strategy—pushing new technology to market—presents greater uncertainty for success in the marketplace, especially if the demand for such technology has not been
explicitly expressed. The characteristics of technology orientation are large R&D investments, the drive for substantial progress in technology development, and long-term focus and duration of development projects. Apart from uncertainty of market demand, that about a technology itself, its feasibility, and maturity also exists (e.g. Lynn & Heintz 1992, Hamel & Prahalad 1991, Scouder 1989).

According to Walsh et al. (2002) the technology push strategy can be based on a company’s internal competencies, or on the external signals of disruptive technology. Internal development can lead to new technology or major improvements over existing ones, and the technology push that originates from external sources causes the creative ‘destruction’ of old technologies. Overall, the technology-oriented strategy is aimed at creating competitive advantage from technological advancements and the adoption of new technologies (Chau & Tam 2000).

2.2.5 Customer focus in strategy

Tseng and Piller (2003) defined customer focus as placing the customer at the centre of the enterprise, and building processes and systems towards serving customers as individuals. Customer culture within organisations basically pertains to pondering over key decisions, investments, and processes from the customer’s point of view. It is about putting the customer first both in everyday business operations and strategic planning initiatives. This task is accomplished on the
basis of a company’s inbuilt values, behaviour models, and competencies, which in the end transform a company’s culture into a customer-focused one (Botero 2007). Slater and Narver (1998) differentiated the customer-led from the market-oriented strategy by stating that the former is viewed as a reactive approach that focuses on the expressed desires of customers, and fails to deliver sustainable competitive advantage by failing to recognise unexpressed customer requirements, which can be a source of innovation. Connor (1999) criticises the aforementioned authors’ approach for its neglect of firm size and the short-term survival needs of businesses as factors; these approaches should be balanced. In response, Slater and Narver (1999) clarified their position on stating the nature of the market learning continuum, and asserted that exclusively customer-led companies do not achieve the full benefits of being market oriented. They compared the customer-centric approach with Miles et al.’s (1978) typology, in which any chosen strategy may be successful. In the market-oriented strategy continuum, however, the more advanced businesses perform better. Hartline et al. (2000) defines customer orientation as a set of beliefs that prioritises customer interest, but that this prioritisation should be balanced with other stakeholders’ requirements. The authors also combine the aspects of customer orientation and market orientation. Kelly (1992) concludes that ‘customer focus can be result of mutually beneficial long-term relationship with customers’.

Mass customisation and personalisation approaches are the essential characteristics of customer focus at the strategy level. The basic premise of being customer-centric in mass customisation lies in satisfying individual customer requirements without any significant increase in production or distribution costs. The competitive advantage of mass customisation is based on combining the efficiency of mass production with differentiation possibilities. Agile manufacturing, focused factory production, flexible specialisation, lean manufacturing, and customer relationship management can also be as adopted as strategies for fulfilling changing customer needs (Tseng & Piller 2003).

Mass customisation characteristics include a stable process that is not re-invented for each customer but a core process that is sufficiently flexible to create on the basis of different customer needs. A pre-built ‘solution base’ that sets the boundaries of differentiation exists. Focus is also directed towards relationship building (for example, collection of data on customer requirements). Overall customisation is kept under cost control so that price does not increase and consequently result in a possible market segment switch (Tseng & Piller 2003).
Personalisation characteristics include frequent communication and interaction with customers. The process is information intensive, and has been especially adopted by Internet-based service businesses. Information on customers is transformed into product features or attributes. Recommendation is key in the personalisation strategy because recommendations that are based on customer attributes can be used to propose a set or bundle of existing standard products, thereby creating added value for customers with minimum effort. This capability to deliver personal configuration is one of the critical components of building personalisation in strategy (Tseng & Piller 2003).

The customer focus in strategy in the current study is considered to have the characteristics of the customer-centric approach, mass customisation, and personalisation.
3 Research contribution

3.1 Article I results

The first article answers to the research question 1 (RQ1). The developed strategy analysis framework that combines the life cycle phase and strategy type is presented in Table 3. This framework combines the life cycle phases—introduction, growth, maturity, and decline—with the strategy types proposed by Miles et al. (1978). The strategy types fitted to this framework are defender, prospector, analyser, and reactor. The characteristics used in the analysis are presented in Table 4.

The article shows that the developed strategy analysis framework can extract valuable information on case business strategy development during different life cycle phases.

The case business net sales figures indicate that the case business follows the selected life cycle framework: the s-curve with phases. The ‘introduction’ phase can be considered as that running from 1990 to 1994. The ‘growth’ phase can be regarded as the stage observed in 1995 to 2000. Before 1995 a significant growth was observed, but in the review of total growth during the total time span of 20 years, the period before 1995 is considered part of the introduction phase in the present research. The period from 2001 to 2006 is considered the ‘maturity’ phase, which is characterised by slow growth. The case business is regarded as being in the ‘decline’ phase from 2007 onwards. This phase is characterised by significant decline in net sales figures.

