University of Latvia

Faculty of Business, Management and Economics

Katharina Buttenberg

CUSTOMER-ORIENTED AND BRAND-ORIENTED CAPABILITIES OF YOUNG FIRMS

Doctoral Thesis

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Professor Dr. oec. Andris Deniņš

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ANNOTATION

Purpose: In the birth phase (first ten years) of the firm, young firms need to develop specific capabilities in order to ensure their successful growth and create a sustainable competitive advantage. Customer- and brand-oriented marketing capabilities are amongst the key capabilities a firm has to develop to gain insights regarding customers, build customer relationships and leverage them for their success as well as develop their own brand and brand elements, communicate the brand and position the firm against competitors for young firms. Founders play a significant role in this phase, acquiring and successfully developing these capabilities as sustainable competitive advantages and contributors to business performance. The purpose of this doctoral thesis is the structuring of customer- and brand-oriented marketing capabilities and the development of a causal model to evaluate the effect of customer- and brand-oriented marketing capabilities on business performance, specifically for these young firms in the first ten years of development. **Research-Design and Approach:** The dissertation proposes a causal model linking customer- and brand-oriented marketing capabilities with business performance. The analysis is based on a mixed-methods approach combining qualitative interviews and a quantitative study with founders of young firms. **Findings:** There is a significant impact of customer- and brand-oriented marketing capabilities on business performance. Customer-oriented marketing capabilities of young firms focus on strategic interaction with customers, product customization and product uniqueness. In terms of brand-oriented marketing capabilities, there is a focus on the strategic analysis of the potential for and the development of a differentiated brand and brand strategy for the young firm as well as the functional components of name clarity and brand distinctiveness. Only if firms are able to develop marketing capabilities in these categories, they will gain a sustained competitive advantage towards competitors. **Originality / Value:** A new theoretical model is proposed to classify customer- or brand-oriented marketing capabilities into strategic and functional dimensions. Based on this structure, specific items of these capabilities have been developed for young firms and, in the second step, a causal model has been conceptualized in order to assess their influence on business performance. This distinct focus on the birth phase of the firm and view on marketing capabilities in the light of the firm's early stages advances the findings regarding the requirements on the development of capabilities in the early stages of the life cycle. Finally, the dissertation advances recommendations for founders, managers of young firms and investors when acquiring and developing the marketing capabilities for the firms they acquire.

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LIST OF ABBREVIATIONS

ANOVA	Analysis of Variance
B2B	Business to business
B2C	Business to consumer
BOMC	Brand-oriented marketing capabilities
BP	Business Performance
CEO/ CEOs	Chief Executive Officer/ Chief Executive Officers
CLV	Customer Lifetime Value
COMC	Customer-oriented marketing capabilities
ctd.	continued
e.g.	example given
etc.	et cetera
IPO	Initial Public Offering
OE	Organizational Environment
OECD	Organization for Economic Co-operation and Development
pp.	following pages
RBV	Resource-Based View
RBT	Resource-Based Theory
R & D	Research and Development
ROA	Return on Assets
ROE	Return on Equity
ROI	Return on Investment
ROS	Return on Sales
SME/ SMEs	Small and Medium Enterprise/ Small and Medium Enterprises
SOCO scale	Selling orientation-customer orientation scale
SP	Strategic Posture
URL	Unique Resource Locator (web-address)

INTRODUCTION

With a recently increased interest in entrepreneurship and the founding of new firms picking up in the last ten years, the founding and growth of new firms is an important factor for economic growth more than ever. However, entrepreneurs and founders are facing many challenges and the risk for nascent firms to fail is high (e.g. OECD Publishing, 2014, p. 20). While the strategic and targeted acquisition and development of valuable capabilities as strategic competitive advantage could improve survival rates, the development and integration of capabilities in the birth phase of young firms in practice is a rather random process and based a lot on circumstance; hence, founders need to be supported in their management of capabilities for young firms. Strategic and functional marketing capabilities are a key driver to provide strong sustainable economic value (e.g. Rust, Ambler, et al., 2004, p. 77), which is typically half of the market capitalization of a mature firm. Especially in the last decade, a significant body of literature has been dedicated towards investigating the impact and benefit of marketing capabilities on business performance. In this research, marketing activities have been proven to generate value and provide financial growth, sales efficiency and product usage for the young firm. Marketing capabilities in the resource-based view are the abilities of a firm to create and manage its brand, the development of customer relationships and the building of marketing innovation and knowledge on a strategic as well as a functional level. Surprisingly, the development of marketing capabilities in young firms has not gained a lot of interest in research yet. In this research, customer- and brand-oriented marketing capabilities have been specifically analyzed for young firms (i.e. firms at the age of up to ten years). While customer-orientation centers on the customer relationship management and how the product or service fulfills the needs of the consumer, brand-orientation focuses on the brand and how it is positioned and communicated. To generate sustainable economic value, young firms need to acquire and build both marketing capabilities. Therefore, research on the development of marketing capabilities and their impact on business performance in young firms is a quite important topic for business research.

The **actuality of the research topic** is based on the following recent developments:

<u>A new interest in young firms and entrepreneurship:</u> The interest in entrepreneurship has increased after the crisis in 2008 and the creation of firms has picked up in the last years (e.g. OECD Publishing, 2014, p. 16). The number of business accelerators and incubators with the role of growing and supporting nascent firms to a stage where they can be self-sufficient has

also accelerated in the last decade. The clear majority of firms are small and young firms, accounting for a reasonable share of the value add. At the same time, a significant share of firms die within the first five years (e.g. Müller et al, 2012, p. 19). Looking at these facts, it is quite important to support young firms in their development. In consequence, a better knowledge and development of capabilities could significantly improve both business performance and survival rates. As previously mentioned, the discipline of marketing can provide a key sustained competitive advantages and, therefore, research on the nature of the development of marketing capabilities and their impact on business performance is a quite actual and important topic, providing founders with valuable insights on how to acquire and strengthen these capabilities and improve the business performance of their young firms.

<u>A redefinition of the role of marketing</u>: In the last decades, the discipline of marketing has been striving to become more accountable for business performance. Recent literature and analysis has shifted the previously sole focus of functional marketing activities on product communication and sales support onto a focus on the brand as the center of marketing; accompanying models have been conceptualized to assess the return on marketing investment. In these models, concepts of customer- and brand-equity are reflected (e.g. Gupta, et al. 2006, p. 140). Investigations of measures, such as customer lifetime value, have resulted in a broader view of the role of the discipline as a value-driver for the firm. Marketing is seen as occupying a central strategic role in management by focusing on shareholder returns (e.g. Day & Fahey, 1988, p. 46). Customer-orientation, focusing on the “outside-in” view of the firm, as well as brand-orientation, representing the “inside-out” view, are crucial for the development of profitable business performance. While the marketing capability of customer-orientation centers on the generation of customer-feedback, the development and customization of products as well as services based on customer needs, brand-orientation is concerned with the strategic presentation of the brand, marketing activities and the functional development of the brand. To create sustained competitive advantage and provide sustainable economic value, firms have to face the challenge of incorporating both sets of capabilities in their organization. The earlier young firms acquire and develop these marketing capabilities, the better they will be able to leverage them as a sustained competitive advantage.

The **object of research** is young firms up to ten years of age after founding.
The **subject of research** is the impact of marketing-capabilities on business performance.

The **aim of the research** is to identify the impact of customer- and brand-oriented marketing capabilities on business performance, specifically for young firms (at an age of up to ten years).

The main tasks of the promotional work comprised of the following activities:

1. A critical analysis of the body of literature of the Resource-Based Theory in regard to marketing capabilities will be conducted.
2. Based on this analysis, a clear definition of customer- and brand-oriented marketing capabilities and their strategic and functional items will be created.
3. The relationship between marketing capabilities and business performance, especially for young firms will be analyzed and defined.
4. Qualitative research will be conducted to identify specific items of customer- and brand-oriented marketing capabilities and their impact on business performance to complement the findings in literature and to develop the definitions of the latent variables specifically for young firms.
5. After the definition of the variables, a causal model will be created including the constructs of customer- and brand-oriented marketing capabilities as exogenous variables and business performance as endogenous variable, connecting them through causal relationships.
6. Principal components of the latent variables will be defined and the distinct marketing capabilities as key performance indicators for business performance will be calculated.
7. The model will then be tested and calculated through quantitative analysis using structure equation modelling.
8. As final step, an analysis of variance will be conducted to analyze the impact of the single variables of customer-oriented and brand-oriented marketing capabilities as well as business performance across different age groups.
9. The results of the research and analysis will provide conclusions and suggestions for founders, managers of young firms, investors and researchers.

Looking at the research on capabilities in the field of resource-based theory, research findings suggest a positive impact of marketing capabilities on financial performance, returns, profits and market performance. Moreover, an increase in resource deployment in marketing has been found to have a statistically significant effect on economic firm-level performance. Given these encouraging results, it seems highly probable that the impact of marketing capabilities on business performance of young firms is similarly strong. Therefore, more research needs to address the development of these important capabilities and their influence on the development for young firms. The author will thus focus on the following **overarching research question**: *"Which marketing capabilities are influencing business performance in young firms?"*

The main hypothesis is based on the research question. The hypothesis is concerned with the economic impact of the development of marketing capabilities:

<u>H:</u> Marketing capabilities of young firms are positively related to their business performance.

For a more detailed investigation of the relationship between marketing capabilities and business performance, the main hypothesis is operationalized in form of two conceptual theses:

<u>Thesis$_1$:</u> Customer-oriented marketing capabilities of young firms are positively related to their business performance.

<u>Thesis$_2$:</u> Brand-oriented marketing capabilities of young firms are positively related to their business performance.

In the resource-based literature, capabilities are defined as the ability to use organizational resources to achieve a defined result by performing different, coordinated tasks. As previously described, *Marketing capabilities* comprise all capabilities concerned with the creation and management of brands, the development of customer relationships as well as the building of marketing innovation and knowledge on both a strategic and a functional level. *Business performance* refers to a combination of financial and organizational performance measures. Financial performance measures assess the performance based on financial indicators such as profit, and growth rates of financial indicators such as return on investments. Organizational performance can be measured through product market performance, which is assessing the performance of the firms' product or service in the market. *Customer-orientation* centers on the customer relationship management of the firm and how the product or service fulfills the consumer's needs. It puts the customer first and customer satisfaction is regarded as key goal of the organization, whilst not neglecting other stakeholders. *Brand-orientation* focuses on the brand and how it is positioned and communicated. It acknowledges the role of marketing's strategic use in creating and enhancing positive feelings towards the firm as well as its products and services; moreover, it is concerned with creating a favorable relation with the brand, stressing marketing effects that can be only attributed to the brand.

Very little research has been done on the topic of firm age connected to marketing capabilities. The few research papers identified that address a firm's age are mainly directed towards the topic of brand-oriented marketing capabilities and the research results of the different authors are quite contradictory. A study analyzing the moderator-effects of firm age, firm size and market-environment on the relationship between brand-orientation and brand performance indicate that these factors have no effect on either brand image, brand awareness, brand reputation or brand loyalty (Hirvonen et al., 2013). These findings seem highly doubtable, given the fact that other research prompts marketing capabilities in young firms to not have been fully developed yet; moreover, the financial constraints in marketing expenditures these firms are facing do not receive consideration (e.g. Rode & Vallaster, 2005, pp. 125–128; Bresciani & Eppler, 2010, pp. 359–361). This research examines the relationship between marketing capabilities and their influence on business performance, specifically for young firms. In the light of this background, **the novelty of research** is established through six main points:

1. A new categorization matrix for marketing capabilities is designed, providing an opportunity to classify customer- and brand-based functional and strategic marketing capabilities.
2. Specific items of marketing capabilities for young firms are identified to define the constructs for customer-oriented and brand-oriented marketing capabilities as well as business performance.
3. Marketing capabilities are related and tested towards business performance for the first time.
4. A new causal model is developed combining customer- and brand-orientation to provide explanation on successful development of marketing capabilities in young firms.
5. The importance of a lifecycle-view on the development of capabilities in firms is demonstrated in this research.
6. The main components driving marketing capabilities and business performance in young firms and how they differ from the ones of mature firms has been analyzed.

The **methods of research** applied in this dissertation are set up as a two-step approach. After an in-depth literature review, the author will conduct exploratory interviews with founders to identify specific marketing-capabilities of young firms and compare them with the marketing capabilities of mature firms described in literature. The author chose founders of young firms (up to 10 years of age), adopting the principles of the key informant technique. The objective of the interviews is to analyze how young firms develop their strategic and functional marketing capabilities and how they are linked to customer- and brand-orientation. These qualitative expert interviews with founders of young firms provide in-depth knowledge regarding the relevant marketing capabilities applied in young firms used to create a sustained competitive advantage. In a second step, a causal model is developed, integrating the findings of the qualitative interviews to test the hypotheses on a quantitative basis. The factors are then reduced using a principal component analysis and the causal relations between the latent exogenous variables of customer-oriented marketing capabilities and brand-oriented marketing capabilities on the endogenous variable of business performance are calculated by use of structural equation modelling. After pre-testing the correlations, a confirmatory factor analysis will be conducted. As an additional test, an analysis of variance will be conducted to analyze a potential difference in the constructs and their factors for different age groups within young firms.

The content of the dissertation is divided into four main chapters and an additional section for conclusions and suggestions. In chapter one, the theoretical foundations of the Resource-Based Theory, customer- and brand-orientation as well as the development of resources over time, specifically the capability life cycle, are summarized. In chapter two, a review of existing research results in the field of customer- and brand-oriented marketing capabilities, empirical Resource-Based Theory -studies on marketing capabilities over the last ten years are systematically analyzed and compared. Chapter three provides information on the empirical research design, which follows a mixed approach, and on the research methods used in the dissertation. Moreover, the results of the qualitative analysis are reported in this part of the dissertation. In chapter four, the analysis of the data obtained through the quantitative survey is described and findings are reported. In the last section of the promotional work, conclusions and suggestions are derived for researchers in regard to further analysis; likewise, implications for founders as well as investors are offered for identification and development of customer- and brand-oriented marketing capabilities.

The following **limitations of the research** need to be mentioned: The doctoral thesis explicitly focuses on the development of marketing capabilities. Albeit closely related to marketing capabilities, other capabilities, such as organizational capabilities, research and development, innovation, technology, or supply chain management, will not be considered as their inclusion would exceed the scope of this thesis and lead to a broader view as well as more generalizable results. This research is mainly addresses the internal view of the firm. However, especially in the early stages of a firm, the external environment and the market situation have a strong impact on the viability and the growth of young firms. Factors like the competitive environment or market entry barriers also influence the development and success of marketing capabilities. Analyzing this relationship might also provide an opportunity for future research. Regarding methodological limitations, the data generated through surveys is cross-sectional in nature and cause-effect inferences might not always be possible. The results therefore might serve to support the previously established causal relationships and might need further research to support this causal relationship. To encompass this limitation in the future, a test-retest could be conducted (Hendrickson, Massey, & Cronan, 1993, p. 227). Also, a longitudinal study on marketing capabilities would generate greater insights into the development of these capabilities. These limitations clearly indicate that this research presents only a first step into the analysis of capabilities in young firms and therefore needs to be elaborated on in the future.

The **main results** of the research indicate that customer- and brand-oriented marketing capabilities are highly relevant as drivers of business performance for young firms. Firms are unique aggregations of productive resources and capabilities, whose use is determined over time by administrative decision of their respective managers. Young firms are still small and are more exposed to external developments. Their access to resources is very often limited and especially in the early years, their capabilities are not fully developed yet. Based on these circumstances, they consequently face a greater risk of failure. But their special situation enables them to react quicker to external influences, also allowing them to be more innovative and entrepreneurial. Management decisions regarding the development of resources and capabilities play an important role in the success of young firms. Founders occupy a significant role in that phase as well, acquiring and successfully developing capabilities which provide a sustained competitive advantage.

As previously mentioned, marketing capabilities are a key driver to provide strong sustainable economic value. Customer-oriented marketing capabilities are concerned with the "outside-in" view on the firm, focusing on customers and their needs, while brand-oriented marketing capabilities regard the "inside-out" view and focus on the brand and how the product or service as well as the firm are presented to consumers. Both capabilities need to be combined to best support the firm's value-generation and business performance. Regarding the assessment of the causal relationship between marketing capabilities and business performance for young firms, the following findings can be extracted:

- Marketing capabilities have a positive impact on business performance. The obtained structural equation model depicts the causal relations between customer-oriented marketing capabilities, brand-oriented marketing capabilities and business performance, controlled by the factor of strategic posture. The results of the factor analysis support the proposed hypotheses regarding the relations between the latent variables. There is a significantly positive relation between customer-oriented marketing capabilities (COMC) and business performance (BP) (estimated factor loading = 0.79). The impact of brand-oriented marketing capabilities (BOMC) on business performance (BP) is even stronger (estimated factor loading = 1.12). Therefore, the hypothesis "H: Marketing capabilities of young firms are positively related to their business performance" is supported.

- Customer-oriented marketing capabilities allow the firm to build relationships with customers and get an understanding of customer needs. The variable is comprised of three components. The variable loads strongest on Strategic Customer-Orientation (factor loading = 1.00). The other two product-related components, Product Customization (factor loading =.87) and Product Uniqueness (factor loading = .70) however are very close in terms of loading, indicating that all components are almost equally influenced by the variable. These results propose that customer-oriented marketing capabilities have a strong impact on the young firm's strategic generation and integration of customer feedback, their way of adapting the product or service based on customer needs and their differentiation against competitive products or services as well as substitutes. This is also supported by the results of the interviews, where several founders of young firms emphasized the importance of customer feedback on their business performance, stressing the relevance of customer focus.

- As previously mentioned, the variable of brand-oriented marketing capabilities has even a stronger overall impact on business performance than the variable of customer-oriented marketing capabilities. Looking at the three components, the functional components of Brand Distinctiveness (factor loading = 1.18) and Name Clarity (factor loading = 1.00) exercise a much stronger impact than Strategic Brand-Orientation (factor-loading = .48). Based on these findings, brand-oriented marketing capabilities of young firms have a strong impact on the creation of a differentiated brand and brand-design as well as a clearly comprehensible and distinct name. This finding is in line with the results of the qualitative interviews, where the nature of a brand was described as being rather functional.

- Depending on the stage of the firm and the market environment it is operating in, the measures for business performance do vary. For some firms in the early stages, the usage of the product or service is more important than its financial performance; hence, it is offered to potential customers without payment or at a reduced price. This indicator of usage or trial as an indicator for business performance is rather particulate of young firms. Moreover, when numbers are still meager, founders often look at sales more than actual revenues and they prefer growth rates over actual numbers. These measures for business performance develop rapidly based on the growth of the firm. Therefore, the variable of business performance exhibits the broadest variation in the loading on its constructs. Sales Efficiency (factor loading = 1.39) constitutes the most relevant component, followed by Financial Growth (factor loading = 1.00) and Product Usage (factor loading = .61).

- Another observation won from the interviews was the role of the founders in the firm's development, as his or her values and perceptions significantly shape the organizational development and strategy of the firm. The influence of the founder or the founding team on these groundbreaking decisions for the firm has been identified in life cycle literature and has also been analyzed by several researchers in the field of entrepreneurship. To capture the founders' orientation, the moderating variable of strategic posture is introduced. It is defined as the way management addresses innovation, founders' motivation to take risks for their business and how proactive they are in addressing development. To ensure that founders' special situation and young firms is reflected in the model, the author integrates it as moderating variable in the model.

- During the birth phase, young firms undergo rapid changes and developments. To analyze potential differences in the development of the three variables of customer-oriented marketing capabilities, brand-oriented marketing capabilities, and business performance during the first ten years, the author decided to conduct an additional analysis of variance, splitting the firms of the sample in three age groups. Since there is more change in most firms' early years, the indicator of firm age was split up into the following three groups: the age of up to two years (<= 2 years), the age from two years to up to five years (>2 <=5 years) and the age of older than five years (>5 years). There are no significant variances between the means of the age groups for customer-oriented marketing capabilities. For brand-oriented marketing capabilities, Strategic Brand-Orientation varies significantly in means throughout the different age groups. The need for strategic development of the brand-orientation increases for young firms after the age of up to two years and then drastically declines once the young firms are older than five years. For the variable of business performance, two components vary significantly: While the mean of Sales Efficiency increases, the mean of Product Usage decreases between the three age groups of young firms. This crossover-effect is logical since the component of Product Usage summarizes the usage of the product or service without payment, whereas the component of Sales Efficiency is comprised of measures for buying customers as well as sales levels and sales growth rates. This data is also supported by the results of the qualitative interviews, in the course of which founders of young firms indicated that they provided their products and services for free or at a reduced rate in the early stages of the firm to generate usage. In later stages, when the product or service is already established, sales and financial performance become more important.

The **main literature sources** used for this doctoral thesis:

1. The theoretical basis for the research was established based on the key authors in the field of the Resource-Based Theory, such as the pioneer in the area of firm-based research Penrose (Penrose, 1959 // 1980) and other experts who have published on Resource-Based Theory of the firm such as Wernerfelt (e.g. Wernerfelt, 2014), and Barney, who published numerous articles and books in this field of research (e.g. Barney, 2002).
2. Sirmon and his colleagues, who focused on dynamic capabilities and their development (e.g. Sirmon, Hitt, Arregle, & Campbell, 2010) also made a significant contribution, connecting life cycle literature with resource orchestration (e.g. Sirmon, Hitt, Ireland, R. Duane, & Gilbert, 2011) Following other authors of life cycle theories, the author turned to authors who mainly take up the capabilities life cycle, such as Quinn and Cameron (Quinn & Cameron, 1983), Miller and Friesen (Miller & Friesen, 1984) and Helefat and Peteraf (Helfat & Peteraf, 2003).
3. The analysis of empirical findings regarding marketing capabilities was based on the main authors in that field, who conducted numerous studies on the development of marketing capabilities and their impact on business performance in the last ten years. Vorhies, Morgan and colleagues analyzed the effect of marketing capabilities on firm performance, including the analysis of the interdependencies of the capabilities by use of a multi-method approach including focus groups, quantitative surveys and data-analysis (e.g. Vorhies & Morgan, 2005; Morgan, Slotegraaf et al., 2009).
4. The literature on the analysis of marketing capabilities in connection with other capabilities such as technology-related capabilities (Song et al., 2005) or management capabilities and innovation capabilities (Merrilees et al., 2011) have also been analyzed.

5. As additional literature to support the analysis of marketing in young firms, the author of this dissertation consulted research on entrepreneurial marketing, such as the works by Rode and Vallaster (Rode & Vallaster, 2005) and Bresciani and Eppler (Bresciani & Eppler, 2010) who analyzed the development of corporate brands together with brand building practices and activities in firms which were founded in the last ten years.

Approbation:

The author of this promotional work has presented the findings of her research to the scientific community in several national and international conferences:

1. **Current Issues In Economic And Management Sciences**
   "Adopting Customer Satisfaction Surveys To Measure Employee Satisfaction"
   Best Presenter Award
   November 11-12, 2011, Riga, University of Latvia

2. **Recent Developments in Business Management Research**
   "Employer Branding in the organizational Context"
   Best Presenter Award
   December 2-4, 2011, Fulda, Fulda (Germany), University of Applied Sciences

3. **70th University of Latvia scientific Conference**
   "The integration of the Employer Brand in the Corporate Brand"
   January 25, 2012, Riga (Latvia), University of Latvia

4. **New Challenges of Economic and Business Development**
   "Employer Branding Objectives, Channels and Performance Indicators"
   May 10 – 12, 2012, Riga (Latvia), University of Latvia

5. **International Conference for Business Research**
   "Employer Branding for Executive Recruiting"
   Best Presenter Award
   August 3 – 5, 2012, Kufstein (Austria), University of Applied Sciences

6. **New Challenges of Economic and Business Development**
   "The Impact of Employer Branding on Employee Performance"

August 3 – 5, 2012, Kufstein (Austria), University of Applied Sciences

7. 6th Annual EuroMed Conference

"Challenges for executive recruitment in the light of the war for talent in Germany", September 23-24, 2013, Estoril (Portugal), EuroMed Academy of Business

8. Current Approaches of Modern Management and Strategy Research

"Active Sourcing in Recruitment: New Recruitment Trends with HR-Managers in Germany?"

November 29 – 30, 2013, Kufstein (Austria), University of Applied Sciences

9. 19th International Conference on Public Finance, Management and Planning

"The Influence of Consumer and Brand-Oriented Capabilities on Business Performance in Young Firms: A Quantitative Causal Model Analysis"

April 13-14, 2017, Venice (Italy), World Academy of Science, Engineering and Technology

10. 10th Annual EuroMed Conference

"How Founders View the Development of Customer- And Brand-Oriented Capabilities of Their Young Firm"

September 13-15, 2017, Rome (Italy), Sapienza University of Rome / EuroMed Academy of Business

In addition to the conferences, the author has published the following papers:

1. Buttenberg, K.: Adopting Customer Satisfaction Surveys To Measure Employee Satisfaction. In: "Current Issues In Economic And Management Sciences - 2011", Conference Proceedings, University of Latvia, Riga, November 2011, p. 138-148, ISBN 978-9984-45-417-7

2. Buttenberg, K.: Employer Branding Objectives, Channels and Performance Indicators. In: "New Challenges of Economic and Business Development - 2012", Conference Proceedings, University of Latvia, Riga, May 2012, p. 110-117, ISBN 978-9984-45-519-8

3. Buttenberg, K.: The Impact of Employer Branding on Employee Performance. In: „New Challenges of Economic and Business Development – 2013", Conference Proceedings, University of Latvia, Riga, May 2013, p. 115 – 123, ISBN 978-9984-45-715-4

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Best paper award

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10. Buttenberg, K. (Reserved for publication): How Founders View the Development of Customer- And Brand-Oriented Capabilities of Their Young Firm. In: “10th Annual Conference of the EuroMed Academy of Business - Global and National Business Theories and Practice: Bridging the Past with the Future”, Conference Proceedings

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1. THE LIFECYCLE OF CUSTOMER- & BRAND-ORIENTED CAPABILITIES

Scholars of the Resource-Based Theory (RBT) of the firm consider the development of resources and capabilities as a main factor in securing the competitive advantage of a firm. In opposition to other theories, entrepreneurs can influence the success of their organization by aggregating or creating a unique set of assets, differentiating their firm from other competitive organizations (e.g. Wernerfelt, 1984). The development of marketing capabilities has been found to be one of the main frameworks to analyze and explain competitive advantages and even forecast performance outcomes (e.g. Kozlenkova et al., 2014, p. 1). Analyzing the capabilities of firms, the author has identified two main types of capabilities – customer-oriented and brand-oriented capabilities, which drive brand equity and organizational performance. These concepts are based on two different views of the firm – the “outside-in” and the “inside-out” view of the firm, which both need to be considered when building successful brands (e.g. Urde et al., 2013, pp. 14–15). Customer- and brand-oriented capabilities need to be acquired and developed over time, supporting firms in their different stages of the life cycle and providing a competitive advantage that contributes to a firm’s performance (e.g. Sirmon et al., 2010, p. 1387). In the first part of this research, the author critically reviews the different constructs and models available in order to define, conceptualize and develop customer- and brand-oriented capabilities and addresses existing gaps in these frameworks.

Regarding resources and capabilities, the author will specifically outline the capabilities necessary for the successful creation of both customer- and brand-equity through customer- and brand-orientation as sustained competitive advantage. The two approaches both focus on the consumer, but they differ in how they perceive the organization. Customer-orientation is based on an “outside-in” view on the organization and hence focuses on capabilities such as market-sensing and customer relationship management (e.g. Leone et al. 2006, p. 129); equity is consequentially created by successfully deploying those capabilities. Brand-orientation, on the other hand, is concerned with creating equity by establishing competitive advantages through “inside-out” capabilities such as brand-management and marketing (e.g. Kotler, 2009, p. 454). The author will outline the customer- and brand-equity approaches and describe the differences between the two orientations supporting these concepts (customer- and brand-orientation) in more detail. This will also be the base for the attribution of capabilities in the research project presented herein.

The structuring, developing and bundling of resources is an ongoing process, and entrepreneurs need to focus on the creation of sustainable competitive advantages from an early age of the organization (e.g., Sirmon et al, 2007, pp. 278-286). Therefore, it is important to analyze the development of resources and capabilities in the light of the life cycle. The author compares life cycle models based on the Resource-Based Theory and outlines the different phases of resource- and capability-creation. Depending on the age of the firm, different capabilities supporting these equities need to be developed and emphasized to be able to provide capabilities for a competitive advantage that then become a success-factor for the firm (e.g. Quinn & Cameron, 1983, p. 33). The author describes the cyclical development of resources and capabilities in the light of their value as sustained competitive advantages. In conclusion, the author summarizes the use of the discussed theories and findings for her own research endeavor.

1.1. The Role of Capabilities in Resource-Based Theory

An ongoing historic debate prevails in academic economic and management literature in regard to the source of competitive advantage in business. Whereas theories following the (German) Historical School of Economics are based on the differences between the businesses' environment as success factors and subsequently put the business owner in a passive role, scholars of the Austrian School attribute economic success to the decisions of the business owner. The Resource-Based View (RBV) is grounded in the same theoretical fundamentals as the Austrian School and the theorists following this school, who have emphasized individual resources and their importance to the firm's performance, such as Coase (Coase, 1937, pp. 386) or Penrose (Penrose, 1959 // 1980). In this view, managers take an active role in the development and can proactively shape the success of the firm through the acquisition, allocation and development of hard-to-imitate resources, which generate a competitive advantage for the firm and a so-called resource position barrier for competitors (Wernerfelt, 1984, pp. 173). Since the first development of the RBV in 1984, the view has gained a lot of interest and has evolved into a full *Resource-Based Theory* (RBT) that is supported by an extensive body of research and literature.

1.1.1. The Firm-Centered View of Resource-Based Theory

The (German) Historical School of Economics, one of the predominant theories of economic development emerged at the end of the 19th century and before the development of the Austrian School (of Economics) around the turn to the 20th century, is based on the assumption that economics is rooted in cultural and industrial differences between businesses and therefore is not generalizable. The focus of research was subsequently directed towards the historical examination of single events (e.g. Roscher, 2009, p. 98; Schumpeter, 1954 // 1986, p. 395).

In opposition to the Historical School of Economics, the Austrian School bases economic analysis on methodical individualism -- the choice of individual entrepreneurs and business owners (e.g. Foss et al., 2008, p. 73; Dolan, 1976, p. 5). This view is highly congenial with the resource-based, internal focus on the firm by Penrose, Wernerfelt and their followers and is the predominant view of contemporary entrepreneurial literature. (Foss et al., 2008, p. 74) This principle of a subjective firm-based focus of economics is rooted in the philosophy of the Austrian School. Carl Menger laid the cornerstone of this new school of thought in 1871, introducing the idea of marginalism (Menger, 1871, p. 160) and creating the base for a generalized approach for economic development: Moreover, he paved the way for other prominent representatives of this school of thought including Friedrich von Wieser and Friedrich Hayek, who dominated the 20th century, or even current scientists such as Peter David Schiff.

Coase is the first to point out the disparity between the theory of an economic system, which is coordinated by pricing-mechanisms, and what he argued to be a more realistic system of the firm where the organization with a coordinating entrepreneur makes resource-allocation decisions (Coase, 1937, pp. 387–388). This broadens the view of the firm from an individualistic approach of entrepreneurial decision-making and the leading role of the entrepreneur to a bigger concept (e.g. Boettke, 2008, p. 1; Foss et al., 2008, p. 74). Penrose for example expands the definition of the ‘firm’ from a mere structure of administrative functions to determine the number of entities produced and their prices for the individual “firm” to "a collection of productive resources the disposal of which between different uses and over time is determined by administrative decision." (Penrose, 1959 // 1980, p. 24) Previous strategy research assumed firms within an industry to be homogenous in terms of their resources and strategic decisions and that resource were highly mobile. (Priem & Butler, 2001, p. 29) The focus the Resource-Based Theory is directed towards the internal perspective of the firm, its strategic assets and (successful) differentiation in imperfect factor markets towards other firms through strategically relevant resources (Barney, 1991, p. 102). “Limited transferability of Resources, scarcity, complementarity and appropriability in turn give rise to rent opportunities. Economic rents, in this view, derive from properties unique to the firm's Resources and Capabilities.” (Amit & Schoemaker, 1993, p. 42) Despite an ongoing academic debate whether Resource-Based Theory is an acceptable theory of strategic management, criticism of the theory being static and tautological (Kozlenkova et al., 2014, p. 5) as well as a call for greater rigor and richness of detail (Peteraf, 1993, p. 179), Resource-Based Theory has gained considerable attention in literature. Without doubt, it is one of the most influential frameworks in strategic management and special issues of top management journals have been solely dedicated to this topic. In the 30 years of its existence, Resource-Based Theory has been further refined and clear terminological definitions have been introduced to address some theoretical inconsistencies, allowing authors to further clarify and develop the theory (Barney et al., 2011, p. 1299). The theory itself has contributed to several fields of study such as Marketing, Entrepreneurship and International Management.

1.1.2. Resources and Capabilities in Resource-Based Theory

Amongst the scholars who published on Resource-Based Theory, there has been a continuous refinement of the terms resources and capabilities and a quite complex set of definitions has emerged. Resources and capabilities are aggregated in firms. They are defined as unique entities, possessing heterogeneous asset bases – a bundle of distinctive resources and their competitive advantage is achieved by positive differentiation from competitors (e.g. Penrose, 1959 // 1980, p. 74). The main reason for their existence is to maximize profits (e.g. Amit & Schoemaker, 1993, pp. 34–35), whereby superior financial performance has been defined as the “rate of return greater than a normal return” (Barney, 1986, p. 657). Looking at the different theories, the basis for this indication of the prospering of a firm is perceived differently. While there are other theories which postulate that a firm’s competitive advantage is based on the ideal combination of labor and capital, the exercise of monopoly power over other firms (Conner, 1991, pp. 123–127), or industry-level leadership for factors determining a firm’s profit potentials (Porter, 1979), Resource-Based Theory focuses on the firm-specific creation of competitive resources.

Firms can achieve superior returns in two ways: "(a) making the firm's product distinctive in the eyes of buyers (e.g. the firm's product must offer to consumers a dissimilar and attractive attribute/price relationship, in comparison to substitutes), or (b) that the firm selling an identical product in comparison to competitors must have a low-cost position." (Conner, 1991, p. 132) This definition also allows for the conclusion that a “firm” has a more advanced role above administration, management and determination of optimal pricing and production quantities, the functions being the main priorities of a firm according to Menger’s theory of marginalism (Menger, 1871, p. 160). In the definition of the Resource-Based Theory, the firm must also be able to display further attributes, such as decision-making and a strategic allocation of resources to the relevant tasks, to be successful (Penrose, 1959 // 1980, pp. 11–24). Therefore, there are various types of resources and capabilities which need to be clearly classified and defined.

Resources

In Resource-Based Theory, the term “resources” is defined as tangible and intangible assets firms use to implement their strategies (Barney & Arikan, 2001, p. 138). Controversially to Penrose and other former authors (e.g. Roscher, 2009, p. 64), it is perceived in a broader view than the traditional tangible categories such as labor, capital and other property. Similar to authors like Caves (Caves, 1980, pp. 64–65), Wernerfelt argues, that resources are "anything which could be thought of as a strength or weakness of a given firm." (Wernerfelt, 1984, p. 172) Barney elaborates on this definition by introducing three categories of resources: *physical technology*, meaning physical technology, plant and equipment, location and access to raw materials, *human capital resources*, such as training, experience, relationships and individual insights of the firm’s employees, and *organizational capital resources*, comprising company assets such as planning, controlling, and informal internal and external relations. (Barney, 1991, p. 101) All definitions include intangible resources besides traditional tangible resources (labor, capital, property) in their definitions and emphasize that also these intangible resources can create a competitive advantage for their firm; hence, authors include them in their conceptualizations of resources (e.g. Hunt, 1997, pp. 438–439, Makhija, 2003, p. 439). Examples for tangible resources are buildings, real estate, equipment and precious materials. (Downes & Goodman, 2010) Examples of intangible resources are intellectual capital, intellectual properties such as brands, human capital or R&D pipeline (e.g. Lev & Daum, 2004, p. 7, Berry, 2005). Early RBV theories use the concept of strategic factor markets (SFMs) where firms can obtain resources and their main competitive advantage included firms’ obtainment of resources at a lower cost than the economic value. (Maritan & Peteraf, 2011, p. 1375) This logic however, is argued not to apply for non-tradable resources, which are firm-specific and hence need to be developed internally. (Dierickx & Cool, 1989, p. 1505) This view is also supported by dynamic capability theorists (e.g. Teece, Pisano, & Shuen, 1997), who focus on "how firms can change their capabilities fundamentally by creating dynamic or higher order capabilities." (Gavetti, 2005, p. 600)

Assets

Another term used in Resource-Based Theory is assets. Some authors use the terms resources and assets interchangeably (e.g. Itami & Roehl, 1991, p. 12), while others make a distinction between assets, resources and capabilities. For example, Hooley et al. stated that assets differ from capabilities based on the fact that they are not process-based. "Capabilities refer to a firm's capacity to deploy assets, usually in combination using organizational processes to effect a desired end." (Hooley et al., 1998, p. 101) Similar to resources, assets are also split into both tangible and intangible assets. (Mahoney, 1995, p. 92) This typology has been extensively elaborated on and might not be necessary in the context of this research. Hence, the author follows the definition of Barney and Arikan, who describe "resources" as "tangible and intangible assets firms use to conceive of and implement its strategies" (Barney & Arikan, 2001, p. 138) and does not make a distinction between assets and capabilities.