According to the analysis, the case business strategy from 1990 to 1994 can be categorised as a prospector strategy, a result consistent with the presented characteristics of the prospector classification. The case business was the first to pursue a newly emerged market space, a development brought forth by technological advancement in the telecommunications arena. In particular, the case business was the first to gain entry into digital wireless communication in the form of the Global System for Mobile Communications (GSM) standard.

In 1995 to 2000, the case business continued to exhibit prospector characteristics, with this approach supported by a broad range of products and involvement in several technology areas. The case business also systematically focuses on large investments in new technology development. The establishment
of regional decentralised organisation further supports the case business categorisation as a prospector.

In 2001 to 2006, the case business strategy took on defender and analyser characteristics. The case business possesses an established set of products. Market share is protected by actively pursuing cost leadership and implementing economies of scale. A work process is created to ensure new product deployments, and decisions are made through a formal decision-making process. The case company is also considered an analyser during this period, being characterised as a matrix type of organisation. This organisational structure was established in 2002 along with the adoption of a highly segmented market understanding.

From 2007 to 2009, the case business strategy was of analyser type. During this period, the business exerted efforts to maintain its current position in existing markets and pursued new business opportunities by acquiring Internet service business companies. This approach is consistent with strategy focus analysis and the theory of jumping from the s-curve of product focus to the s-curve of service focus. The company faces the challenge of maintaining low cost to solidify its position in existing markets and the need for flexibility for new product and business opportunities. The necessity of product customisation also defined strategic product decisions. The case business operated organisationally in matrix mode.

### Table 3. Strategy analysis framework for life cycle and strategy type.

<table>
<thead>
<tr>
<th>Lifecycle phase</th>
<th>Years</th>
<th>Strategy type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>yyyy-yyyyy</td>
<td>Defender</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Prospector</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Analyser</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Reactor</td>
</tr>
<tr>
<td>Growth</td>
<td>yyyy-yyyyy</td>
<td>Defender</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Prospector</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Analyser</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Reactor</td>
</tr>
<tr>
<td>Maturity</td>
<td>yyyy-yyyyy</td>
<td>Defender</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Prospector</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Analyser</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Reactor</td>
</tr>
<tr>
<td>Decline</td>
<td>yyyy-yyyyy</td>
<td>Defender</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Prospector</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Analyser</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Reactor</td>
</tr>
</tbody>
</table>

46
Table 4. Strategy typology characteristics used in the analysis.

<table>
<thead>
<tr>
<th>Strategy type/dimension</th>
<th>Defender</th>
<th>Prospector</th>
<th>Analyster</th>
<th>Reactor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product–market domain</td>
<td>Narrow and stable</td>
<td>Broad and continuously</td>
<td>Segmented and carefully adjusted</td>
<td>Possibilities</td>
</tr>
<tr>
<td></td>
<td></td>
<td>expanding</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technology goal</td>
<td>Cost efficiency</td>
<td>Flexibility and innovativeness</td>
<td>Technological synergy</td>
<td>Developing projects and finishing them</td>
</tr>
<tr>
<td>Structure</td>
<td>Functional and line authority</td>
<td>Products and or market oriented</td>
<td>Matrix oriented</td>
<td>Tight formal authority</td>
</tr>
</tbody>
</table>

3.2 Article II results

The second article answers to the research question 2 (RQ2). The developed strategy analysis framework is presented in Table 5. The framework enables the analysis and characterisation of the strategy orientation of the case business and the changes it experienced over the examined period. Figure 12 presents the orientation map, which can be used to plot the changes in the four-way strategy orientation.

The strategy orientation of the case business in 1990 to 1994 is characterised by technology orientation, technology push. In the first part of this period, the business decided to concentrate on the telecommunications business, which is an explicit sign of a long-term commitment to development within the technology-based market. This move was followed by investments focus on R&D activities to pursue the newly emerged business opportunities presented by adopting GSM. During this period, the case business heavily invested in R&D, as evident from the company’s decision to open new R&D sites in Oulu and Salo. Production investments were also considerable during this period. The case business actively pursued advancements in technology to achieve competitive advantage.

In 1995 to 2000, the case business continued to have the characteristics of the technology-oriented strategy, which can be seen as the continuance of the large investments in R&D, followed by focus on the international standardisation of new technologies. The dominant characteristic, however, was product focus as attested to by the company’s commitment to developing a portfolio of products to satisfy the needs of different customer segments. In particular, the corporate and private users’ needs were identified. The case business aimed to develop the best product, with particular focus on features such as the design and latest features of mobile phones. During this period, customer focus the form of regional
organisations was also embraced and mass customisation needs arose. An example is the customisation of the mobile phone keyboard for Chinese users. Overall, the differentiation is based on actual collected and expressed customer requirements.