Capabilities

Capabilities can be described as "the ability of an organization to perform a coordinated set of tasks, utilizing organizational resources, for the purpose of achieving a particular end result." (Helfat & Peteraf, 2003, p. 999) The term has been introduced by Amit and Schoemaker, who were the first to evolve the concept of resources. Following these authors, capabilities refer to "a firm's capacity to deploy Resources, usually in combination, using organizational processes, to effect a desired end. They are information-based, tangible, or intangible processes that are firm-specific and are developed over time through complex interactions among the firm's Resources. They can abstractly be thought of as 'intermediate goods' generated by the firm to provide enhanced productivity of its Resources, as well as strategic flexibility and protection for its final product or service." (Amit & Schoemaker, 1993, p. 35) Looking at this definition, the two distinctive characteristics of capabilities are (1) their specific embeddedness in an organization and their passing on through the firms' human capital and (2) their main purpose in supporting the efficiency of the other resources of the firm (e.g. Kozlenkova et al., 2014, p. 5). In contrast to resources, capabilities cannot be bought but must be "built" within the organization. They are an "intermediate transformation ability" between resources and outputs. (Dutta, Narasimhan, & Rajiv, 2005, p. 278) They consist of routines, "those to perform individual tasks and those that coordinate the individual tasks." (Helfat & Peteraf, 2003, p. 999) Hooley also splits capabilities into strategic, functional and occupational categories. Through this classification, an abstract depiction of different levels of capabilities has been defined. Capabilities range from the long-term, overviewing capabilities of the company's top management to highly tactical skills, considering the execution of specific tasks. (Hooley et al., 1998, pp. 102–103) With this classification, another dimension is added to the resources definition as especially with the strategic competencies classification, Hooley highlights the role of management in the development of capabilities.

Dynamic capabilities

The concept of capabilities is further extended by Teece through the introduction of dynamic capabilities. He defines dynamic capabilities as capabilities that can "continuously create, extend, upgrade, protect, and keep relevant the enterprise's unique asset base" in a flexible environment (Teece, 2007, p. 1319). Like the capabilities introduced by Amit and Schoemaker, they are also resources that change and enhance other resources to secure the competitive advantage of the firm. These dynamic capabilities are especially pertinent to fast-paced and frequently changing environments. (Eisenhardt & Martin, 2000, p. 1106) In his definition, Teece further divides dynamic capabilities into three forms of capacities: "(1) to sense and shape opportunities and threats, (2) to seize opportunities, and (3) to maintain competitiveness through enhancing, combining, protecting, and, when necessary, reconfiguring the business enterprise's intangible and tangible assets." (Teece, 2007, p. 1319) Whereas Teece and his colleagues argue that due to their importance, dynamic capabilities should be analyzed in a stand-alone theory, Resource-Based Theory-authors see the concept as consistent with the definitions of resources and capabilities and, hence, merely as an extension of the existing Resource-Based Theory framework (e.g. Peteraf & Barney, 2003, pp. 321–322). The author of this doctoral thesis follows the argument that defines dynamic capabilities as a special type of capabilities and employs the definition of Makadok, who conceptualizes dynamic capabilities as a group of resources that represent an "organizationally embedded non-transferable firm-specific resource whose purpose is to improve the productivity of the other resources possessed by the firm." (Makadok, 2001, p. 389) Still they hold an important position amongst other resources and capabilities because they do not involve the production of a good or the provision of a marketable service, but build, integrate or reconfigure operational capabilities (e.g. Srivastava, Shervani, & Fahey, 1998, pp. 4–5); therefore – as all assets – they are valued in the external product marketplace, to which they contribute directly or indirectly.

As can be seen from the descriptions above, the main differentiation lies between resources and capabilities. Whereas resources are externally available and transferable, capabilities are firm-specific and need to be developed internally. Their main purpose is to enhance the productivity of other resources. Dynamic capabilities are special capabilities supporting the change over time and congruence in the changing environment.

1.1.3. Sustained Competitive Advantages in Resource-Based Theory

Not all resources or capabilities of a firm are strategically relevant resources. A resource or capability can provide a competitive advantage when it creates “more economic value than the marginal (breakeven) competitor in its product market.” (Peteraf & Barney, 2003, p. 314) Resource-Based Theory assumes an intrinsic heterogeneity of resources (Leiblein, 2011, pp. 915–916). Hence, some firms may own superior productive factors, which are not accessible to all firms in one market and need to add a durable value to the firm (Peteraf, 1993, p. 180). In fact, not all competitive advantages are sustained competitive advantages. Resources or capabilities need to be valuable, rare, in-imitable and non-substitutable. Resources and capabilities should not be temporary and provide a long-term advantage. All this also holds true for the resources of competitors. Competitive disadvantages therefore could also only be short-term. Sustained competitive advantages are “implementing a value creating strategy not simultaneously being implemented by any current or potential competitors and when these other firms are unable to duplicate the benefits of this strategy." (Barney, 1991, p. 102) or are defined by Conner as "costly-to-copy attributes of the firm as sources of economic rents and, therefore, as the fundamental drivers of performance and competitive advantage." (Conner, 1991, p. 121) To advance from a short-lived competitive advantage into such a sustained competitive advantage, resources need to be long-term *heterogeneous* and *immobile* / not perfectly mobile (Peteraf, 1993, p. 182) as otherwise they would only provide a short-term advantage and would be easy to imitate by competitors. To ensure that heterogeneity and immobility are fulfilled, early authors of Resource-Based Theory have created a set of characteristics, required to be fulfilled by a sustained competitive advantage. Displaying these four so-called *VRIN-criteria*, the resources will empirically fulfill the requirements for heterogeneity and immobility and will be able to provide a barrier to entry to potential competitors (e.g. Amit & Schoemaker, 1993, p. 37). Sustained competitive advantages are defined to have to (a) provide the firm with value (provide opportunity or eliminate threats), (b) be (competitively) rare, (c) be not easily and fully imitable, or so-called in-imitable, and (d) be non-substitutable. (Barney, 1991, pp. 105–106) Resources which are not valuable do not hold any competitive advantage. Resources which are not rare are no advantage towards competitors owning this resource. Resources should also be in-imitability and non-substitutable, ideally on a long-term basis to be a sustained competitive advantage. In the following paragraphs, each of the criteria for a resource to become a sustainable competitive advantage is described in more detail. Only if resources fulfill these criteria, they will be made part of the model analyzed by the author.

Resource Value

The value of a resource or capability is defined by its capability to either provide strength against the firm's competitors or neutralize threats. The value of a resource or capability can be assessed by examining the impact of the resource's or capability's use o on the firm's revenues and costs. A value-chain analysis can be used to analyze the value of resources and capabilities. In the Generic Value Chain, for example, Porter suggests the identification of valuable resources or capabilities by first classifying them and defining the value chain afterwards. He splits value-generating activities into primary and support activities. Primary activities are defined as inbound and outbound logistics, operations, marketing and sales as well as services. Support activities are comprised of procurement, technology development, human resource management and the firm infrastructure (Porter, 2004, pp. 39–48). This structure is very rigid and production-oriented and does not consider aspects such as the development and evolution of capabilities and dynamic capabilities as previously described. Moreover, there are differences in markets and other external influences, which are not considered in this view on the value of resources and capabilities. Every firm approaches these activities in a different way and, depending on how these are developed and how they are linked to one another; the value chain and the competitive advantages are developed differently. Valuable resources and capabilities are hence defined as resources that "enable a firm to develop and implement strategies that have the effect of lowering a firm's net costs and/or increase a firm's net revenues beyond what would have been the case" without them. (Barney & Arikan, 2001, p. 138) The purpose of these resources and capabilities is to enable firms to implement strategies, leverage market opportunities as well as identify and eliminate threats (Barney, 2002, p. 173). If a resource does not provide value to the firm, it does not offer a competitive advantage and therefore should not be further developed by the organization.

Resource Rareness / Scarcity

One condition for a resource to be valuable is that it must be rare and that other companies have no or limited access to it (e.g. Barney, 1991, p. 106). Put simply, the definition of a rare resource is that the resource is only controlled by a small number of firms. "In general, the strategic value of a firm's Resources and Capabilities is enhanced the more difficult they are to buy, sell imitate or substitute." (Amit & Schoemaker, 1993, pp. 38–39) Given the nature of capabilities as being information based, closely connected to the firm’s human capital and often accumulated over time, they are unique to the firm. Since capabilities are that specific, they may also lead to market failure. (Mahoney & Pandian, 1992, p. 370) Therefore, it is especially important that capabilities as well as resources are of value to the firm. Since they are applied differently, depending on the firm and the industry, the rarity of a valuable resource or capability so that it generates a competitive advantage varies from situation to situation. If a firm’s resource is absolutely unique, it at least provides a competitive advantage and provides the potential for a sustained competitive advantage. If a resource fulfills the criterion of being valuable but is not rare, it will not award the company a competitive advantage. However, it might still be important for a firm to exploit this resource or capability, because it offers competitive parity and might present a competitive disadvantage if not exploited.

Resource In-imitability

If valuable and rare resources can be easily imitated, new entrants or competitors will be able to copy them and will not have to allocate as many assets towards developing them. To be a sustained competitive advantage, the resource also needs to be imperfectly imitable or so-called in-imitable (e.g. Lippman & Rumelt, 1982, p. 419). Hence, an in-imitable resource can be defined as a resource which is very expensive for a competitor to imitate or to obtain. One reason for why a firm’s resource can be imperfectly imitable may be specific historic conditions under which the company was able to acquire the resource or capability. "The performance of a firm does not depend simply on the industry structure within which a firm finds itself at a particular point in time, but also on the path a firm followed through history to arrive where it is." (Barney, 1991, p. 108) Historical conditions can either occur in specific historical contexts, thus generating a resource or capability in a timely circumstance that might not occur again (e.g. in connection with historical events like a war), or they can occur when there is a path-dependence for a resource, meaning the firm must outlive a difficult learning process to obtain this resource or capability. Another reason for a resource being in-imitable can be *causal ambiguity*. Causal ambiguity occurs if it remains unclear what the competitive advantage of the firm is exactly based on (e.g. Peteraf, 1993, p. 183). The third reason for a resource being imperfectly imitable is *social complexity*, such as organizational culture, interpersonal relationships, and other social resources which are either not imitable or very costly to imitate, especially in the short term. In most cases, there is no causal ambiguity and socially complex resources can be explained and are understood. However, it is still difficult for competitors to copy these resources or capabilities. For a few industries, patents also serve as a source of competitive advantage. But even if technology is patented, it can be imitated and with the growing speed of technological innovation, they might only be limited in their in-imitability. "If a resource or capability is valuable and rare but not costly to imitate, exploiting this resource will generate a temporary competitive advantage for a firm and above-normal economic profits." (Barney, 2002, p. 173) However, this is just a first-mover advantage that prevails until “the competitive advantage is competed away through imitation the first-moving firm can earn above-normal economic performance.” (Barney, 2002, p. 174) Only if the resources or capabilities are in-imitable or too costly to imitate, they become sustained competitive advantages. Otherwise, if they are just valuable and rare, they can only offer a temporary competitive advantage and competitors will be able to acquire or copy the resource or capability and benefit from it as well.

Resource Non-substitutability / Resource Organization

If a resource is valuable, rare and in-imitable, it also must be non-substitutable to provide a sustained competitive advantage (Dierickx & Cool, 1989, p. 1509). Non-substitutable resources also do not have any strategic equivalents (Volberda, 2011, p. 108). To provide the same competitive advantage, the substituting resource must award the other firm the same implications as the firm that is imitated. "If enough firms have these valuable substitute resources (i.e. they are not rare), or if enough firms can acquire them (i.e., they are imitable), then none of these firms (including firms whose resources are being substituted for) can expect to obtain a sustained competitive advantage." (Barney, 1991, p. 112) According to Barney (Barney, 1991, pp. 111–112), firms can apply two different substitution-strategies for strategically equivalent resources: They can either substitute with similar resources which enable them to implement the same strategies or they can substitute with very different resources, generating a differentiation and hence a new competitive advantage for the firm. In any case, it makes a difference to which extent the new resource substitutes the imitated resource. However, it may not be easy to define when a resource is substituted, since multiple resources or capabilities are often responsible for a successful strategy and every firm has a different resource-bundle (Barney & Arikan, 2001, pp. 144–145). It is not always only one resource or capability that is responsible for the profitability of a firm, and it is not easy to isolate the resources responsible for the sustained competitive advantages.

There has been an academic debate on the completeness of these criteria and their ability to address the impact of organizational actions on resource effectiveness over time (Foss & Knudsen, 2003, p. 291 pp). In response to this criticism, the model of VRIN-criteria was developed towards the *VRIO-framework*, where the criteria were enhanced by the topic of *organization* – the *organizational capabilities* to successfully exploit the valuable, rare, and in-imitable resources. Organizational capabilities are also called complementary resources and capabilities because they do not present a competitive advantage standing alone, but in combination with other resources and capabilities, they can be a sustained competitive advantage (Amit & Schoemaker, 1993, pp. 37–38). Firms need to have an appropriate organization in place to fully leverage the advantages of their resources and capabilities and turn them into sustained competitive advantages (Barney, 2002, p. 172). The author has decided to incorporate this evolvement of the model in the definition of sustainable competitive advantages. Especially elements of successful organizations, such as formal management control systems (e.g. budgeting and reporting systems) and informal management control systems (e.g. organizational culture) are also highly relevant for the full exploitation of resources and capabilities and for the resources and capabilities to become sustained competitive advantages (Kozlenkova et al., 2014, p. 3). Depending on how many criteria are met by a resource (value, scarcity, costly to imitate, exploited by the organization), its economic performance varies. Only if a resource is valuable, rare and in-imitable or too costly to imitate, it fulfills the VRI-requirement, enabling the firm to economically perform above normal (Barney, 2002, pp. 173–174). However, to become a sustained competitive advantage, it is important that the single valuable, rare and in-imitable resources or capabilities as well as their unique combination, achieved through resource organization, cannot be copied by competitors - either by replacing one of the resources or capabilities or by combining resources and capabilities in a different manner.

1.2. Customer-Orientation and Brand-Orientation of Marketing Capabilities

The author has chosen to analyze the Resource-Based Theory in the context of marketing resources and capabilities and the generation of customer- and brand-equity. Several authors have already conducted an analysis of the marketing discipline in the context of Resource-Based Theory, since the theory provides a suitable framework to provide reasons and predictive models for success and performance (Kozlenkova et al., 2014, p. 1). Marketing is a core and long-developed discipline, which can significantly support firm value. The first roots of marketing can even be tracked back to the Bronze Age (Moore & Reid, 2008, p. 422). Since then, the discipline has evolved quite considerably. Especially in the last decades, marketing has undergone a paradigm-shift: More contemporary theories have emerged from a mere product-based approach of a functional discipline with the purpose of communicative support of sales and product presentation towards a more integrated, strategic role as value-driver with a focus on shareholder returns (e.g. Day & Fahey, 1988, pp. 46). Marketing has evolved from a mere sales- and product-supporting function to a strategic function focusing on the customer, which is integrated throughout all organizational functions and processes. It is “geared towards marketing promises through value proposition, enabling fulfillment of individual expectations created by such promises and fulfilling such expectations through support to customers’ value-generating processes, thereby supporting value creation in the firm’s as well as its customers’ and other stakeholders’ processes.” (Kotler, 2009, pp. 6–7) This definition describes the integrative role of marketing, combining relational assets, building trust with consumers as well as relationships with intellectual assets, managing the marketing processes and distributing knowledge inside the firm (e.g. Srivastava et al., 1998, p. 2). Also in Resource-Based Theory, the definition of marketing resources and capabilities has broadened form its original definition, further including different marketing domains such as marketing strategy and marketing innovation.

In addition, the focus of marketing has evolved from a sole inside-out view focusing on how the brand is communicated and an outside-in view, traditionally grounded in customer behavior theory and customer satisfaction theories, to an integrated view that takes up the definition of marketing capabilities and resources. In the light of this new classification, marketing is increasingly studied in the context of capabilities and dynamic capabilities (e.g. Baumgarth et al., 2011, pp. 8–9; Kozlenkova et al., 2014, pp. 2–4). Marketing resources and capabilities therefore can be summarized as all resources and capabilities involved in the creation and management of brands, the development of customer relationships and the building of marketing innovation and knowledge on a strategic as well as a functional level. Marketing resources and capabilities qualify as valuable, rare, inimitable and non-substitutable (VRIN-resources) and hence can become sustained competitive advantages.

1.2.1. *The Brand as Central Construct for The Firm*

There is an ongoing academic debate regarding the definition of the term “brand” and its implications. Even though the term is frequently used in literature, most definitions either focus on single aspects of the brand, such as brand personality or brand image, or they emphasize brand outcomes, such as brand awareness or brand perception. In an extensive literature review, authors like de Chernatony and Dall’Olmo Riley or Balmer have developed systems to structure the vast field of definitions, which are anchored in various domains of research, mainly in the fields of law, business strategy, marketing management and consumer behavior (e.g. De Chernatony & Riley Dall'Olmo, 1998a, pp. 418–424; Balmer, 2001, pp. 253–257). A significant share of the brand-definitions identified focuses on the functional aspects of a brand, such as legal protection for the product or service, the logo or the visual identity. According to the American Advertising Association, a brand is a "name, term, design, symbol, or any other feature that identifies one seller's good or service as distinct from those of other sellers." (American Marketing Association, p. 1) Many scholars argue that this definition is too mechanical and too narrow, only focusing on the purpose of identification and differentiation and thus neglects the emotional and cognitive aspects as well as the economic and entrepreneurial importance of the brand.

Another set of definitions centers on the brand at a more abstract level. In this definition, brands stand for specific values and an identity system (external as well as internal). Like humans, they have a perceived personality and a reputation. Brands differentiate the firm and the firms’ products and services from those of competitors in the mind of the customer (e.g. Aaker, 1997, pp. 346–350). Besides customers, this differentiation is also relevant for other stakeholders of the firm, such as investors, suppliers, partners, potential and existing employees etc. For the consumer and other stakeholders, brands are shorthands, allowing them to recall all information on the brand they have memorized and make faster purchase decisions. Moreover, they reduce the perceived risk of consumers when making their purchasing decisions, because they stand as a guarantee for a consistent product or service experience (De Chernatony & Riley Dall'Olmo, 1998a, pp. 419–420). Consumers hold attitudes towards brands respectively their personality, liking or disliking them. If brands are successful, customers are loyal to the brand, are willing to pay higher prices for the products or services, and are likely to promote the brand via word of mouth and be more forgiving if the brand fails (e.g. Conner, 1991, p. 1547). Brands therefore hold benefits for both consumers and the firm:

On the *customer side*, brands

- represent a level of quality, which customers can expect when buying the product.
- simplify the purchasing process by providing clarity and avoiding indecision.
- reduce risk of purchase and save time for the customer.

On the *firm side*, brands

- create customer loyalty and with it secure demand and returning customers, lower switching rates and higher price margin potentials.
- create awareness, attraction and loyalty with other stakeholders, such as (potential) employees, suppliers, potential licensing-partners.
- protect the firm, product or service against competition or potential crisis.
- support the efficiency of marketing- and communication efforts.
- provide the opportunity for differentiation and market segmentation. (Kotler, 2009, pp. 428–429)

The above summarized benefits each take a view at the brand from a different angle - the outside-in view of consumers and the inside-out view of the firm. They need to be managed addressing both views. The primary activities associated with the discipline of "branding" can be described as all practical marketing measures taken to make an offer/ product stand out from comparable competitive offers/ products and allow a clear identification with a specific brand (Esch, 2010, p. 214). But the creation and management of a successful brand also includes strategic activities, such as the differentiation of firms, products and services against competitors, the creation of stakeholder awareness and the creation of a brand image; in a second step, the building of stakeholder trust and loyalty should be achieved (e.g. Levitt, 1979, p. 3; Schmidt, 2008, p. 19). These activities also involve customer-oriented marketing activities, such as customer-relationship management. Therefore, customer- and brand-oriented marketing capabilities need to be consulted when creating a brand that will maximize long term brand-equity and provide sustained competitive advantage.

1.2.2. Combining Brand-Equity and Customer-Equity

The term brand equity refers to the value generated for the firm through marketing-effects attributed to the brand. The concept of brand equity – similar to the brand itself – comprises outside-in or customer-oriented and inside-out or firm- / brand-oriented components. To leverage the full potential of marketing resources and capabilities, drivers of brand equity should be integrated, because there is a need for the organization to understand the customer's as well as the intermediary's perspective; consequently, both perspectives need to go hand in hand. Even though the end consumer is the final focus of both approaches, the viewpoint of the customer-based approach (also called market-based or market-oriented approach) is looking at the firm from the outside-in whereas the brand-oriented approach (also called firm-oriented approach) is concerned with the view of the firm from the inside-out (e.g. Barney, et al., 2001, pp. 779–783; Urde et al., 2013, pp. 14–15). Since both orientations play a crucial role in the creation of competitive advantage, the two approaches need to be clearly defined and the integration of the two needs to be described.

Classic brand equity

Aaker defines brand equity as "a set of brand assets and liabilities linked to a brand, its name and symbol that add to or subtract from the value provided by a product or service to a firm and/ or to that firm's customers." (Aaker, 1991, p. 15) These assets generate marginal cash flow by supporting the firm with the afore mentioned brand-benefits. This definition mainly focuses on the brand name / symbol to be loaded with brand awareness, positive brand associations, perceived quality, other proprietary brand assets (patents, trademarks etc.) and brand loyalty. This approach is rather functional and very much focused on the core branding capabilities of the inside-out approach.

Customer equity

Blattberg and his colleagues define customer-equity as the optimal balance between the cost of customer acquisition and the cost of customer retention (Blattberg & Deighton, 1996, p. 137). They focus on high-value customers first by evaluating the success of marketing programs based on customer-based brand equity gains and losses and putting a strong emphasis on customer retention – they even build two marketing organizations for acquisition and retention (Leone et al., 2006, p. 128). Rust, Zeithaml and Lemon define customer-based brand equity as "the sum of lifetime values of all customers." (Rust, Zeithaml, & Lemon, 2004, p. 113) – a definition which has been adopted by various streams of literature. The authors identify three central drivers for customer-based brand equity: (1) Value equity (i.e. the perception of what customers receive for what they put in; utility of the brand) (2) Brand equity (i.e. the subjective and intangible brand-assessment of consumer; awareness, attitudes and perception of brand ethics) (3) Relationship equity (i.e. the customer's loyalty towards the brand). (Keller, 2008, pp. 83–84) The goal of their approach is customer-centered brand management which focuses on customer-relationships and customer-centricity in making branding- and brand-extension-decisions. Kumar and his colleagues focused their research on the so-called customer lifetime value (CLV). Similar to Blattberg and his colleagues, they suggested to focus on customers with high- and medium CLV, addressing their future revenue potential and creating the respective metrics to maximize profitability throughout the customer lifetime (Leone et al., 2006, p. 129). Despite their slight differences, all three theories center on “the set of beliefs that puts the customer’s interest first, while not excluding those of all other stakeholders such as owners, managers, and employees, in order to develop a long-term profitable enterprise.” (Deshpandé et al., 1993, p. 27) The focus of the customer orientation is highly directed outwards and focuses on customer-relationships, customer acquisition and customer-retention.

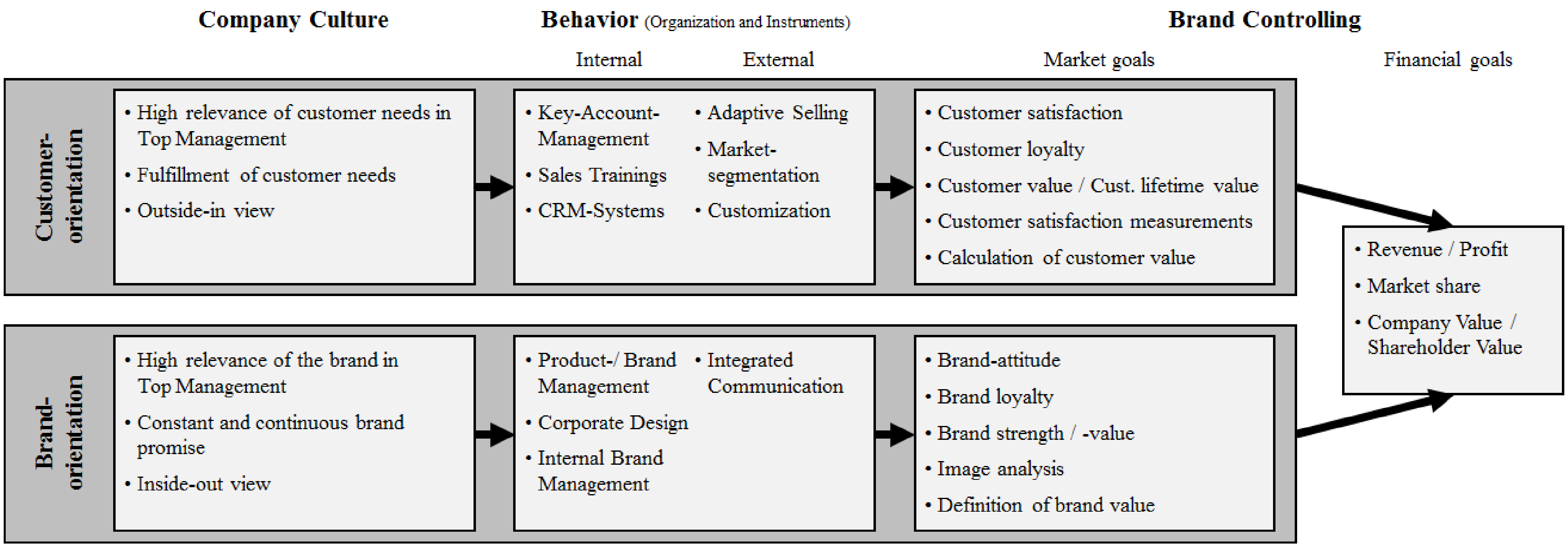
Customer-based brand equity

The customer-based brand equity model by Keller combines both consumer- and brand-based components by depicting their relationship. It consists of four sequential steps to build a strong brand. Throughout these steps, six brand building blocks are generated, which then create the brand pyramid. These blocks are Brand Salience, Brand Performance, Brand Imagery, Consumer Judgments, Consumer Feelings and Consumer Brand Resonance. According to this model, the strength of a brand and therefore its equity is based on how customers perceive and feel about the brand and how they react to the brand. Goal is to achieve Brand Resonance and make the customer feel that it is their kind of product (Keller, 2001, pp. 16–18). Kotler and his colleagues describe these consumer feelings and their brand resonance as an added value to products and services which is reflected in the perceptions of the brand, the feelings about the brand and the actions these perceptions and feelings may lead customers to take. This equity is generated through marketing effects which can only be attributed to the brand and result in higher price margins and the financial value of the firm (Kotler, 2009, pp. 446–454). This integrated approach towards brand equity is the most contemporary and most representative concept for the dominant logic of marketing which is based on the incorporation of the outside-in and inside-out view of the firm and integrates brand-equity as well as customer equity into one concept of marketing.

1.2.3. Customer- and Brand-Orientation - Differences and Similarities

Customer-based and classic brand equity are grounded in different theoretical foundations. Customer-based brand equity is generated through several business-activities, led by the view of customer-orientation. This orientation focuses on the satisfaction of customer needs. It puts more emphasis on the bottom line financial value provided by customers and focuses on the relationship management with them. However, it largely ignores the influence the brand has on other stakeholders, such as the previously mentioned investors, suppliers, partners, potential and existing employees as well as competitors (e.g. Urde et al., 2013, p. 14). Brand-orientation, which aims at generating firm-based brand equity, takes a broader approach, including strategic stakeholders and competitors by focusing on brand awareness and brand image. “Strong favorable and unique brand associations are essential as sources of brand equity to drive customer behavior.” (Leone et al., 2006, p. 126) There is also a focus on the satisfaction of customer needs, but only within the limitation of the brand core identity. These different approaches have varying strategic implications and lead to diverse business decisions, goal-definitions and measurements for success.

This difference in perspective touches many aspects of a firm, from corporate culture, to different organizational behavior and market goals. Customer-orientation is highly focused on customer needs, measuring items such as customer satisfaction, customer loyalty and customer value. Customer equity is generated through profitable customer relationship management and long customer life cycles (e.g. Rust, Zeithaml et al., 2004, p. 113). This view lacks the inclusion of growth opportunities, network effects and the comparison with other firms and competitive offers. Brand-orientation focuses on the brand-presentation, brand image and brand strength. Subsequently, brand-equity is built on a strong brand management, including prescriptive marketing guidelines. Growth opportunities are considered in this orientation. However, this view does not contain any focus on the consumer, including a segmented analysis of consumer behavior. Both orientations share the same financial goals of profit, market share and shareholder value growth. The comparison of the two orientations is displayed in Figure 1-2 on the next page, which is adapted from the graph by Baumgarth and colleagues (Baumgarth et al., 2011, p. 11). Customer- and brand- oriented resources and capabilities are naturally not equally distributed across the firms’ portfolios. Depending on the organization’s set of resources and capabilities, there are organizations which express a stronger customer- or a stronger brand-orientation. In addition to the differences in distribution, the need for resources and capabilities changes over time and management needs to set a different emphasis and strategic focus. (Leone et al., 2006, p. 130) The authors’ research further investigates this development of customer- and brand-oriented marketing resources and capabilities by an organization in the light of the lifecycle of the firm.



Source: adapted by the author from Baumgarth et al. (Baumgarth et al., 2011, p. 11)

Figure 1-1: Comparison of customer-orientation and brand-orientation

1.3. The Development of Resources and Capabilities in Firms

As previously mentioned, resources and capabilities, especially dynamic capabilities, are not static concepts and thus subject to change, especially as competitive advantages. Firms own resources on a permanent or semi-permanent basis (Helfat & Peteraf, 2003, p. 999). This is why it is important to take a long-term and processual view on the growth of resources and capabilities. Managers need to take on a long-term vision and strategic view when developing them. A firm’s profitability and financial success is created through the exploitation of imperfect factor markets and the acquisition and creation of strategic resources. "Economic rents, in this view, derive from properties unique to the firm's Resources and Capabilities. The focus is thus more internal and institutional, recognizing the often slow and evolutionary path by which specific Capabilities develop." (Amit & Schoemaker, 1993, p. 42) However, during the evolution of the organization, the inside-out view evolves and capabilities need to be adapted to also take the outside-in view into consideration (Leone et al., 2006, p. 130). There is an evolutionary process in the development and maintenance of competitively advantageous resources. In accordance with the theories by Schumpeter, Resource-Based Theory believes in the necessity to develop and change priorities of competitive resources over time.

Schumpeter introduced the so-called “process of creative destruction”, which emphasizes the economy’s evolutionary process. He believes that over time businesses change from within, a process which he calls "creative destruction". (Schumpeter, 1942 // 1987, pp. 83–84) Firms are constantly challenged to adapt their use of resources to stay ahead of their competition and ensure superior financial performance (Barney, 1986, p. 658). This attitude of competition is perceived as a struggle by the school of evolutionary economics is opposed to the Austrian view, where competition is seen as a “knowledge-discovery process in which entrepreneurship and economic institutions are important.” (Hunt, 1997, pp. 433–434) In both theories, the development of competitive resources is a process and thus subject to constant change. This view is also supported by the fundamental propositions of evolutionary economic theorists, who name Schumpeter as one of their thought-leaders (Nelson & Winter, 1982, pp. 39–43). They propose a model of change over time, involving both “random elements which generate or renew some variation in the variables in question, and mechanisms that systematically winnow on extand variation.” (Dosi & Nelson, 1994, p. 154) So, resources and capabilities can evolve or change over time in significant ways (Helfat & Peteraf, 2003, p. 999), and even if a firm has established a sustainable competitive advantage, the value of resources can change over time. Changes in the industry, changes of customer demand, resource supply etc. influence whether a resource or capability will stay a sustained competitive advantage or not (Barney, 2002, pp. 161–162). Firms that might have created strong market entry barriers, so-called “isolating mechanisms”, might find themselves in a changing situation (Mahoney & Pandian, 1992, pp. 371–373). Therefore, managerial flexibility and constant development of resources and capabilities based on the changing environment and role of the firm is a central task for management.

1.3.1. Resources- and Capabilities-Portfolio-Management of Firms

As mentioned above, the sole possession of resources is not sufficient to provide a competitive advantage. To benefit from the full potential of resources, they must be managed. Entrepreneurs identify and take advantage of “productive opportunities” to enhance the growth of the firm and determine how the resources will be used (e.g. Hansen, Perry, & Reese, C. Shane, 2004, p. 1280). Management or entrepreneurship in this context is defined as “individuals or groups within the firm providing entrepreneurial services, whatever their position or occupational classification may be.” (Penrose, 1959 // 1980, p. 31) The imperfect imitability of capabilities for social complexity, but also for causal ambiguity show the importance of strategic management as source of heterogeneity (e.g. Mahoney & Pandian, 1992, pp. 364–365). The resource- and capabilities-portfolio must be constantly and carefully monitored and updated. When looking at the resource- or capabilities bundle at any given time, the resources and capabilities that need to be managed are composed of both strengths and weaknesses. Resources need to be evaluated and if needed, non-valuable resources need to be shedded and new resources added. (Sirmon & Hitt, 2003, pp. 344–348) It is the task of management of the firm to pick the resources alongside building the corresponding capabilities (Makadok, 2001, p. 389). “Managerial decisions concerning such resources and capabilities are ordinarily made in a setting that is characterized by: (1) *Uncertainty* about (a) the economic, industry, regulatory, social, and technological environments, (b) competitors' behavior, and (c) customers' preferences; (2) *Complexity* concerning (a) the interrelated causes that shape the firm's environments, (b) the competitive interactions ensuing from differing perceptions about these environments; and by (3) *Interorganizational conflicts* among those who make managerial decisions and those affected by them." (Amit & Schoemaker, 1993, p. 33) Sirmon and his colleagues have developed a framework, in which they suggest three different processes to manage resources: One main task for the entrepreneur is the *structuring* of the resources portfolio (i.e. the sum of all tangible and intangible assets of a firm), meaning the acquisition of new resources, the accumulation and development of resources within the organization and the divesting or dropping of unwanted or unproductive resources. The second most important duty of the entrepreneur is the *bundling* of resources and the formation of unique capabilities. By bundling resources, they can either be stabilized by incrementally improving existing capabilities or they can be enriched with capabilities and extended to significantly enhance competitive advantages. Another option of bundling is pioneering, where completely new resources are combined. The third task for the entrepreneur is *leveraging* the capabilities in the marketplace through the mobilization of capabilities in specific configurations to exploit market-opportunities through the coordination and integration of capabilities or through the deployment of strategies to support the previously identified firm strategy (e.g. Sirmon et al., 2011, pp. 1391-1394).

The role of the entrepreneur in realizing and enabling the competitive advantage by allocating resources is crucial, especially in the early stages of the firm; hence, it needs to be adapted depending on the developmental stage of the firm. Researchers argue that there is also a cyclical development of resources and the resource management phases described above go hand in hand with the processes and development phases described in both organizational life cycle theories and the entrepreneurial requirements in the respective phases (e.g. Hansen et al., 2004, pp. 1280–1281; Ndofor, Sirmon, & He, 2011, pp. 643–644). Since resources and capabilities are created and redefined in the complex and evolutionary process of company history, life cycle theories can contribute to the explanation of this process. “They [resources and capabilities] are the results of enduring accumulation and learning processes and cannot be changed rapidly.” (Hooley et al., 1998, p. 113) To best cover the different requirements for a firm to be effective in the strategic management of resources and capabilities over time, life cycle theory is a well-researched and accepted theory. It is based on the metaphor of organic growth, and addresses theoretical approaches such as developmentalism, ontogenesis, metamorphosis, stage and cyclical models. Supporters of life cycle theory suggest that life cycle models usually (1) follow a single sequence of changes, (2) which is cumulative and (3) conjunctive (Van De Ven, Andrew H. & Poole, 1995, pp. 513–515). In business studies, life cycle theory has been applied to various topics but mainly organizations. In Resource-Based Theory, each stage of life cycle of a firm provides different opportunities and challenges in regard to the acquisition and development of resources and capabilities. In each stage, it is important for management to leverage the potential and develop its assets along each of the life cycle stages.

1.3.2. *Life Cycle Models for Resources and Capabilities*

Life cycle modes for Resource-Based Theory have been adapted from life cycle theories in other disciplines, such as product life cycles. Similar to them, organizational life cycle models suggest that the developments of a firm follows predictable patterns that can be described in different stages of development. The term organization in this context is defined as the procedures and policies of a firm "organized to exploit the full competitive potential of its resources and capabilities." (Barney & Hesterly, 2012, p. 94) The developmental stages of every organization are different and individual. Depending on the stage of life cycle, pressures, opportunities and threats vary for each organization and success-criteria for the firm and for the management of resources and capabilities are different (e.g. Jawahar & McLaughlin, 2001, pp. 404–405). But there are common patterns in organizational development which take the form of different life cycle stages. These stages are (1) sequential in nature, (2) occur as a hierarchical progression that is not easily reversed, and (3) involve a broad range of organizational activities and structures (Quinn & Cameron, 1983, p. 33). There are no clear findings or evidence as to how many stages a firm passes through (Rutherford, Buller, & McMullen, 2003, p. 322). Some models summarize stages whereas others split them into more steps and the transitions between the different stages are defined differently. In literature, models with a range of three to ten stages can be found. Most of these models focus on the growth of the organization and only a selected few look at the complete life cycle including decline and death. Several authors in life cycle theory also place strong emphasis on the early stages and argue that the initial "imprinting" for future stages of the organization is set in the early stages of a firm (Cameron & Whetten, 1981, p. 527). In the context of Resource-Based Theory, the author has chosen to explore the *Summary Model Life Cycle* by Quinn and Cameron (Quinn & Cameron, 1983, pp. 34–41) which reviews and summarizes nine different life cycle models, the *Corporate Life Strategies Model* by Miller and Friesen (Miller & Friesen, 1984, pp. 1162–1163) which takes a longitudinal approach to the life cycle model, the *Capability Life Cycle Model* by Helfat and Peteraf (Helfat & Peteraf, 2003, pp. 1000–1005), which specifically pays attention to the development of capabilities throughout the life cycle, and the *Resource Orchestration Model* during the Firm Life Cycle by Sirmon et al. (Sirmon et al., 2011, pp. 1400–1403), which is based on management-tasks regarding resources for each life cycle phase.