In 2001 to 2006, the case business continued to adopt a strong product focus, but less emphasis on customer focus. The strategy focus seemed to be directed towards internal development initiatives and the development of the company’s expanding product portfolio. In 2001, 22 new mobile phone models were launched, and in 2002, 34 new mobile phone models were introduced. In 2003, 2005, and 2006, a staggering 40 new mobile phone models were launched each year. The case business focused on the development of new features and responding the different customer needs with a large variety of products. An example is the development of colour displays, QWERTY keyboards, and megapixel cameras as new high-end features. The case business strategy exhibited the company’s drive to find new purposes for using its products (e.g. in gaming). The decision to establish a new organisational setup of nine product business units to optimise economies of scale and drive market share acquisition towards the established long-term target is characteristic of a product-focused organisation.

The period 2007 to 2009 showed indications of change in the case business strategy. The product dimension continued to be strong but the market orientation also began to emerge. The company implemented a strategic drive to pursue the development of Internet-based services (e.g. music and navigation services) via the acquisition of several Internet companies. The more long-term commitment to understanding customer needs and delivering holistic solutions for these needs (e.g. the company established a dedicated solutions unit) also became evident at the end of the examined period. Signs of exclusive customisation efforts for key customers of certain models were also apparent. The company’s actions are consistent with customer-focus characteristics. The changes in the strategy four-way focus are illustrated in Figure 13.
**Table 5. Strategy orientation analysis framework.**

<table>
<thead>
<tr>
<th>Strategy orientation characteristics</th>
<th>Technology orientation, technology push</th>
<th>Market orientation, Market pull</th>
<th>Customer focus</th>
<th>Product focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Large research and development investments</td>
<td>a) Ability to identify customers</td>
<td>a) Focus on expressed customer needs</td>
<td>a) Focus on creation of the best product</td>
<td></td>
</tr>
<tr>
<td>b) Drive for huge technological advancements</td>
<td>b) Focus on customer value</td>
<td>b) Stable customisation process with boundaries</td>
<td>b) Focus on features and new applications</td>
<td></td>
</tr>
<tr>
<td>c) Long-term focus and duration of development initiatives</td>
<td>c) Ability to generate information about customers</td>
<td>c) Collecting data on and the requirements of customers</td>
<td>c) Creation of portfolio of products</td>
<td></td>
</tr>
<tr>
<td>d) Adoption of new technologies</td>
<td>d) Long-term proactive drive to understand customer needs</td>
<td>d) Cost-focused customisation and differentiation</td>
<td>d) Inward-focused strategy approach</td>
<td>‘core competencies’</td>
</tr>
</tbody>
</table>
Fig. 12. Four-way orientation framework map.

Fig. 13. Four-way orientation dynamics.
3.3 Article III results

The third article answers to the research question 3 (RQ3). The developed strategy analysis framework combines the strategy orientation analysis tool with the market share analysis, and builds a new framework that can be used to examine strategy orientation in relation to market share. The developed framework extracts new information and creates a valuable analysis tool for market share-based strategy orientation analysis. The developed analysis framework and the strategy orientation characteristics used in the analysis are presented in Tables 6 and 7, respectively.

According to the article, 1998 to 2000 was characterised by a technology-oriented strategy, which can be viewed as the continuance of the large investments in R&D, followed by a focus on the international standardisation of new technologies. The dominant characteristic, however, is product focus as evidenced by the emphasis on the development of a portfolio of products to satisfy the needs of different customer segments. Corporate and private users’ needs were particularly delineated. The company aimed to develop the best product, with strong focus on aspects such as the design and latest features of mobile phones. During this period, the company espoused customer focus in the form of regional organisations; mass customisation needs also arose. An example of the company’s response to this issue is the customisation of a mobile phone keyboard for Chinese users. Differentiation was driven by the varied customer bases as different customer requirements were collected. The market share of the case business expanded strongly in this period, reflecting an increase from 22.9% to 30.6%.

The strong product focus in the company strategy persisted in 2001 to 2003, and less emphasis was placed on customer focus. The company appeared to concentrate on internal development initiatives and the development of its expanding product portfolio. In 2001 and 2002, 22 and 34 new mobile phone models were launched, respectively. In 2003, 2005, and 2006, a remarkable 40 new mobile phone models were launched each year. The strategy orientation in this period is regarded as highly product focused. The market share of the company was pegged at 35.1% and stabilised at this level during this period.

The focal points of the company’s strategy in 2004 to 2006 are developing new features and responding to different customer needs with wide-ranging products (e.g. colour displays, QWERTY keyboards, megapixel cameras as new high-end features). A drive to find new purposes for using the company’s products
(e.g. in gaming) was also evident. The company decided to establish a new organisational setup of nine product business units to optimise economies of scale and increase market share towards facilitating the realisation of the established long-term target. This action is a reflection of a product-focused organisation. The market share declines in the beginning of the period but rises to 34.8% by end of the period.

Indications of change in the case business strategy were observed in 2007–2009. The product dimension continued to thrive but emphasis on market-orientation also began taking place. The company was determined to develop its Internet service division, which was initiated through the acquisition of several Internet-based companies. The more long-term commitment to understanding customer needs and delivering holistic solutions for these needs emerged during the examined period. Signs of exclusive customisation efforts for key customers of certain model were also observed. Such company initiatives are consistent with customer-focus characteristics. The market share of the company reached its highest within the examined period, at 38.6% in 2008. However, this was followed by a decline towards the end of the examined period.