It is not possible to give any indication about the duration of the described life cycle stages. Every firm develops at its own pace and faces different challenges in the process; moreover, it is provided with different opportunities during each stage. Resources and capabilities are distributed and developed differently. The development of the stages can follow each other rapidly or slowly, depending on the organization (Quinn & Cameron, 1983, p. 40). The unique combination of resources and capabilities in each firm is as unique and differentiated as their change over time (Mintzberg, 2003, p. 79). Except for Miller and Friesen (Miller & Friesen, 1984, p. 1166), none of the authors offer any criteria for the classification of the stages, neither in terms of company-size nor time. The definitions by Miller and Friesen only have been set for their experimental work and have not been based on other research. Even though there is evidence that firm size is positively related to the likelihood of survival and that growth slows down in further life cycle developments (Sutton, 1997, p. 46), there is no clear definition, how firms must develop in terms of size to be successful (Agarwal & Audretsch, 2001, p. 26). So, life cycle of each firm is as individual as the firm itself. Unfortunately, this lack of delineation of single phases and the development over time make it impossible to provide any predictions and guidelines. However, recent research findings and selected concepts, such as the development of dynamic capabilities, indicate that it is important to analyze resources and capabilities in the light of organizational developments and recommendations for preparation regarding the firm's development can be derived.

Quinn and Cameron have analyzed nine life cycle models on strategic and organizational topics. They distilled the common structure and merged it into an overall "Summary Model". Depending on the models, there are three to eight different stages, which they subsumed in four main stages (not including decline) (Quinn & Cameron, 1983, pp. 34–41). Miller and Friesen came up with a very similar typology of a prototypical life cycle in their literature review. They identified five main stages (including decline) (Miller & Friesen, 1984, pp. 1162–1163). A life cycle concept addressing the specific nature of capabilities has been introduced by Helfat and Peteraf. Their model includes 3 stages of growth towards maturity. After maturity, at least six branches of development are possible: retirement/ death, retrenchment, renewal, replication, redevelopment, recombination or a simultaneous combination of these stages. (Helfat & Peteraf, 2003, p. 1000) Based on their (previously mentioned) resource management process, Sirmon and his colleagues put the resource orchestration in connection with the respective life cycle requirements (Sirmon et al., 2011, pp. 1400–1403). These models share similarities in regard to the stages and the requirements for management. Depending on the emphasis of the model, a different focus is put on the organizational challenges of the respective phase. The author outlines the single stages and the parallels as well as differences of the different models in the following pages. To structure this comparison, the author has identified six different stages across the four models, which are described in the following pages. For a better overview and comparison, the author has also graphically summarized the models in Table 1-1 on the next page.

Stage 1

The first stage is called Birth Phase, Founding Stage, Start-Up Stage or Entrepreneurial Stage. These names describe very well that in this phase, the first idea for the organization is established and concepts for the firm are developed. Entrepreneurial literature suggests that these ideas are generated by identifying and leveraging opportunities – either discovery opportunities or creation opportunities – of imperfection in the market (Alvarez & Barney, 2010, p. 563). This phase is dominated by the founder(s), their first idea of the firm and of the product or service. The organization does not exist yet and only a small number of people, most of the time only the founders, are involved. This phase, even called the Fantasies Stage by Torbert (Torbert, 1974 / 1975, p. 5), is still only about "the big idea" and big promises. Ideas are still developed and business plans are made. There is no concrete product or service to show to potential customers or other stakeholders. It is not finalized and the "niche" is yet to be established (e.g. Adizes, 1979, p. 4; Quinn & Cameron, 1983, p. 35).

In terms of resources and capabilities, managerial cognition is especially important in this phase (Johnson & Hoopes, 2003, pp. 1057–1058). On one hand, the organization needs to further enhance the "big idea" and develop concrete products and services as well as concrete business plans. These young firms are thus firms that focus on innovation. On the other hand, to advance their ideas quickly and in the right direction, the firm's managers need to ensure a timely and continuous acquisition of resources to further experiment and build the product or service (e.g. Sirmon et al., 2011, pp. 1400–1403). One very important resource in this phase are human resources. Since the firm is still small and the organizational and financial resources are limited, the newly formed team begins by utilizing the set of endowments of the individual team members, including their network from previous occupations and their professional experience (Levinthal & Myatt, 1994, pp. 47–48).

Stage 2

Gradually, the first stage of ideation and concepts transits into the second stage, which is called the Collectivity Stage, Infant Organization, or Investment Stage. Since the life cycle of a firm is a fluctuating process, some authors combine Stage 1, Stage 2 and Stage 3 in one

Table 1-1: Life Cycle Models Overview

	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
Summary Model Life Cycle Quinn & Cameron 1983 (p. 33)	**Entrepreneurial Stage** · Marshalling of Resources · Lots of ideas · Entrepreneurial activities · Little planning and coordination · Formation of a "niche" · "Prime mover" is in power	**Collectivity Stage** · Informal communication and structure · Sense of collectivity · Long hours spent · Sense of mission · Innovation · High commitment	**Formalization and Control Stage** · Formalization of rules · Stable structure · Emphasis on efficiency and maintenance · Conservatism · Institutionalized procedures	**Elaboration of Structure Stage** · Elaboration of structure · Decentralizations · Domain expansion · Adaptation · Renewal		*Decline not covered by this life cycle model*
Corporate Life Stages Miller & Friesen 1984 (pp. 1162- 1163)	**Birth Phase** · Dominated by owner – manager · Homogenous, placid environment · Informal structure · Undifferentiated · Crude information processing and decision-making		**Growth Phase** · Multiple shareholders · More heterogeneous and competitive environment · Some formalization of structure · Functional basis of organization · Moderate differentiation · Somewhat less centralized · Initial development of formal information processing and decision-making	**Maturity Phase** · Dispersed ownership · Competitive and still more heterogeneous environment · Formal, bureaucratic structure · Functional basis of organization · Moderate differentiation and centralization · Information processing and decision-making	**Revival Phase** · Heterogeneous, competitive and dynamic environment · Divisional basis of organization · High differentiation · Sophisticated controls, scanning and communication in information-processing: more formal analysis and decision-making	**Decline Phase** · Homogenous and competitive environment · Formal bureaucratic structure · Mostly functional basis for organization · Moderate differentiation and centralization · Less sophisticated information-processing systems and decision-making
Capability Lifecycle Helfat & Peteraf 2003 (pp. 1000-1005)	**Founding Stage** · Goal is the organization around one objective, requiring or centrally involving the creation of a capability · Creation of organized group with leadership and capability of joint action · Setting of central objective of achievement · Setting of endowments (human capital, social capital, cognition) · Characteristics of the team leader affect the capability development path · External ties and social capital are important to obtain necessary resources		**Development Stage** · Capability development, search for viable capability-alternatives · Accumulation of experience over time · Choice of alternatives to pursue differs depending on the team and the conditions at founding · Organizational learning mainly through imitation or learning-by-doing · Sustained productivity improvements over time	**Maturity Stage** · Capability-maintenance (after ceasing capability-development) · Embedding of capabilities through regular exercising and repetition · Continuous production to maintain productivity levels · High skillfulness	**Branching and Capability Transformation** Branching into one of at least six additional stages of the capability life cycle: · Retirement · Retrenchment · Renewal · Replication · Redeployment · Recombination	
Resource Orchestration and Firm Lifecycle Sirmon et al 2011 (pp.1400-1403)	**Start-up Stage** · Resource-structuring behavior (financing, hiring, training) · Flat hierarchies · Establishment of alliances to obtain critical resources · Flexibility, adaption, experimentation	**Growth Stage** · Focus on pioneering capabilities that are new to the firm and enable internalization of previously outsourced functions (HR, legal, etc.) · Increasingly formalized procedures · Managerial hierarchy · Network relationships enable resource acquisition and innovation		**Mature Stage** · Maturity in strategies and operating procedures · Greater clarity in internal and external environments · Pursuit of innovation, balance with efficiency · Simultaneous exploration and exploitation of resources · Potential internationalization or forming of alliances		**Decline Stage** · Conservation of resources · Structuring action is required · Judicious investment of the remaining resources

Source: construct by author

stage. In this phase, the “big idea” is now clear and has transformed into solid plans for products and services, which are now ready to be launched on a bigger scale. To ensure further development, first significant investments and commitments need to be made (e.g. Adizes, 1979, p. 4). At this stage, the team grows, roles are starting to be defined and the organization starts to form through the creation of first informal structures. Managerial hierarchies develop and the firm’s leadership team is being formed (e.g. Quinn & Cameron, 1983, p. 35). This phase is also crucial for the future of the firm, because pathbreaking decisions need to be made regarding which resources should be invested in. The course is set for the development of capabilities and dynamic capabilities for the organization and the central objective of achievement is defined. As mentioned above, the duration of this phase can vary. Depending on external influences and internal developments, it might take time and some cycles of development to finally agree on the main mission of the firm, but the next level of growth can only start based on this central objective of achievement (Helfat & Peteraf, 2003, pp. 1000–1001). In this phase, innovation continues. The necessary resources become clearer, first capabilities are identified and start to be developed.

Stage 3

In this stage of the organization, called Formalization and Control Stage, Growth Phase or Development Stage, the main capabilities start to be developed and alternatives for missing resources and capabilities are identified. Organizational learning is key in this phase. It is mainly achieved through imitation. Experience is accumulated and viable alternatives for capabilities are found mainly through learning-by-doing. In this phase, the alternatives for growth and development are dependent on external factors and condition the firm experiences at founding (Helfat & Peteraf, 2003, p. 1001). The group unity of the first phases is still prevalent. The formalization of processes and organizational structures is still very low, but at the same time, it is a phase of first intense growth (Torbert, 1974 / 1975, p. 5). The firm “has the same results orientation […] an infant organization has, but with a vision and a horrendous appetite. It moves fast, often makes decisions intuitively since it lacks experience, and almost every opportunity seems to become priority.” (Adizes, 1979, p. 5) Even though the first cornerstones of the organization are set and some goals are defined, there is still a lack of structure and formalization. This high paced and yet unstructured environment provides a challenge to the leadership team and managers have to quickly develop enhanced management capabilities to support and foster growth (Lumpkin & Dess, 2001, pp. 437–438). In this phase, structures need to be further enhanced and experience needs to be developed over time. Management needs to allocate resources and develop capabilities as well as first productivity improvements.

Stage 4

The fourth development stage is called Elaboration of Structure stage or Maturity Stage. As the name tells, the main goal of the organization is efficiency. The organization is set on a functional basis and clear roles and responsibilities are established (e.g. Quinn & Cameron, 1983, p. 35). Based on these newly setup structures, information processing and decision making need to be developed and capabilities need to grow (e.g. (Miller & Friesen, 1984, pp. 1162–1163). The achievement of new capabilities is ceasing and the focus is put on the embedding of capabilities through regular exercising and repetition of these capabilities. (Helfat & Peteraf, 2003, p. 1003) The maturing of the firm and the growing clarity in strategic direction and procedures also allows firms to further define their internal and external environment (Sirmon et al., 2011, p. 1402). This gain in structure and procedures often is accompanied by a rise in bureaucracy (Adizes, 1979, p. 6). To ensure that the organization still remains flexible and capable of responding to environmental changes and business opportunities, management needs to exhibit an entrepreneurial mindset and nourish an entrepreneurial culture. (Ireland, R. Duane, Hitt, & Sirmon, 2003, pp. 967–972) The focus on organizational efficiency needs to be carefully balanced with innovation (Sirmon et al., 2011, p. 1402). New growth opportunities need to be identified to prevent slowdown (Quinn & Cameron, 1983, pp. 34–41). The challenge for management in this phase therefore lies in the cultivation and improvement of capabilities in terms of efficiency, the exploration and exploitation of resources and - at the same time – a focus on innovation and entrepreneurship to prevent the organization from decline.

Stage 5 & 6

In the subsequent phases of the life cycle, the firm either further develops or declines. Depending on the development the authors describe, they are called Branching and Capability Transformation, Revival Phase or Decline Phase. Selection effects, which either provide new opportunities for the growth of capabilities or threaten to make an existing sustained competitive advantage obsolete, initiate this phase following maturity. In this stage, the firm must further develop either through renewal, the redeployment or recombination of resources; moreover, it can continue through replication or it can decide to retrench or retire (Quinn & Cameron, 1983, p. 40). The firm can revive through differentiation or diversification of products or elaboration in its organizational structure. Another way to renew and develop resources and capabilities can be internationalization or the forming of alliances with other firms (e.g. Miller & Friesen, 1984, pp. 1162–1163; Sirmon et al., 2011, p. 1402). Unlike the stages from birth to maturity, these subsequent phases cannot be predicted easily. Reason for this might be that after maturity, developments are very diverse and depend on many different variables. Once a firm enters the decline stage, however, the resource-portfolio must be carefully structured, resources must be conserved; furthermore, resources and capabilities that do not support the firms' competitive advantage must be divested (Sirmon et al., 2010, pp. 1390–1392) and the remaining resources and capabilities must be carefully invested. Depending on the development path taken by the firm, the new developments then again start a new life cycle, the firm exists with reduced resources and capabilities or the firm ceases to exist.

Across all stages of development, management needs to take decisions regarding the allocation of resources and the development of capabilities over time. The concept of the life cycle also implies that all resources and capabilities have an evolution path and that organizational change does not necessarily require dynamic capabilities as intermediaries (Helfat & Peteraf, 2003, p. 998). To be successful, the firm needs to evolve as a whole and the life cycle theories as described above provide possible paths and patterns for this evolution.

1.4. Summary of the Theoretical Implications

In the first Chapter of this research, the project's theoretical background has been explained. Different theories and streams of research have been discussed and the prerequisites for a thorough evaluation of a firms' potential, its resources and capabilities have been clearly defined and assessed. The intangibility of capabilities and dynamic capabilities demands special due diligence, especially as their potential to become a sustained competitive advantage is very high. Customer- and brand-oriented resources and capabilities are highly relevant as effective and efficient creators of sustainable wealth for a firm. Both orientations have the end consumer as core focal point, but each approach takes a different point of view. Whereas the customer-oriented approach focuses on the "outside-in" angle, the brand-oriented approach focuses on an "inside-out" view. Both views need to be combined to best support the value-generation of the firm. Both, consumer- and brand-orientation share the same financial goals of profit, market share and shareholder value growth.

Resources and capabilities which provide a sustained competitive advantage change over time. This is influenced by external factors, such as changing customer preferences and the competitive situation, as well as the internal developments of the firm. To address these constant changes and support the firms' development, resources need to be constantly bundled, structured and leveraged by their managers. Depending on the situation, it might also be necessary to divest a resource. There is also a cyclical development of resources and capabilities and their value as (sustained) competitive advantage. In the early stages of a firm, the main task is the organization of resources and a flexible development of capabilities. The firm is still in the process of setting its central objectives and is involved in entrepreneurial activities. With the evolution of the life cycle of the firm, requirements change. However, the system measuring the branding- and marketing-activities needs to capture these changes as well.

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2. CUSTOMER- AND BRAND-ORIENTATION IN YOUNG FIRMS

In Resource-Based Theory, the topic of marketing has recently gained quite a lot of interest. Various researchers have analyzed the role of marketing in terms of business performance. Marketing activities have been proven to generate value and provide equity for the organization by emphasizing customer loyalty and creating a high price margin for as many customers as possible (e.g. Leone et al., 2006, pp. 129–130) In the contemporary definition of marketing, the role is very broad, and it is part of numerous departments and processes in an organization, encompassing various strategic and operational assets to manage and fulfill customer expectations and subsequently the creation of equity for the firm and its' stakeholders (Kotler, 2009, pp. 6–7). This role is related to a broader set of assets than the classic functional tasks of marketing-execution, which better capture the richness of the role of marketing and branding (De Chernatony, 2010, p. 15). To more readily identify capabilities which create sustained competitive advantages and determine their contribution towards business performance, the author creates a classification structure categorizing and differentiating customer- and brand-oriented capabilities. In her research, the author focuses on the acquisition and development of these assets for firms over time and in the light of development, especially in their early stages. Firms in the early stages of their life cycle face a special situation: There is a greater risk of failure when they are still of young age and still small (Thornhill & Amit, 2003, p. 497) and a significant share of firms die within the first five years (e.g. Müller et al., 2012, p. 19). When firms are still small, their access to resources is limited (Hirvonen et al., 2013, p. 628), and their capabilities will not be fully developed yet (e.g. Sinkula, 1994, p. 36). But they often are also more entrepreneurial, can react quicker to external influences and can be more innovative (Weerawardena, 2003, p. 18). Given this specific situation, management decisions regarding the development of resources and capabilities play an important role for the success of the firm. Therefore, the author has also put an emphasis on firms in the first stages of their life cycle. Since there is no clear definition in research as to the age of firms undergoing the different life cycle changes, the author has decided for this step of the research to choose papers referring to startups or firms in the founding stage. In the research literature, there are no specific indications on the duration of the development of a firm's life cycle. Since the development of every firm is different, depending on the founders, the product or service the firm produces, the industry, the market situation and other internal and external factors, it is difficult to derive general patterns on the single life cycle phases. There are only indications based on estimates for the first phase lasting up to ten years after founding. This estimate has never been tested (Miller & Friesen, 1984, p. 1166). Even though this timeframe is just an estimate, the author has chosen to follow this definition and provide some cross-sectional analyses to further test whether there is a change in marketing capabilities between groups within this timeframe. For this reason, the author will focus on firms founded between 2004 and 2014 for her empirical analysis. To ensure that these assets provide for the firms' success and serve as equity, the author further defines business performance-indicators to measure the economic success of the resources and capabilities as sustained competitive advantages. Conceptions for business performance range from simple financial performance measures to operational and organizational effectiveness measures, which broaden the simple view of outcome-based fulfillment numbers to broader concepts such as market-share, marketing effectiveness, and technology efficiency (e.g. Venkatraman & Ramanujam, 1986, pp. 803–804). The author compares and defines the most suitable performance indicators for resources and capabilities indicating customer- and brand-orientation as bases for future research.

2.1. Classifying Customer- and Brand-Oriented Capabilities

There are various suggestions of categories and dimensions for the classification of resources and capabilities. In a first step, before any further structuring of the marketing-assets, it needs to be clarified how marketing capabilities can be classified as resources, capabilities or dynamic capabilities. An overview on the classification of marketing resources, capabilities and dynamic capabilities can be found in Table 2-1 on the next page. Marketing resources can be split into tangible resources, defined as physical resources, financial resources or human resources, and intangible resources such as specific marketing knowledge or specific relations (e.g. Morgan, 2012, pp. 104–109). As previously discussed, resources are not firm-specific. They are transferable and can be obtained by any competitor. Therefore, they can only become a competitive advantage when obtained at lower cost than the economic value (e.g. Maritan & Peteraf, 2011, p. 1375). In contrast to resources, capabilities are firm-specific and need to be developed within the firm. They support the efficiency of other resources in the achievement of a particular goal of the firm.

Marketing capabilities include cross-functional capabilities such as brand management and customer relationship management (CRM) and marketing-specific capabilities such as product management, pricing, marketing channel management, marketing communication management, selling and market research (e.g. Helfat & Peteraf, 2003, p. 999). Marketing can also occupy a central role in the firm as a dynamic capability for

Table 2-1: Classification of marketing resources, capabilities and dynamic capabilities

	Description of the dimension	**Branding and Marketing examples**
Resources	• Tangible and intangible resources • Externally available and transferable • Controlled by the firm • Convertible	• Tangible resources (e.g. physical resources, human resources, financial resources) • Intangible resources (e.g. tacit knowledge resources, relational resources)
Capabilities	• Firm-specific • Developed internally • Grow over time • Main purpose: enhance productivity of other resources	• Cross-functional marketing capabilities (brand management, CRM) • Specialized marketing capabilities (product management, pricing management, channel management, marketing communication management, selling, market research)
Dynamic Capabilities	Characteristics of capabilities plus: Change over time / congruence in changing environment Three forms of capacity: • sense and shape opportunities and threats • seize opportunities • maintain competitiveness (enhancing, combining, protecting, reconfiguring assets)	• Market-learning capabilities (market-sensing, customer asset orientation) • Resource reconfiguration capabilities (strategic market planning, marketing strategy)

Source: construct by author

identifying and anticipating trends and regrouping resources accordingly. Dynamic capabilities are capabilities which support the firm in sensing and shaping opportunities as well as threats, seizing opportunities and the general maintenance of competitiveness through enhancement, combination, protection or reconfiguration of assets (Teece, 2007, p. 1319). Some authors argue for the majority of marketing capabilities to be dynamic. In their view, marketplaces are dynamic and the development of the resources needs to adapt to the firm's market environment. These dynamic capabilities often involve strategic decisions and are based on the knowledge of market, the anticipation of upcoming trends and the organization's reaction to these upcoming opportunities (e.g. Day, 2011, p. 187).

Dynamic capabilities are capabilities that change over time and provide (1) the capacity to sense and shape opportunities and threats, which is a characteristic especially displayed by customer-oriented capabilities such as product management or customer relationship management, (2) the capacity to seize opportunities, which is a characteristic especially displayed by brand-oriented capabilities such as pricing management or channel management; moreover, dynamic capabilities maintain competitiveness through enhancing, combining, protecting and reconfiguring assets, which especially strategic customer- and brand-oriented capabilities like market-learning and strategic marketing resource planning do (e.g. Leiblein, 2011, p. 915 pp). For this research, the author does not make a distinction between capabilities and dynamic capabilities In her research, the author will follow the definition of marketing capabilities (including dynamic marketing capabilities) as integrative processes which foster the application of the organization's shared abilities and knowledge to support the business in adding value to its products for the market, to set itself apart from the competition and benefit from market opportunities (Vorhies, 1998, p. 4). Marketing capabilities are capabilities involved in the creation and management of brands, the management and development of customer relationships and the building of marketing innovation and knowledge on a strategic as well as a functional level. To structure the different marketing capabilities, which are quickly developing in a complex and rapidly growing body of research, the author has classified them in a matrix-framework. This approach is a modification of the classification of resources and assets by Hooley (Hooley et al., 1998) and the "adaptive versus dynamic marketing capabilities" map by Day (Day, 2011, p. 187). The dimensions have been applied in various contexts by several Resource-Based Theory scholars, but they have not combined in such a way as in the author's matrix. In this matrix, the dimensions of customer- and brand- orientation are represented on one axis and the classification of strategic and functional capabilities on the other axis (see Figure 2-1).

	Customer-oriented / Outside-in	Brand- oriented / Inside-out
Strategic	Customer-oriented capabilities on the strategic level	Brand-oriented capabilities on the strategic level
Functional	Customer-oriented capabilities on the functional level	Brand-oriented capabilities on the functional level

Source: construct by author

Figure 2-1: Dimensions for classification of marketing-capabilities

This structure allows the author to map resources, capabilities and dynamic capabilities for a better transparency and overview. It ensures that all components of marketing-capabilities will be covered during the empirical research serves as a basis for the empirical analysis of the impact these assets exercise on business performance. Based on this classification into four groups of assets, which is described in more detail in the following pages, the author will structure the results of the research models analyzed in this chapter.

2.1.1. Dimension of Customer- and Brand-Orientation

Customer- and brand-equity, are based on two distinct research streams and managerial viewpoints: Customer-equity focuses on lifetime-value, whereas brand-equity is concerned with brand assets, especially brand image and brand awareness (Leone et al., 2006, p. 126). Along with these different research streams, the managerial view on the organization is also a different one. These views on the firm hold different implications and are based on different organizational assumptions. The "outside-in"-perspective is rooted in the cultural belief of putting the customer and their needs first. Creating customer value and focusing on a successful customer experience are central contributors to a firms' success. The "inside-out"-perspective puts an emphasis on the resources and capabilities of the organization itself and the ways in which they are successfully utilized and combined. As described in chapter one, for marketing assets, the outside-in perspective represents customer-orientation and the inside-out perspective is represented by brand-orientation. Both marketing views are closely connected and focus on the end-consumer in the end (e.g. Baumgarth et al., 2011, pp. 8–9; Urde et al., 2013, p. 14). The marketing capabilities which are apt to increase customer-equity are often also beneficial to the growth of brand-equity and vice versa.

Customer-orientation / Outside-in view

The customer-oriented approach – also called market-orientation by several authors – highlights the "outside-in" perspective of the consumer and market on the organization, which is based on the questions of how the product or service is perceived and how the products or services fulfill the needs of the consumer. Culturally, organizations which are very consumer-oriented put high importance on the fulfillment of customer needs, also on the individual level of the employee (Saxe & Weitz, 1982, p. 343). Consequentially, customer satisfaction, customer loyalty, customer lifetime value and other indicators measuring customer feedback and impact are key performance indicators in the evaluation of organizational activities (Baumgarth et al., 2011, p. 10). Consumer-oriented organizations display market-oriented behaviors such as a strong focus on individual customer needs and adherence to their changes. They also strategically segment their customers to better focus on specific characteristics of separate groups (Urde et al., 2013, p. 14). In early stages, the products or services of young firms are still under development. They are highly innovative and can react quickly to environmental changes (Weerawardena, 2003, p.18). Since structures are not yet established and finances are constrained, sources for customer-feedback are often in direct interaction with selling activities or feedback of customers who have already used or bought the product or service (e.g. Alvarez & Barney, 2010, p.563). This individualized feedback obtained is very valuable for product development as well as the assessment of market development. It needs to be carefully analyzed and interpreted by the entrepreneur. Some more indirect sources for customer-feedback are trade associations or customer-organizations. In the later stages, when the firm is more developed, teams are growing and the majority of employees is not directly interacting with the customer anymore, knowledge needs to be distributed through internal communication. The theoretical base for customer-orientation is rooted in customer-behavior- and customer-satisfaction theories, but through a growing body of research, customer-orientation has further evolved towards Resource-Based Theory, especially through dynamic capability theory (Morgan, Vorhies et al., 2009, pp. 909–911). Especially capabilities regarding the management of the customer relationship, customer responsiveness, or market sensing capabilities as well as more functional capabilities such as market orientation, the generation of customer feedback on products and product development capabilities, have proven to be connected to firm performance and profitability by a wide stream of research. The direct and very close interaction with the customer and the analysis of customer needs in the product development process provides a strong advantage for young firms in terms of customer-orientation.

Brand-orientation / Inside-out view

The concept of brand-orientation puts the brand as a strategic hub at the center of its focus. High brand-orientation stands for a marketing strategy and marketing activities centered on the brand. In the course of its development, the life of a brand very often starts with a distinctive name. Both the image and personality of the brand are created, the latter standing for emotional values which makes the brand more difficult to copy. Marketing and communication activities raise awareness for the brand's emotional and functional components and customers build a relationship with the brand and interact with it (De Chernatony & Riley Dall'Olmo, 1998b, pp. 1078–1082). Successful brands create awareness for the firm and evoke positive associations, support a positive brand image and differentiate the brand towards competitors (Aaker, 1991, p. 15). Culturally, brand-oriented organizations share a strong brand-philosophy, framing how they operate from the "inside-out". There is a strong emphasis on the integration across all parts of the firm, which requires a high level of brand knowledge on behalf of all employees. Brand-orientation draws upon a high identification with the brand throughout the whole organization, from management to staff, and focuses on the uniqueness and continuity of their brand (Wong & Merrilees, 2005, p. 159). Brand-oriented organizations focus on building a strong brand identity and put an emphasis on branding-related disciplines, from naming, to branding guidelines, to more strategic assets such as pricing, market potential exploitation (e.g. Urde et al., 2013, p. 14). In young firms, the brand is still under development. There are no elaborate brand definitions or structures as they might be found in older firms (e.g. Bresciani & Eppler, 2010, p.357). Very often, the corporate brand is the same as the product brand and besides the name, there are no clear structures and processes and both the reputation and perception still need to be established and built (e.g. Rode & Vallaster, 2005, pp. 125-126). Optimal brand and marketing communications manifest themselves in the feelings and perceptions about the brand and, consequentially, the favorable customer (purchasing) behavior, potentially also leading to higher revenues gained through higher pricing (Kotler, 2009, pp. 446–454). Key performance indicators of management in a brand-oriented organization are brand awareness, brand attitudes, brand loyalty and brand value (e.g. Leone et al., 2006, p. 126). Capabilities such as branding capability, pricing or brand performance as well as more functional brand-oriented capabilities like the definition of the brand name and logo, market planning, marketing communication or marketing implementation have also been proven to be connected to firm performance and profitability by several researchers.

A summary of the classification of the two dimensions representing on the one side the "outside-in" view, representing customer-orientation in marketing, and on the other side the "inside-out" view, representing brand-orientation in marketing, reflect the authors' definition and have been aggregated in Table 2-2.

Table 2-2: Classification of customer- and brand-orientation

Customer-orientation / Brand-orientation	
Description of the dimension	**Branding and Marketing examples**
Outside-In: - External focus - Focus on customer satisfaction - Fulfillment of customer needs - Key performance indicators customer satisfaction, customer loyalty and customer lifetime value	Outside-In (customer-orientation): - Customer relationship management - Customer responsiveness - Market sensing capabilities - Market orientation - Product development
Inside-Out: - Internal focus - Improvement and application of firm-resources - Strong philosophy, high identification - Key performance indicators: awareness, attitudes and loyalty	Inside-Out (brand-orientation): - Branding capabilities - Brand performance - Market planning - Marketing communication - Marketing implementation

Source: construct by author

Table 2-2 provides an overview of the differences between the two approaches used for the main dimension of the marketing capability matrix as created by the author. As mentioned in the beginning of the chapter, there is not always a clear distinction between customer- and brand-oriented marketing capabilities and some of the capabilities integrate both views of the firm. Depending on the research-approach taken and the indicators analyzed, these capabilities then integrate customer- and brand-oriented elements as described in the definition above. Based on this dimension described, the author will evaluate the current body of RBV-literature, focusing on marketing capabilities and their effect on business performance.

2.1.2. Dimension of Strategic and Operational Capabilities

As second dimension of the matrix, the author has chosen the concept of strategic and functional capabilities. Strategy in this context refers to the management's task of defining goals for the organization and setting a long-term course of action for the organization to achieve these goals (e.g. Vorhies, 1998, pp. 5–6). Many authors regard strategic capabilities on a more important level than functional capabilities, because they occupy an important role in the development of the firm and they themselves also have a strategic impact on the firm. However, even if they are more executional and more tactical, operational capabilities are equally important for the success of an organization – especially when it comes to marketing capabilities. Some authors combine the strategic level of an asset with the classification of a resource, capability and dynamic capability (e.g. Teece, 2007, p. 1319). Even though there are parallels in the definition, the author decided not to combine the dimensions

Strategic capabilities

Strategic capabilities support managers in their decision-making tasks, allowing them to predict possible future developments and preparing them for possible competitive situations for different future scenarios; moreover, they enable the organization to adapt to these scenarios and restructure their capabilities accordingly (Amit & Schoemaker, 1993, p. 40). They are very specific to one firm and are acquired through the integration of knowledge and the passing of learnings. These distinctive capabilities must be managed carefully and committedly, since they are disproportionate contributors to the firms' success (Day, 1994, p. 39). Strategic capabilities cannot be acquired and need to be created respectively built over time. In order to be successful, strategic capabilities must be upgraded continuously, adapted and remain relevant for the firm and the market (Hooley et al., 1998, p. 103). In the early stages of a firm, these capabilities are mainly dependent on the experience and managerial cognition of the founding team (e.g. Johnson & Hoopes, p. 1057). The more valuable and scarce the resources are, the harder they are to imitate and substitute, and the higher their strategic value for the firm (e.g. Barney, 1991, p. 102) Therefore, they also need to be carefully protected. The focus of the early stage is clearly set on innovation and the development of the "big idea" for the firm, also regarding customer- and brand-oriented capabilities. As strategic marketing capabilities, they are located at the meta-level of marketing and focus on the enhancement of other firm-resources and the strategic direction of the firm (e.g. Morgan, 2012, pp. 102–103). Examples for these capabilities are customer asset orientation, market sensing capabilities, branding capabilities and pricing. All of these are essential in establishing the first stage of the firm.

Functional capabilities

Just like strategic capabilities, functional capabilities are also specific to the firm, but they are more related to the firm's processes and functions. These capabilities can also be defined as capabilities that support and follow the firm's strategy (Black & Boal, 1994, pp. 138–139). Very often, these capabilities have an integrative role and ensure functioning processes, information dissemination and the delivery of superior value to stakeholders and customers. A significant body of literature suggests that the interaction between the different functional capabilities, such as marketing execution, operations and R&D, has a positive impact on the firm's performance that goes beyond the impact of the single capabilities. Reason for these effects are for example a better knowledge of the customer, faster commercialization of products and better cost control across the functions (Dutta, Narasimhan, & Rajiv, 1999, p. 551). The development of functional capabilities is closely connected to the organizational structure and culture. Depending on how hierarchically the organization is structured in terms of decision-making of management in relation to functional specialists and how the social systems and the organization are structured, the organization is capable of successfully distributing knowledge and decision-making (e.g. Slater & Narver, 1995, pp. 69–70).

As previously mentioned, young firms are still developing their structures in the early stages of the life cycle. At this point, functional capabilities are still developing. Looking at the topic of customer- and brand-oriented capabilities, the organizational structure and the way in which information sharing is managed, has an impact on performance and the development of capabilities. Marketing and consequentially customer- and brand-orientation are very central capabilities, which also have a significant role in the acquisition of knowledge for the organization. It is important that an efficient information-flow and cross-functional integration with other capabilities, such as technology and IT or research and development, prevails in the organization (Song & Montoya-Weiss, 2001, pp. 65–66). Research findings prompt that the better the diffusion of information and knowledge, the better marketing capabilities are developed (e.g. Vorhies, 1998, pp. 6–7). Especially customer-oriented capabilities, which focus on the generation of information from customers and the sharing as well as the responsiveness to this knowledge throughout the organization, are influenced by the organizational structure and culture (Deshpandé et al., 1993, p. 27). Customer-oriented functional marketing capabilities include responsiveness to market intelligence and the development of the product or service based on customer feedback. Regarding the dimension of brand-orientation, these capabilities include the operational definition of the brand name, logo, and design as well as marketing planning or marketing communication, which very often also integrates various functions of the firm. A summary of the classification of the two dimensions representing strategic capabilities on the one side and functional capabilities on the other side has been aggregated in Table 2-3. This table provides an overview of the differences between the two different types of capabilities used for the supporting dimension of the marketing capability matrix as created by the author.

Table 2-3: Classification of strategic and functional capabilities

Strategic capabilities / Functional capabilities	
Description of the dimension	**Branding and Marketing examples**
Strategic: - Purpose and direction for firm - Management of change - Facilitation of organizational learning - Disproportionate contributors to success	Strategic marketing capabilities: - Customer asset orientation - Market sensing capability - Branding Capability - Pricing
Functional: - Related to processes and functions - Integration of processes - Based on organizational structure - Distribution of knowledge	Functional marketing capabilities: - Responsiveness to market intelligence - Product development - Brand orientation - Marketing communication

Source: construct by author

Both strategic and functional capabilities need to be clearly separated from operational capabilities. Operational capabilities are individual task skills which can be acquired and do not have to be "built" by the organization. In terms of marketing capabilities, they focus on the execution of marketing strategies such as promotions and packaging. Operational capabilities can also be outsourced easily to external contractors or can be brought in from outsourcing partners, which enables the firm to further focus on the development of relevant resources and capabilities to generate the required positioning (Hooley et al., 1998, p. 104). The role of the manager in that case is one of an informed "stock-picker", the role of the manager in the building of capabilities is one of "an architect" (Makadok, 2001, pp. 389–390). In young firms, teams are still small and tasks are often executed by the same employees involved in the development of strategic and functional capabilities. The author has decided to exclude this category of capabilities as they do not qualify for the VRIN criteria of sustained competitive advantages and rather apply to more grown organizations in the course of development.

2.2. Application of the Matrix of Marketing Capabilities

The matrix created by the author in the previous chapter provides the framework for the following review of the body of Resource-Based-Theory-literature, covering marketing-capabilities and their impact on business performance. Especially in the last decade, the topic of marketing has gained quite a lot of interest in the Resource-Based Theory debate and elaborate frameworks to structure and classify brand- and marketing-related resources have been created (Kozlenkova et al., 2014, p. 1). Since marketing-capabilities are integrated within many departments and often closely connected with other capabilities (e.g. Vargo & Lusch, 2004, p. 3), most studies combine the measurement of marketing-capabilities not only with other non-marketing-capabilities such as Research & Development, IT, product innovation and managerial capabilities, but also with external factors such as environmental turbulence or competitive intensity. To provide a base for a future comparison of customer- and brand-oriented capabilities and their impact on business performance, the author has chosen to include also those papers that combine marketing-capabilities with other resources and capabilities.