<table>
<thead>
<tr>
<th>Label</th>
<th>Period 1</th>
<th>Period 2</th>
<th>Period 3</th>
<th>Period 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Years</td>
<td>yyyy-yyyy</td>
<td>yyyy-yyyy</td>
<td>yyyy-yyyy</td>
<td>yyyy-yyyy</td>
</tr>
<tr>
<td>Market share-%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Technology orientation</td>
<td>Characteristics</td>
<td>Characteristics</td>
<td>Characteristics</td>
<td>Characteristics</td>
</tr>
<tr>
<td>Product focus</td>
<td>Characteristics</td>
<td>Characteristics</td>
<td>Characteristics</td>
<td>Characteristics</td>
</tr>
<tr>
<td>Customer focus</td>
<td>Characteristics</td>
<td>Characteristics</td>
<td>Characteristics</td>
<td>Characteristics</td>
</tr>
<tr>
<td>Market orientation</td>
<td>Characteristics</td>
<td>Characteristics</td>
<td>Characteristics</td>
<td>Characteristics</td>
</tr>
</tbody>
</table>
Table 7. Summary of strategy orientation characteristics used in the analysis framework.

<table>
<thead>
<tr>
<th>Strategy orientation characteristics</th>
<th>Technology orientation, technology push</th>
<th>Market orientation, market pull</th>
<th>Customer focus</th>
<th>Product focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Large research and development investments</td>
<td>a) Ability to identify customers</td>
<td>a) Focus on expressed customer needs</td>
<td>a) Focus on creation of the best product</td>
<td></td>
</tr>
<tr>
<td>b) Drive for huge technological advancements</td>
<td>b) Focus on customer value</td>
<td>b) Stable customisation process with boundaries</td>
<td>b) Focus on features and new applications</td>
<td></td>
</tr>
<tr>
<td>c) Long-term focus and duration of development initiatives</td>
<td>c) Ability to generate information about customers</td>
<td>c) Collecting data on the requirements of customers</td>
<td>c) Creation of portfolio of products</td>
<td></td>
</tr>
<tr>
<td>d) Adoption of new technologies</td>
<td>d) Long-term proactive drive to understand customer needs</td>
<td>d) Cost-focused customisation and differentiation</td>
<td>d) Inward-focused strategy approach ‘core competencies’</td>
<td></td>
</tr>
</tbody>
</table>

3.4 Article IV results

The fourth article responds to the research question 4 (RQ4). The developed analysis framework combines the strategy orientation framework with the strategy typology framework of Miles et al. (1978). The findings from the article show that the developed framework can analyse case businesses strategy, show changes in strategy focus, and generate new information in the form of strategy analysis. The created analysis framework is presented in Table 8.

According to the analysis, the mobile phone case business strategy in 1990 to 1994 is characteristic of a product-oriented prospector. The strategy focus during this period was to create the best products for the new market, which emerged from the GSM standard. The case business was one of the first to enter this new product–market domain created by technology advancements in wireless communication. Thus, the value creation channel was the creation of applications for this new technology. The operational driver was investment in R&D, so that new market opportunities can be exploited at full scale. The product-orientated
strategy directed focus towards internal capability development, together with securing adequate productisation capacity. This product-oriented focus was especially evident in the company’s establishment of new R&D sites.

The mobile phone case business continued to exhibit the characteristics of a product-oriented prospector in 1995 to 2000, in which the strategy focus and operational driver was the creation of a broad portfolio of products with the most advanced features. Developing the best product with the latest industrial design was of particular significance. The case business was involved in several technology areas and built efficient product creation capabilities. The product–market domain was constantly expanded through the identification of new customer segments. Thus, the drive from a strategy point of view is to find as many customers as possible for the products that the case business is creating.

From 2001 to 2006, the mobile phone case business strategy can be categorised as of product-oriented defender type. The case business established its position as a market leader, and its strategy at this point was to protect this position. It established a product business unit to realise economies of scale in product creation and delivery. During this period, launched more than 40 new mobile phone models in consecutive years, aiming to create the widest portfolio of products in the industry. These new models contain the latest features and form factors, such as computer-like keyboards for messaging and digital camera capabilities.

In 2007 to 2009, the case business can be defined as a market-oriented analyser. Significant change in the case business strategy was observed as the company searched for new market areas whilst maintaining its current position in the market where it operates. The product–market domain was carefully adjusted and the case business operated in matrix mode. The company exhibited efforts to build a closer relationship with customers and establish a specific solutions unit to satisfy their need to obtain the most suitable product. Similarly, the strategic customisation efforts reflected a rise in prioritising customer satisfaction and customer information collection.