2.2.1. Definition and Scope of the Resource-Based Theory-Models Analyzed

For the following review, the author has specifically selected papers involving capabilities and their impact on business performance with a focus on customer- and/or brand-oriented marketing. Based on these criteria, a total of twenty-six studies published in the last decades (2005-2014) empirically describing the connection between marketing-capabilities and business performance on the firm-level have been identified by the author. These publications have been compared in regard to their methodology, variables used and empirical results found (see Appendix 1 for a list of the studies analyzed). In all the studies chosen, researchers address the effect of marketing-capabilities on performance, taking either the form of financial firm performance and / or other types of performance such as market performance, customer performance, product performance or marketing performance. Capabilities connected to the topic of marketing can be largely grouped in CRM-capabilities (inside-out) and brand management-capabilities (outside-in). Except for three studies which took either a multi-country approach (e.g. Wu, 2013) or focused on a meta-analysis of studies (Krasnikov & Jayachandran, 2008), the studies were set in one single country, mainly the US (thirteen studies), but also Australia (three studies) the UK, Turkey and Korea (one study each). Regarding industries, a broad range of business to consumer and business to business firms was covered, operating in various goods and service markets. Of the twenty-three quantitative studies in the set of papers analyzed, most datasets were spread across a wide range of industries. Only four studies focused on specific industries. Most researchers made no selection in terms of company size. Only five studies specifically targeted certain sizes of firms in terms of employees. Mostly, they set a minimum of employees, ranging from small sizes of up to 20 employees, over 20 to 150 employees, to 150 to 499 employees or more than 500 employees as cutoff-points. In terms of life cycle stage, three studies focused on firms in a certain stage of growth. Kor and colleagues analyzed firms going for an Initial Public Offering on the stock market in life science (Kor & Mahoney, 2005), Morgan and colleagues analyzed post-Initial Public Offering firms (Morgan, Slotegraaf et al., 2009), and Song and colleagues focused on firms founded in a certain timeframe (1990-1997) (Song et al., 2005). However, some studies used firm age and firm size as control variables (e.g. Ramaswami, Srivastava, & Bhargava, 2009). Of the studies analyzed, the majority of researchers (eighteen studies) turned to structured online- or mail-surveys as method of data collection. To better operationalize the quite complex concept of marketing-capabilities, four studies used a two-step approach using qualitative interviews (e.g. Hooley et al., 2005) or focus-groups (Vorhies & Morgan, 2005) with marketing experts. They interviewed marketing experts on their perceptions or opinions on marketing-capabilities and how to measure their performance. Most studies combine marketing-related capabilities with other strategic capabilities such as organizational culture (e.g. Hult et al., 2005), leadership and management (e.g. Menguc, Auh, & Uslu, 2013), technology and IT (Song et al., 2005), innovation and innovativeness (e.g. Merrilees et al., 2011). In summary, the studies cover a broad field of capabilities, countries, industries, company sizes and organizational disciplines (see Appendix 2 for detailed information on the studies analyzed). This variety ensures that the concepts which will be identified by the author are widely applicable and that this broad base is a good basis to apply the matrix developed by the author.

2.2.2. Customer- and Brand-Oriented Capabilities in the Matrix

As described previously, marketing capabilities are highly complex and integrated within various other capabilities in the firm. Therefore, they can be classified in various ways. Looking at the single measuring items of the surveys for the studies analyzed, the grouping of the single items varies from author to author, depending on the topics and relations analyzed. Many researches differentiate between customer-oriented and branding-oriented as well as strategic and functional marketing-capabilities (e.g. Morgan, Vorhies et al., 2009; Orr, Bush, & Vorhies, 2011; Vorhies et al., 2011), but due to the complexity and the very heterogeneous structuring of the different concepts, these capabilities are defined differently and measured with different items. To structure these facetted and yet condensed classifications, the author has analyzed each of the marketing capabilities provided by the other researchers and outlines below the capabilities for each of the four matrix-items:

Customer-oriented capabilities on the strategic level

As described in the classification, customer-oriented capabilities are based on customer-orientation. These capabilities focus on topics like the perception of products or services and how they fulfill consumers’ needs. On the strategic level, these capabilities are directed towards predicting future trends and external developments in customer demand. The concept of market-learning capabilities from Morgan and colleagues describes the understanding of the market on a higher strategic level (Morgan, 2012, p. 109). These capabilities follow the imperative for a proactive marketing strategy (Day, 2011, p. 186) and are connected to the theory of customer-oriented selling, which has been developed by Saxe and Weitz and is described as “the practice of the marketing concept at the level of the individual salesperson and customer.” (Saxe & Weitz, 1982, p. 343) These capabilities focus on the overall strategic approach of the firm’s relationship with the customer, e.g. in the capability of customer asset orientation or the capability of customer-orientation and customer relationship management capabilities (CRM capabilities). The customer is perceived as the focus of the firms’ activities. Measurement indicators for this important customer-relationship need to be examined and the value of the customer as an asset needs to be assessed (e.g. Ramaswami et al., 2009, p. 105; Orr et al., 2011, p. 1080). Investigating these capabilities, the researchers analyze how firms integrate the customers’ view in strategic decisions through customer relationship management and input systems (e.g. Hult et al., 2005, p. 1180). By anticipating customer needs and requirements and developing the capability of customer responsiveness, the firm can gain a competitive advantage because it can adopt strategies to future customer needs and wants (e.g. Hooley et al., 2005, p. 26). One important aspect of this approach is that the customer is perceived as a long-term partner of the firm. Therefore, when establishing customer-oriented marketing capabilities, it is important to ensure that customer needs are met as well as objectives are set based on the customer satisfaction creation by the firm (e.g. Harmancioglu, Droge, & Calantone, 2009, p. 274). These capabilities support the firm in gaining tacit knowledge about the customers and market feedback. This feedback then might lead to strategic adjustments or changes in strategy.

Customer-oriented capabilities on the functional level

The functional capabilities take the previously described concepts of managing the customer-relationship to a more tactical level. They focus more on the process of gathering customer information, assessing customer-feedback and integrating the findings and knowledge throughout the organization. One group of variables in market-capabilities takes an in-depth approach to the process of functional customer relationship management capabilities and how market intelligence is generated (e.g. Morgan, Vorhies et al., 2009, p. 919). This includes a proactive view through which information on the customer and their preferences are gained via market research and other means of feedback (e.g. Hult et al., 2005, p. 1181). When defining the market- and customer-base, some authors also include suppliers, wholesalers and retailers, or employees in their definition of the market (e.g. Song et al., 2007, p. 24; Hooley et al., 2005, p. 26). The author has decided not to include these customer-groups into her research and will solely focus on the end-consumers of the firms' products and services. The other group of customer-oriented capabilities on the functional level investigates the product and service itself and its capabilities to meet customers' needs (e.g. Vorhies & Morgan, 2005, p. 92). These capabilities also include the ability to identify changes in customers' product preferences, the development of new products and the ability to customize products based on customers' requirements (e.g. Morgan, Slotegraaf et al., 2009, p. 292; Steensma & Corley, 2000, p. 1067). They focus on the core of the functional customer-orientation itself: The capability of the firm to provide a valuable, unique, in-imitable and un-substitutable product or service to the customer.

Brand-oriented capabilities on the strategic level

As previously described, brand-oriented capabilities are based on the foundation of the inside-out view of the firm. The purpose of these capabilities is to build a strong brand, with strong positive associations and high brand awareness. To achieve this result, a valuable brand positioning needs to be identified. Creating a brand positioning is a highly strategic branding-capability. It needs to consider market characteristics and market trends, including the assessment of competitive brands (Morgan, Slotegraaf et al., 2009, p. 286). The focus of strategic brand-oriented capabilities is then to create a brand based on this positioning, to develop it further over time and to maintain the brands' uniqueness and position against the competitive environment. Especially when creating a new brand, it is crucial to have knowledge on the development of competitive products and services as well as the market potential for the products and services (Song & Montoya-Weiss, 2001, p. 79). Both a long-term orientation and planning are crucial for brand-oriented strategic marketing capabilities to become a sustained competitive advantage. These branding capabilities are the antecedents of even more specific marketing strategies such as pricing and brand marketing capabilities. The capability to define the optimal price and the definition of successful pricing strategies are challenging marketing capabilities, because they influence perception and also have a direct impact on business results. They enable the firm to obtain the optimal revenue from the customer (e.g. Morgan, 2012, p. 106). The capability to create an optimal marketing plan and brand marketing results in a high-level brand awareness and a preferential brand position (Vorhies et al., 2011, pp. 753–754). Strategic brand-oriented marketing capabilities are comprised of a broad set of different capabilities, which are highly integrated with other organizational capabilities. Moreover, they are closely linked to customer-oriented marketing capabilities. Therefore, they are sometimes not so easy to separate.

Brand-oriented capabilities on the functional level

Functional brand-oriented capabilities can be split into two main groups. One group of capabilities is connected to the creation of functional brand elements and branding guidelines, mainly including the definition of the brand name and the establishment of a brand meaning (e.g. Bresciani & Eppler, 2010, pp. 359–361; Merrilees et al., 2011, p. 372). Naming is a very important capability as well. The name is the most important element of a brand. It needs to clearly describe what the product or service is about, has to evoke the appropriate emotional response, be distinctive, memorable and easy to spell (Aaker, 1991, p. 196). Once the brand is created, it needs to be properly communicated. The second group of functional brand-oriented marketing capabilities required for providing a sustained competitive advantage therefore focuses on the development and execution of marketing plans, including the effective delivery of marketing programs, the choice of the appropriate marketing channels, as well as advertising and promotion initiatives (e.g. Chang, Park, & Chaiy, 2010, p. 854; Harmancioglu et al., 2009, p. 274). Of course, all marketing activities need to contribute to an increase of brand awareness, differentiate the brand and support the brand image as defined in the brand strategy. Functional capabilities can be separated more clearly than strategic brand-oriented capabilities, but they are much more specific to the firm, the industry and business environment the firm is operating in and also its stage in the life cycle. Especially the development of marketing capabilities depends on the stage of the market’s life cycle and the type of customer that needs to be targeted (e.g. Hirvonen et al., 2013). Based on these parameters, different marketing programs need to be launched and marketing channels need to be chosen, which might vary in cost and availability.

For every research construct provided in the research papers, the author has classified each measuring item of the single constructs (provided they were made available by the authors) and assigned it to one of the fields of the customer-oriented / brand-oriented and strategic /

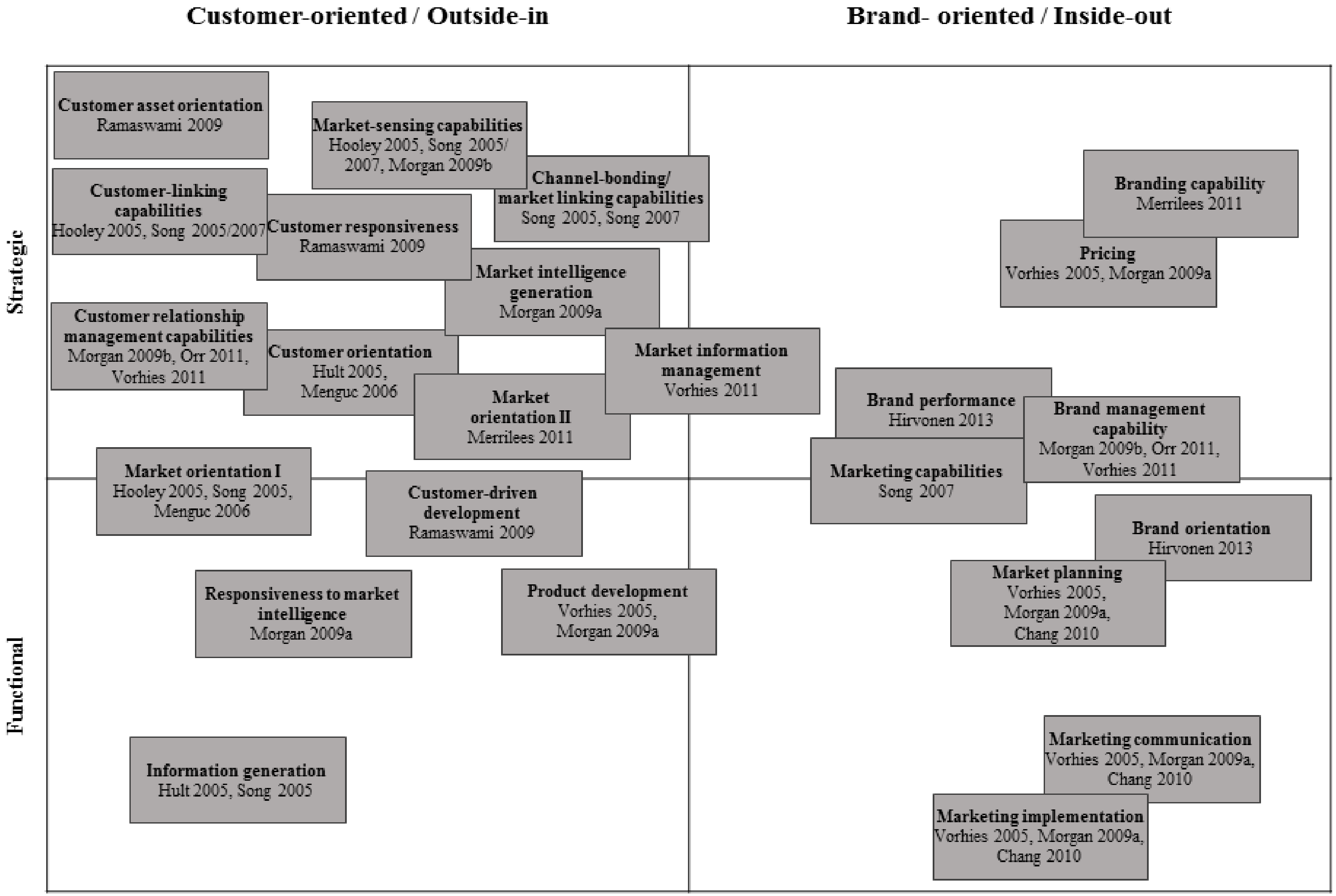
functional grid. The classification of the single items can be found in Appendix 3. Based on this classification the author has then allocated the capability-constructs used in the papers analyzed to the marketing capabilities matrix. Figure 2-1 on the next page displays this classification and provides a comprehensive overview regarding the state of the art of empirical studies on the marketing-capabilities analyzed as well as their impact on business performance. This matrix provides a good overview of the state of art in the research on marketing capabilities. It will be used in further research to draw parallels with the research findings for young firms as won from this empirical research.

2.3. Connecting Marketing Capabilities to Firm Performance

To become a sustained competitive advantage, capabilities need to provide value to the firm. Empirical research on marketing capabilities has already proven that they have a positive impact on the value of the firm. In empirical analyses on Resource-Based Theory, firm value is often used synonymously with organizational performance, which is assessed at the firm-level. Firm value is often translated into the multidimensional construct of organizational performance, which can be split into the concept of effectiveness and efficiency (e.g. Chang et al., 2010, p. 850; Leiblein, 2011, p. 912). These two concepts have been extensively discussed in research and various researchers have provided measuring tools for them. Below, a definition of organizational effectiveness and organizational efficiency is provided.

Organizational effectiveness

The term of organizational effectiveness captures a broad set of effectiveness-indicators, such as business performance, internal performance, innovation or other external indicators that are related to economic valuation like corporate social responsibility (Richard, Devinney, Yip, & Johnson, 2009, p. 722). Business performance, also called organizational performance by some authors, is one of the main indicators of organizational effectiveness. It is a key strategic management topic. Managers need performance measurement systems to improve and better orchestrate capabilities and their impact on the business. These systems support strategic decision-making and the allocation of resources and capabilities. A quite elaborate body of research suggests that the application of performance measurement systems has a positive effect on the improvement of capabilities and consequentially the improvement of business performance. Without performance objectives and measurement systems indicating the progress towards this objective, the management of capabilities and directions for improvement are difficult to indicate (e.g. Kaplan & Norton, 2008, p. 7; Koufteros, et al.,



Source: construct by author

Figure 2-1: Classification of capabilities in the marketing-capability matrix

Legend of studies: Hooley 2005: (Hooley et al., 2005); Hult 2005: (Hult et al., 2005); Song 2005: (Song et al., 2005); Vorhies 2005: (Vorhies & Morgan, 2005); Menguc 2006: (Menguc & Auh, 2006); Song 2007: (Song et al., 2007); Morgan 2009a: (Morgan, Vorhies et al., 2009); Morgan 2009b: (Morgan, Slotegraaf et al., 2009); Ramaswami 2009: (Ramaswami et al., 2009); Chang 2010: (Chang et al., 2010); Merrilees 2011: (Merrilees et al., 2011); Orr 2011: (Orr et al., 2011); Vorhies 2011: (Vorhies et al., 2011); Hirvonen 2013: (Hirvonen et al., 2013)

2014, p. 314). For this reason, performance indicators for the improvement of business performance must be defined and the impact of capabilities on these indicators needs to be measured. Young firms operate in a very unstable environment and especially in the early stages, performance is not steady and classic indicators for organizational effectiveness, such as business performance or economic valuation, are not applicable. Also, measures of innovation are not really structured, since very often, the organization still needs to establish the base of the product or service and is therefore subject to change.

Organizational efficiency

There has been a debate whether organizational efficiency is always most beneficial for firms. Some researchers attribute heavy costs and rigid processes to resource- and capability-efficiency. They argue that a moderate level of resource availability allows firms to identify new potentials for ideas and experiment with them in order to adapt better to unexpected environmental changes. On the other hand, a significant body of research argues that capability-efficiency reduces waste of excess resources, generates savings and makes operations more stable (e.g. Modi & Mishra, 2011, pp. 254–256). Especially in the case of strategic capabilities, the value of the capability can be provided through an increase in efficiency by optimizing decision-making and the implementation of more efficient processes, as well as providing more knowledge and better information in the organization (e.g. Morgan, 2012, pp. 102–104). Depending on the development stage of the firm, organizational efficiency might not be beneficial. For some capabilities, organizational efficiency becomes apparent in the Collectivity Stage of the organization for the first time, when the firm transforms the "big idea" into a concrete plan for products or services, which are ready to be launched on a bigger scale. However, highly integrated capabilities, such as customer- and brand-orientation or innovation, already contribute to organizational efficiency at an early stage. A significant body of research therefore suggests combining business performance measures with efficiency measures.

Authors of this research stream argue that the sole focus on effectiveness can result in misleading conclusions, because effectiveness-variable are highly aggregated and may not give any appropriate indication regarding the performance of the single capabilities leading to this performance (e.g. Ray, Barney, & Muhanna, 2004, p. 23). In this context, some researches define capabilities themselves as forms of efficiency which transform resources into firm value (e.g. Dutta et al., 2005, p. 278). Looking at the definition of capabilities and especially dynamic capabilities, together with their role of constantly improving the firms' performance (Teece, 2007, p. 1319), the author has decided to follow this argumentation and therefore attributes capability efficiency to the capability itself, including the assessment of efficiency in the assessment of the respective capability. In the following analysis, the focus will be put on the direct measures of effectiveness, especially business performance.

2.3.1. Business Performance Measures for Marketing Capabilities

In the literature on Resource-Based Theory, different approaches are provided to measure the impact of capabilities on organizational effectiveness. Especially, linking marketing-capabilities with firm value and business performance has triggered significant interest among marketing scholars in the last decade (Rust, Ambler, et al., 2004, p. 76). In the definition of business performance, the author follows the example of Venkatraman and Ramanujam, who include operational performance alongside financial performance and thereby enlarge the previously dominant models of management research (Venkatraman & Ramanujam, 1986, pp. 803–804). This inclusion of further indicators such as sales performance or market share allows for a more detailed view on capabilities' effect on organizational performance. Below, the indicators of business performance are further classified.

Financial performance

Financial performance is measured through monetarily based metrics, metrics indicating financial ratios or metrics measuring monetary outcomes (Mintz & Currim, 2013, p. 17). Especially Return on Investment (ROI) and Return on Assets (ROA) are very popular and common accounting measures used for financial performance (Richard et al., 2009, pp. 729–730) and a significant body of research has proven that these accounting measures are reliable indicators of organizational effectiveness.

Product-market performance

Indicators referring to the market position and sales, that further provide an overview on the position of the firm in comparison to its competition, are also highly relevant variables for indicating business performance. Market share, which stands for the share of sales earned by the firm in regard to the total sales of the market, and related measures such as market share growth are positively linked to financial performance (e.g. Capon et al., 1990, p. 1148). Sales, alluding to the revenue gained from goods sold by the firm, and related indicators such as sales growth, revenue growth rate of sales to current customers can also be used as product-market indicators for organizational performance (Richard et al., 2009, p. 722). Also, non-financial measures should be included in this category.