The second case company follows the product-oriented analyser strategy from 1994 to 2000. The drive was to go for the position of leading sports equipment manufacturer in the world. To achieve this target, the case company consistently invested in selected existing business areas, such as car and forklift importing. Simultaneously, it pursued new business opportunities through organic growth and most important, through the acquisitions of several companies. The existing business was in good condition, and was able to support the financial
operations needed for search for new business domains. In the existing business areas, the focus was to maintain efficient production and operations. The new business domains acquired during this timeframe were Atomic (the ski equipment manufacturer), Suunto, and DeMarini. All of the acquisitions broadened the product portfolio of the case business, and its strategy was clearly one of considerable focus on products. The innovation within R&D was directed towards improving the existing capabilities of the products and creating new technological solutions to be able to expand the product portfolio. Improvements in products characteristics were sought, from new material compositions to product designs. The world knows that brands play an essential role in the efforts to develop a broad and widely known product portfolio.

The strategy of the case company in 2001 to 2008 can be categorised as a product-oriented defender strategy. The company earned the position of leading sports equipment manufacturer in the world during this period, and supported by a strong financial position. The company maintained this position by creating a wide product portfolio, which was built from summer and winter sports gear, as well as outdoor and indoor sports equipment. This approach was intended to protect the company against seasonality and other sudden causes of volatility (e.g. weather conditions). The case company focused on building long-term relationships with retail and distribution, and making sure that supply chain operations are efficient. The integrated and transparent supply chain management was intended to achieve cost efficiency. The narrow definition of the target product–market domain also supported the perspective of strong focus on core competencies and building an unbeatable position within this segment/product domain. The company also carried on with its acquisitions to concentrate further on sports equipment, and divested from the original business area of tobacco license manufacturing. The company implemented significant reorganisations and searches for efficient cost positions to guarantee competitiveness and deny rivals entry into the business domain.
<table>
<thead>
<tr>
<th>Strategy orientation</th>
<th>Strategy typology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Defender</td>
<td>Prospector</td>
</tr>
<tr>
<td><strong>Market orientation</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Strategy focus:</strong></td>
<td>Strategy focus:</td>
</tr>
<tr>
<td>-Delivering most suitable product for the customer</td>
<td>-Delivering most suitable product for the customer</td>
</tr>
<tr>
<td><strong>Product-market domain:</strong></td>
<td>Product-market domain:</td>
</tr>
<tr>
<td>-Narrow and stable</td>
<td>-Broad and continuously expanding</td>
</tr>
<tr>
<td><strong>Value Creation:</strong></td>
<td>Value Creation:</td>
</tr>
<tr>
<td>-Customer value</td>
<td>-Customer value</td>
</tr>
<tr>
<td><strong>Operational Driver:</strong></td>
<td>Operational Driver:</td>
</tr>
<tr>
<td>-Cost efficiency</td>
<td>-Flexibility and innovativeness</td>
</tr>
<tr>
<td>-Customer information</td>
<td>-Customer information</td>
</tr>
<tr>
<td><strong>Culture:</strong></td>
<td>Culture:</td>
</tr>
<tr>
<td>-Long-term proactive drive to understand customer needs</td>
<td>-Long-term proactive drive to understand customer needs</td>
</tr>
<tr>
<td><strong>Organisation:</strong></td>
<td>Organisation:</td>
</tr>
<tr>
<td>-Functional and line authority</td>
<td>-Market oriented</td>
</tr>
<tr>
<td><strong>Product orientation</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Strategy focus:</strong></td>
<td>Strategy focus:</td>
</tr>
<tr>
<td><strong>Product-market domain:</strong></td>
<td>Product-market domain:</td>
</tr>
<tr>
<td>-Narrow and stable</td>
<td>-Broad and continuously expanding</td>
</tr>
<tr>
<td><strong>Value Creation:</strong></td>
<td>Value Creation:</td>
</tr>
<tr>
<td>-New features and applications</td>
<td>-New features and applications</td>
</tr>
<tr>
<td><strong>Operational Driver:</strong></td>
<td>Operational Driver:</td>
</tr>
<tr>
<td>-Cost efficiency</td>
<td>-Flexibility and innovativeness</td>
</tr>
<tr>
<td>-Creation of portfolio of products</td>
<td>-Creating portfolio of products</td>
</tr>
<tr>
<td><strong>Culture:</strong></td>
<td>Culture:</td>
</tr>
<tr>
<td>-Inward-focused 'core competencies’</td>
<td>-Inward-focused 'core competencies’</td>
</tr>
<tr>
<td><strong>Organisation:</strong></td>
<td>Organisation:</td>
</tr>
<tr>
<td>-Functional and line authority</td>
<td>-Product oriented</td>
</tr>
</tbody>
</table>
3.5 Results summary

The research contribution of this study is a set of strategy analysis frameworks. Each of the analysis frameworks answers a specific research question. The contributions are summarised in Figure 14. Each framework can be used individually, but together, they constitute an analysis toolbox that can generate valuable information from analysis targets. These frameworks can plot current conditions, evaluate previous developments, and provide insights into future development directions.

<table>
<thead>
<tr>
<th>RQ4</th>
<th>RQ2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orientation with Typology framework</td>
<td>Orientation framework</td>
</tr>
<tr>
<td>RQ1</td>
<td>RQ3</td>
</tr>
<tr>
<td>Typology with lifecycle framework</td>
<td>Orientation with market share framework</td>
</tr>
</tbody>
</table>

Fig. 14. Strategy analysis frameworks and research questions.
4  Discussion

4.1  Theoretical implications

The theoretical background of this study is built from strategy analysis, especially on the strategy analysis frameworks and strategy orientation domains. In its theoretical synthesis, this dissertation combines the perspectives of the strategy analysis frameworks and strategy orientation, thereby creating new strategy orientation analysis frameworks.

In the first article, ‘Strategy changes analysis using life cycle framework and strategy typology’, the concept of business life cycle (in the form of an s-curve) is introduced combined with the viewpoint that the strategies of companies change over time and that these changes are in line with variations in life cycle position. The Miles and Snow (1978) strategy typology is combined with this viewpoint to create a basis for the strategy analysis framework, which can be used to analyse strategy changes over life cycle. This is a new framework that combines the existing theoretical concepts of life cycle and typology, thereby serving as an interesting framework for scholars. The need to analyse strategy change over life cycle is becoming more important because of the changes in the speed of technological advancement; an increasing number of new disruptive technologies enter the high-technology realm. Such technologies include Internet-based services and the ongoing convergence of business domains.

In the second article, ‘Strategy orientation analysis in the mobile phone business’, the concept of strategy orientation is introduced from the perspective of the four-way strategy orientation and focus. The characteristics of technology orientation, market orientation, product focus, and customer focus are summarised from various references, forming a basis for the four-way analysis framework. This analysis framework is also new, and combines the two dominant dimensions in current strategy thinking: market-based and product-based strategies. Examples of market-based strategies are evident from the perspectives of Porter (1980) (differentiation or cost leadership), whilst the viewpoints of Hamel and Prahalad (1994) (core competencies) are a good representation of product-based strategies. This framework enables analysis in both of these domains through the identification of key characteristics. Product-level strategies [which are in many occasions derived from a company’s core competencies in terms of technology (technology push)] and product-centric
strategies make up the analysis framework’s product-based strategy section. The market-based strategy section is built from customer-focused and market-oriented strategies (market pull). The developed framework brings together these orientations, enabling researchers to analyse companies or company strategies with the use of one framework. It also contributes to the discussion on market and product orientation by analysing and synthesising the perspective currently adopted by many scholars.

In the third article, ‘Analysis of strategy focus vs. market share in the mobile phone case business’, the orientation analysis framework is improved by adding the market share dimension. This is a new framework that serves as an interesting view of combining the business metrics of market share with the qualitative analysis of orientations. This interesting framework contributes to the discussion on qualitative and quantitative frameworks and their synthesis.

In the fourth article, ‘Analysis of strategy by strategy typology and orientation framework’, the theoretical foundations of the strategy typology of Miles and Snow (1978) are combined with the strategy orientation dimension. This framework serves as an avenue for scholars to analyse interesting typological characteristics in relation to strategy orientations, and expands the current use of the strategy typology with a novel approach.

Overall, the entire research brings new knowledge in the form of new strategy analysis frameworks, as well as interesting findings from the empirical case materials. The analysis frameworks built by enhancing the Miles and Snow (1978) typology extend the discussion and confirm the applicability of this highly referred typology to the special cases presented in the present work. The change in typology over life cycle is an interesting phenomenon and shows that case companies move from being prospectors to defenders under continuous growth, and then seek balance under slow growth by transitioning into analysers. A strategy can be successful in one growth phase yet a failure in another. The same conclusion was drawn by Moore (2000). In the strategy orientation realm, the current study extends the ongoing academic discussion on product and market orientation. This research also creates summary of the orientation characteristics gathered from several academic studies. These summaries are available in table format as part of the created analysis frameworks. The results show that a technology/product-oriented strategy can transform into market/customer orientation over time. This change can be essential to a company in case of competition or slow growth. However, this change does not guarantee success.
4.2 Managerial implications

The strategy analysis frameworks constitute an analysis toolbox that can be beneficial to the business side in terms of strategy analysis. The developed analysis frameworks can be used individually and applied in groups of two or three; the full set can also be adopted. A natural area for application would be the strategy analysis phase in a company’s strategy formulation process. The follow-up on the success of strategy implementation can be evaluated against the established characteristics in the periodic strategy review process. An example would be to first identify a company’s strategy orientation (e.g. product orientation) and then determine whether the company pursues a change in strategy orientation (e.g. towards market orientation). After these steps, a follow-up of the progress of strategy implementation can be performed and evaluated against the analysis framework characteristics.

To strategically guide a company through its evolution, management should understand the life cycle and s-curve concepts, as discussed in the first article. The S-curve is applicable in various conditions, and can direct management priorities towards matters relevant to the s-curve position. The concept of life cycle with phases helps management consider and reflect on its relative business position, as well as understand its growth limitations and then pursue new opportunities. These opportunities can be investments in new technology or changes in the company business domain. Overall, the life cycle-based strategy analysis serves as a tool for determining needs and preparing for transformation. It drives this transformation in a controlled manner when analysis is conducted and results are available.

The case business and its life cycle development with changes in strategy type function as benchmarks for transformation, and show the strategic renewal potential to again realise growth. The pattern of change from a prospector to a defender shows the linkage between life cycle position and adopted strategies. The prospector strategy is especially applicable when new technology emerges, new markets are open, no pre-defined business players or business logic exists in the domain, or technological limitations slow down growth potential. When growth carries on for longer periods, however, the slowing down of growth and the business area becomes more established, as the s-curve maintains. This phenomenon is observed from the case business in which the market players more readily assume the role of defender. It can originate from the business necessity to secure market position (e.g. by rolling out several new products and expanding
business volume). The analyser strategy is a benchmark example for the transition period strategy, in which the established position in the market is maintained; at the same time, new business opportunities are created through investments in new technology areas or business domains. An example of such transitions is the shift from being a product-centric business to being a services business. This transformation has occurred in various companies and industries, making the transformation period strategy critical to strategic management planning and execution.

Furthermore, the strategy typology is a valuable analysis framework for strategy development purposes because it serves as an analytical tool for evaluating company strategy using a set of criteria. One of the clearest advantages of using this tool would be the prevention of transitioning into a reactor role. Identifying the characteristics of such a strategy or lack of strategy necessitates a strategy renewal process within a company.

In the second article, the four-way analysis framework enables managers responsible of strategy development to analyse their company’s position in the demand-based or product-based domains, and then more accurately identify its position in one of the four dimensions. Both the current position and changes over time in the company’s strategic position can be analysed using the framework. The same can be applied in analysing or estimating a competitor’s strategic position, which is important in ensuring competitive advantage in highly competitive markets.

The case business strategy orientation dynamics serve as an interesting example of strategy development over time. Such dynamics are a good benchmark for strategy developers in different companies given that the agility to change strategy drivers has been shown (by the case business example) as essential to successful growth. Later in the life cycle, this agility is essential necessary building block for renewal and search for new growth.

The discussion of customer-centricity within a company can be easily evaluated by using the analysis framework. Companies founding themselves in the section of technology-product orientation cannot argue to be leading in customer-centricity and vice versa. This practical analysis tool enables strategy analysts to evaluate how a company performs in terms of strategy implementation and the contrast between the desired and current state; and highlights the difficulty of achieving customer-centricity. Customer-centricity, however, is becoming increasingly important in the market where buyers have a variety of
choices and failure to satisfy customer requirements may result in losing valuable customers, and eventually bankruptcy.

The third article builds on the four-way analysis framework by linking important business metric, market share, to be one of the analysis dimensions. This linkage provides professionals a good opportunity to evaluate strategy orientation, as well as market share linkage and development.

The framework constructed in the fourth article can help external observers scrutinise the case company’s strategy. This scrutiny can provide information fundamental to understanding the strategy orientation within the examined firm. Knowledge on orientation, together with the strategy typology, can facilitate the positioning of the examined company in the strategy continuum in a defensive (defender) or aggressive (prospector) role. The potential failures in strategy execution can also be recognised (reactor). The strategy orientation analysis framework fitted to the Miles and Snow (1978) typology enables managers responsible for strategy development to analyse their companies’ position in the demand-based or product-based domains, and mirror this positioning in the strategy typology types.

An important application of the strategy analysis framework that can be maximised by strategy managers are to use it in understanding competitors’ strategy orientations together with their typology characteristics. If one company follows the product-oriented defender strategy in markets where the main competitor is pursuing a market-oriented prospector strategy, the defender can assume aggressive customer targeting and acquisition from the competitor side.

The defender, prospector, and analyser strategies can all be successful in the market place, but in markets characterised by constant change (e.g. where new technologies cause interruptions), the lack of market understanding can hinder timely response to changing or new customer demands and requirements.

4.3 Reliability and validity

This dissertation has created four new analysis frameworks. The theoretical material used to create these frameworks is available and highly cited by many journals and scholars. The created frameworks are tested with two case companies’ strategy materials, which were taken from their respective public annual reports. Public availability ensures replicability and reliability. The research process is illustrated in Appendix 1, described in detail in the Introduction and in published journal articles. The results, both the created
strategy analysis frameworks and the empirical findings on the case examples, were subjected to a critical scientific double blind review in each of the four journal articles to evaluate theoretical and empirical reliability and validity. The comments and improvements requested were implemented before publication.

In the second and third articles, the limitations of the research originate from the definitions of the analysis framework dimensions. In particular, those on customer focus and market orientation somewhat overlap. Customer-centric strategies are new concepts in strategy research and only little discussion is conducted on fundamental definitions and directions. The empirical material is constrained by its nature because it provides an overview of the examined period but many detailed or fine-scale notations cannot be discussed in further detail. The view in this research is broad but shallow compared, for example, with the interview approach in empirical material collections.

The fourth article is constrained by the definitions of the analysis framework dimensions. The empirical materials of both the cases businesses are limited by their nature also because they provide an overview of the examined period but prevent a detailed discussion of fine-scale notations.

Other limitations are due to fact the in the qualitative research the researcher itself can be the most critical aspect for the reliability, as researchers on views and biases can influence the results. However, because the analysis frameworks were created in such a way that a clear criteria set is always available, a researcher can carry out a study as objectively as possible, thereby minimising the risk of bias. This attribute of the framework also enhances repeatability and encourages scrutiny of results. This way any researcher can repeat the study and examine the results.

As for external validity, the theoretical themes discussed and the strategy analysis frameworks developed are universal. This universality is supported by the nature of the two case businesses, which function in multiple business areas. Nevertheless, external validity should be analysed further in future research.

4.4 Recommendations for further research

Interesting research directions would be the association between business success and different strategy orientations, as well as the comparison of the differences in company success over economic cycles. Enhancing the developed analysis frameworks would be a fruitful starting point for future endeavours.
Areas for further research can also include a more comprehensive analysis of transformation strategies (e.g., shifting from one technology area to another or from a product business to a service business). Strategy focus areas, such as consumer focus, as a strategy driver are also interesting research topics. For example, understanding consumers, such as those in segmented consumer bases in the analyser strategy, can be used or further developed for strategy creation purposes and to fuel new growth in the same or different business domains (e.g., service business).

Additional directions include a more in-depth analysis of the customer-centric approach to strategy, as well as customer influence on strategy priority definitions, customer lifetime value approach to strategy, and the overall transformation process from a product-centric strategy to a customer-centric strategy.

Finally, researchers can include testing on the presented frameworks using case businesses from different industrial areas, such as business-to-business markets or highly regulated markets. Overall, product or market orientation as a source of competitive advantage is an interesting area for further research.
5 Summary

This research contributes to the field of strategic management and strategy analysis by analysing strategy characteristics, interdependencies, and success factors.

The primary research target of this dissertation is to develop new strategy analysis frameworks, focusing on analysing the changes in strategy position as a function of variations in life cycle s-curve/time/market share/orientation.

The research is carried out as a compilation dissertation containing four (4) journal articles. The research problem is divided into four research questions presented in Table 2. The implementation of the research is presented in Appendix 1. The research questions are addressed in the journal articles, with one question answered per article (Figure 14).

The research approach within this study is constructive. The theoretical foundations are built from strategy analysis, strategy typology, and strategy orientations theories. Particular attention is paid to the strategy typology of Miles and Snow (1978), as well as to market orientation and product orientation in strategy. This literature analysis and synthesis are then used to create new strategy analysis frameworks.

The created strategy analysis frameworks are tested with two case companies’ strategy materials taken from publicly available annual reports. The case companies are Nokia and Amer. The empirical results show that the strategy analysis frameworks can generate new information on case businesses strategy, and detect changes in strategic positions. The frameworks constitute a solid new analysis toolbox, in which the analysis tools can be used individually, or in groups of two or three. The full set of tools can also be adopted.

The theoretical implications of this dissertation are a result of combining the perspectives of the strategy analysis frameworks and strategy orientation domains, thereby creating new strategy orientation analysis frameworks.

The strategy analysis frameworks build an analysis toolbox that can be beneficial to businesses in terms of strategy analysis intended for detecting strategy focus and its change.

Areas for further research include the linkage of business success to orientations, transformation strategies, and consumer focus as elements of strategy creation.
References


Appendix 1

Research process

- Strategic Management Analysis
- Focus: Strategy analysis
- Analysis framework creation as literature synthesis
- Case strategy analysis
- Case business empirical data sourcing and collection
- Frameworks and findings
Original publications

This dissertation is based on the following publications


Reprinted with permission from Inderscience (I) and SciRes (II,III,IV).

Original publications are not included in the electronic version of the dissertation.
400. Goratti, Leonardo (2011) Design, analysis and simulations of medium access control protocols for high and low data rate applications

401. Huttunen, Sami (2011) Methods and systems for vision-based proactive applications


403. Räsänen, Teemu (2011) Intelligent information services in environmental applications

404. Janhunen, Janne (2011) Programmable MIMO detectors

405. Skoglind-Ohman, Ingegerd (2011) Participatory methods and empowerment for health and safety work: Case studies in Norrbotten, Sweden


408. Rajala, Hanna-Kaisa (2011) Enhancing innovative activities and tools for the manufacturing industry: Illustrative and participative trials within work system cases


412. Oikonen, Jarkko (2011) Groundwater and its response to climate variability and change in cold snow dominated regions in Finland: methods and estimations

413. Antsonen, Antti (2011) Estimation of energy detection thresholds and error probability for amplitude-modulated short-range communication radios

414. Neitola, Marko (2012) Characterizing and minimizing spurious responses in Delta-Sigma modulators

415. Huttunen, Paavo (2012) Spontaneous movements of hands in gradients of weak VHF electromagnetic fields

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AND FOCUS

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FACULTY OF TECHNOLOGY,
DEPARTMENT OF INDUSTRIAL ENGINEERING AND MANAGEMENT