This approach of analyzing business performance through financial performance indicators and product-market indicators has been widely applied in empirical research (e.g. Morgan, Slotegraaf et al., 2009; Orr et al., 2011, p. 1080). Besides these two performance indicators, researchers use other indicators of business performance, such as financial market measures, or further operational indicators specific to their respective research question. In the studies analyzed, only few authors used indicators for customer performance and customer satisfaction as further indicators for business effectiveness (Hooley et al., 2005; Vorhies & Morgan, 2005). Given the fact that these papers have a strong focus on customer-oriented capabilities aiming at customer satisfaction, applying these performance indicators for papers are very valuable additional performance indicators. (Appendix 4 offers an overview of the business performance measures used.) Concluding from the findings described above, the author has decided to use an indicator for Financial Performance and an indicator for Product-market performance as indicators for business performance in the empirical research.

Looking at the findings of empirical research, there are clear indications for a positive impact of marketing capabilities on business performance. An increase in resource deployment in marketing has a statistically significant effect on economic firm-level performance and a continuously increased marketing investment over a longer period of time results in additive effects and synergies on future performance (Kor & Mahoney, 2005, p. 494). Marketing-capabilities have a positive impact on financial performance, returns, profits and market performance (e.g. Morgan, Slotegraaf et al., 2009, p. 290). Krasnikov and Jaychandran suggest that marketing capabilities even have a higher ability to influence efficiency and market performance than research and development or operations capabilities (Krasnikov & Jayachandran, 2008, p. 8). Moreover, first analyses indicate that even just the measurement ability of marketing performance has a positive impact on the performance (O'Sullivan & Abela, 2007, p. 88). These findings support the importance of these capabilities and suggest further research in this field is needed. Core marketing capabilities such as product management, including the ability to be responsive to customer needs, selling capabilities, pricing, marketing communication, and distribution management also have a positive effect on business performance (e.g. Vorhies & Morgan, 2005, p. 88; Morgan, Vorhies et al., 2009, pp. 914–915). Customer-oriented marketing capabilities such as the ability to build relationships with customers and gain an understanding of customer needs are positively related to market performance. The greater these capabilities are, the better the performance of the firm in relation to their objectives (profit margin, sales, ROI) (e.g. Hooley et al., 2005, p. 24, Song et al., 2005, p. 268). Hooley and colleagues found that brand-oriented marketing capabilities such as brand reputation are key influencers of business performance. They state that superior reputational assets (brand name, reputation, credibility) can predict market sales levels and market share compared to competitors and consequently also financial performance (Hooley et al., 2005, p. 24). Wong and Merrilees defined four concepts for branding: Brand distinctiveness, Brand orientation, Brand barriers and Brand-marketing performance (also called Brand-performance). Based on these concepts, typologies of SME-development were developed (Wong & Merrilees, 2005, pp. 158–160). In a later paper, they confirmed the impact of the four proposed concepts on financial performance independent of firm size (Wong & Merrilees, 2008). Further research comparing marketing capabilities by firm size only showed minor differences between firms ranging from between micro firms (>20 employs), to medium-sized firms (100-499 employees). For all firms analyzed, branding and innovation were identified as the central players in explaining marketing performance (Merrilees et al., 2011, p. 374).

There are directionally differing findings on customer relationship management and brand management by Morgan and colleagues: In their construct, customer relationship management capabilities have a negative effect on revenue growth rate and a positive effect on margin growth rate, while brand management capabilities have a positive effect on revenue growth rate and a negative effect on margin growth rate. But despite this difference in effect direction, the total effect on the firm’s profit growth rate is positive (Morgan, Slotegraaf et al., 2009, pp. 289–290). Later findings also confirm that combining the two capabilities improves the outcome and even future earnings of the firm (Angulo-Ruiz et al., 2014, p. 395). It therefore seems that marketing capabilities – whether they are customer- or brand-oriented – are ubiquitous drivers for business performance in any firm.

2.3.2. Business Performance in Young Firms

Depending on their stage in the life cycle, firms face different challenges in terms of the management of capabilities and the development of firm value. In the light of the paradigm-shift in entrepreneurship literature from the assumption that opportunities are created through exogenous shocks to the more modern view according to which entrepreneurs form opportunities themselves, it is an important topic for CEOs and managers, especially in young firms, to acquire and develop capabilities that support business performance (e.g. Alvarez & Barney, 2010, p. 558). In general, it is not easy to define what is meant by a young firm. There are clear national definitions, which describe SMEs in terms of their number of employees or turnover and they vary by country (e.g. European Commission, 2009). However, even though many young firms may be small, the definition does not cover the newness of firms. Therefore, many reports also look at the firms' birth years, e.g. the OECD in their report "Entrepreneurship at a Glance" (OECD Publishing, 2014). Also in life cycle theory literature, there is no clear definition on the timing and duration of the single stages of the life cycle (Rutherford et al., 2003, p. 322). The only authors who give an indication regarding time are Miller and Friesen, who define the duration of the "Birth phase" as lasting up to ten years (Miller & Friesen, 1984, p. 1166). Therefore, the author decided to define "young firms" as firms who were ten years of age (founded in the year 2004 and after).

When firms are still young and small, their capabilities might not be fully developed and market-based information might still be limited (Sinkula, 1994, p. 36). Environmental conditions are a greater threat to the survival of young and small firms than they are to bigger firms. (Covin & Slevin, 1989, p. 75) Also, young firms most likely have fewer resources available than larger firms (Hirvonen et al., 2013, p. 628) and they are also less structured and strategically planned (Gilmore, et al., 1999, p. 29). Especially in the early stages, there is a greater risk of failure for firms, when they are young of age and still small. (Thornhill & Amit, 2003, p. 497) But – due to their small size and newness to the field – it is easy for young firms to act highly entrepreneurial, to innovate and to quickly react to environmental changes. (Weerawardena, 2003, p. 18) These traits of entrepreneurial orientation may vary depending on the environment the organization is in, but overall the propensity in young firms to take decisions and be proactive in identifying and leveraging opportunities is high. Managers of young firms must take an aggressive stance towards competitors, be open to innovation and willing to take risks (e.g. Lumpkin & Dess, 1996, pp. 136–137). In addition to entrepreneurial orientation, well-developed marketing skills can support innovation in these turbulent environments and contribute to the development of strategic orientations (Miller, Droge, & Toulouse, 1988, pp. 550–551). In this context, customer-oriented marketing capabilities can generate valuable customer input to support innovation, but innovation can also be developed in the discipline of marketing communication, for instance by adopting innovative advertising- and communication-activities.

Measuring business performance in young firms is challenging. These firms operate in a highly unstable environment and with little information. Together with the constant change in requirements for firm resources and capabilities, their business results can be constantly subject to change and negative performance in profits might not be attributable to the firms' performance. (Covin & Slevin, 1989, p. 75) Being in an environment of risk and uncertainty, where a constant focus on opportunities is necessary, managers need to revise and restructure their business performance measures over time, looking at financial performance as well as market effectiveness (Miller, 2007, p. 58). They might even be dependent on an investor, who has a substantial influence on business performance and can change the financial situation of the firm in a very short timeframe. Perceptions of the effectiveness also change along with their development (Cameron & Whetten, 1981, p. 527). As opposed to established firms, young firms do not have the same reporting requirements as bigger or publicly listed firms and financial data of young firms often is not publicly available. Therefore, it is challenging for researches to obtain business performance information from them (Rosenbusch, Brinckmann, & Müller, 2013, p. 336). Gupta and Govindarajan have developed a measurement system for financial performance which was later adapted by Covin and Selvin. This "Financial performance"-scale looks at all relevant parameters at the level of strategic business units, such as sales levels, ROE, ROI, cash flow and profit margins. These units are an aggregate of product strategies and vary in managerial requirements (Gupta & Govindarajan, 1984, pp. 31–34), covering a broad set of measures; hence, they can apply to the various stages of developments of smaller firms and also young firms. Unfortunately, empirical analyses focused on the development of marketing-resources and capabilities in young firms are rare (Merrilees, 2007, p. 405). This is surprising, since under the light of the creation of sustained competitive advantages, marketing capabilities deserve close attention. They can provide multiple benefits to young firms, not only in terms of financial performance and market effectiveness, but also because they create shareholder value (Srivastava et al., 1998, p. 8) or assist in attracting and maintaining employees, a very scarce resource in young firms (Lievens, 2007, p. 62). The few papers identified which analyze marketing capabilities in young firms mainly focus on brand-oriented marketing capabilities and explore the developments of marketing and brands in new firms. Especially the qualitative papers are concerned with founders or CEOs of new firms and analyze their perceptions regarding the relevance of marketing, further scrutinizing how they create the brand, make first branding decisions and measure their marketing activities. Each research takes a slightly different angle onto the topic of marketing capabilities and their impact on business performance.

Regarding branding, there are two authors who have specifically addressed the topic of brand development in new firms. While Rode and Vallaster analyzed the status of branding within companies between two and four years of age, Bresciani and Eppler focused more on the relevance of the brand, the attitude towards branding and the brand building process itself within companies of up to five years of age. Findings revealed that most companies at the age of up to four years had not yet decided on their final brand including strategic branding elements such as positioning, values etc. as well as their final functional elements such as name and logo (Rode & Vallaster, 2005, pp. 125–128). Out of the slightly older companies (up to five years of age), most had already had defined their strategic elements, but the functional elements were still unclear. (Bresciani & Eppler, 2010, pp. 359–361) In general, it is important to note that both studies were qualitative studies with just a low number of companies investigated; moreover, the studies just inquired brands regardless of the industry, the market, and surveyed whether customers were consumers or businesses as well as whether the companies used the brand for their company or their products and services. Most commonly at this stage, the companies at this stage had just developed one brand, which was then used as the corporate as well as the customer and employer brand (Ambler & Barrow, 1996, pp. 187–188). Regarding marketing-communication, both studies uncovered the existence of financial constraints. They also highlighted a lack of professionalism in communication and a lack of identifying suitable target audiences. Hirvonen and colleagues further developed this concept for SMEs. They analyzed the impact of several firm-specific internal and external factors on the relationship between Brand orientation and Brand performance, demonstrating that customers and the state of the market had a significant impact on this relationship (Hirvonen et al., 2013, pp. 631–632). These results suggest that already in small firms, brand-oriented marketing capabilities have a positive impact on business performance. However, the body of research is still rather small and therefore no indications can be made about the development of marketing capabilities over time. Additional analyses need to be conducted for this reason.

2.3.3. Subjective and Quasi-Objective Business Performance Measures

When it comes to the assessment of business performance, the generation of empirical data on business performance can be quite complex for researchers. The access to individual objective data is often limited, since firms very often hesitate to communicate this data or are legally restricted in their ability to provide such information. For this reason, researchers very often turn to data from secondary sources (Venkatraman & Ramanujam, 1986, pp. 803–804). To obtain objective secondary data on business performance, researchers often turn to financial databases. Examples for databases used by the studies analyzed by the author are Compustat, a financial database by Standard & Poor’s (Standard & Poor's, 2014) and Dun and Bradstreet’s Million Dollar Database (Dun & Bradstreet, 2014) for the United States of America or other business directories are employed, which provide financial data on a firm-level. Besides financial performance data (sales, returns and profit), these databases also provide market measures to put firm performance in relation to the overall market situation. In the majority of the studies analyzed, the authors worked with subjective primary data from questionnaires or interviews with senior marketing executives‘ perceptions of business indicators (e.g. Slater, Olson, & Hult, 2006; Morgan, Slotegraaf et al., 2009; Chang et al., 2010). The advantage of turning to primary sources is the possibility of customizing the data, the absence of external interpretation and aggregation of data and the flexibility regarding the application of data (Venkatraman & Ramanujam, 1986, pp. 808–809). Subjective measures are more critical to assess, because the danger of obtaining biased information from and potential human error on behalf of the interviewee is higher than from objective sources. According to Richard and colleagues, subjectively reported data can be further broken down in two categories: quasi-objective and fully subjective measures (Richard et al., 2009, pp. 735–736).

Quasi-objective measures

Quasi-objective measures refer to self-reported specific objective performance measures, such as financial performance measures like ROA, ROI, or product-market measures such as market share or sales growth. Even though objective primary data for these business performance indicators is preferable to subjective primary data, research suggests a high validity of subjectively reported data due to a strong correlation between subjectively and objectively reported information (Dess & Robinson, 1984, p. 271).

Fully subjective measures

Fully subjective measures refer to self-reported performance information that is not directly related to performance measures. The benefit of these measures is that latent constructs can be inquired directly. However, since these indicators are not related to a specific object, but are rather questions assessing business performance in relation to benchmarks such as competitors’ performance or management goals, there is a high danger of bias and the results are inherently relative (e.g. March & Sutton, 1997, pp. 701–702).

In the Resource-Based Theory studies on marketing capabilities analyzed by the author, the researchers assessing subjective data employed structured interviews with questions about subjective measures. Respondents were asked to assess financial performance indicators, mostly compared to competitors' data on five-point to eleven-point Likert Scales (e.g. Hooley et al., 2005; Menguc & Auh, 2006) or relative to the objectives set (e.g. Song et al., 2005); in both cases, the timeframe was limited to "in the last year", "in the last time period" or similar. Vorhies and Morgan even created a new construct named "Market Effectiveness", which combines the firm's self-reported assessment regarding the market share growth and compares it to competitors', the growth in sales revenue and the acquisition of new customers. The same approach was used and adapted by several authors in the papers analyzed (e.g. Chang et al., 2010, p. 854; Mintz & Currim, 2013, p. 20). For her empirical research, the author has chosen to also adopt the "Market Effectiveness"-scale and combine it with the "Financial Performance"-scale by Covin and Selvin (Covin & Slevin, 1989, pp. 79–80). In the author's opinion, this combination ensures a broad coverage and a reliable measure of business performance for the group of young firms at the age of up to ten years.

2.4. Summary of the Empirical Findings and Implications

In the second Chapter of this research, the empirical streams of research have been analyzed and structured. The author has defined a framework as the base for the variables to be analyzed in the research at hand. For the analysis of empirical research, the author has chosen to investigate the body of literature on Resource-Based Theory-research that includes marketing capabilities and their impact on business performance. These findings concerning the impact of marketing capabilities provide a promising base for future research. In the research, the author focuses on the acquisition and development of these resources for firms over time and under the light of development, especially in the early stages. Therefore, the author will focus on firms of up to ten years of age, which still classify as young firms. To properly structure the broad set of marketing disciplines and to better define how they contribute to business performance, the author creates a classification of marketing capabilities, which will be compared to the empirical findings regarding the factors impacting customer- and brand-orientation of young firms.

3. MARKETING CAPABILITES AND BUSINESS PERFORMANCE IN YOUNG FIRMS

On the strategic level as well as on the functional level, customer- and brand-oriented marketing capabilities allow firms to create sustained competitive advantages and enable firms to be successful in their markets. An extensive body of literature has documented the impact of these capabilities on both organizational efficiency and effectiveness and marketing capabilities have long been known to be drivers of business performance. However, the impact of brand-oriented marketing capabilities in comparison to customer-oriented marketing capabilities on business performance over time has not been comparatively analyzed to date. Based on the findings of previous research, the author proposes to investigate this relationship using a two-step approach to research: In the first step, the author further defines and clarifies the role of marketing capabilities in young firms through explorative qualitative interviews. In a second step, the author uses structural equation modelling to analyze the impact of customer-oriented and brand-oriented marketing capabilities on business performance.

3.1. The Relationship of Marketing Capabilities and Business Performance

As base for the present research, the author draws from Resource-Based Theory. Several researchers, such as Hooley, Morgan, Song, Vorhies and their colleagues, have been substantially developed the research in the field of marketing capabilities and have contributed valuable findings to the role of marketing capabilities and their contribution to the success of the organization (e.g. Hooley et al., 2005; Vorhies & Morgan, 2005; Song et al., 2007; Morgan, Vorhies et al., 2009). The development of the concept of capabilities and especially dynamic capabilities as well as life cycle theories prompt that firms need to provide different resources and capabilities at different stages in their development; moreover, research further suggests that they need to grow their capabilities over time to become successful (e.g. Teece, 2007; Sirmon et al., 2011). The author has decided to further investigate this topic and focus on the group of firms in their early stages, analyzing their development of marketing capabilities as sustained competitive advantages. The set of capabilities driving a firm’s success does change over time. Especially the first phase of the life cycle is very demanding and management needs to constantly adapt to changing challenges. Young firms still have not fully developed their structures and culture and are still growing their customer base. To create sustainable advantages, the firm needs to constantly update and develop its portfolio of resources (e.g. Sirmon et al., 2011, pp. 1400–1403). The development of marketing in the early stages of firms, especially from a strategic standpoint, has not been analyzed yet. There are only a few authors who have researched resources and capabilities of marketing in SMEs (e.g. Wong & Merrilees, 2005) and even fewer who have focused on the birth phases of firms (e.g. Rode & Vallaster, 2005; Bresciani & Eppler, 2010), which is surprising against the fact that the clear majority of firms are SMEs accounting for a reasonable share of the value add. This suggests that better knowledge and development of capabilities could improve survival rates. Across all OECD countries, the percentage of firms with less than 250 employees is 99.8 percent (OECD Publishing, 2014, p. 27), accounting for 66.75 percent of value add (OECD Publishing, 2014, p. 35). At the same time, a significant share of firms dies within the first five years (e.g. between 2002 and 2004, 41 percent of newly founded companies in Germany were closed within the first five years; Müller et al., 2012, p. 19). Since young firms tend to be overall smaller in size than firms that are older, firm size might be an indicator for different results when comparing young firms and older firms. Analyzing research of Resource-Based Theory based on firm size, the results showed no difference in the impact of marketing capabilities on business performance (e.g. Wong & Merrilees, 2008; Merrilees et al., 2011, p. 374). The factor of size does not explain differences in the impact of marketing capabilities on business performance. Therefore, firm age becomes an even more important indicator to analyze. Looking at these facts, it seems to be quite important to support young firms in their development. These firms still need to build strong brands and marketing for their business performance. Therefore, research on the nature of the development of marketing capabilities and their impact on business performance is a quite current and important topic.

Little research has been done on the topic of firm age as connected to marketing capabilities. The few research papers identified that focus on firm age are mainly directed towards the topic of brand-oriented marketing capabilities and the research results by the different authors are quite contradictory. A study analyzing the moderator-effects of firm age, firm size and market-environment on the relationship between brand-orientation and brand performance indicates that these factors have no effect on brand image, brand awareness, brand reputation and brand loyalty (Hirvonen et al., 2013). These findings seem highly doubtable, especially since other research prompts that marketing capabilities have not been fully developed in young firms, proclaiming that these firms also face financial constraints in marketing expenditures (e.g. Rode & Vallaster, 2005, pp. 125–128; Bresciani & Eppler, 2010, pp. 359–361). Looking at these contradictory results, it becomes obvious that more research needs to analyze the development of customer- and brand-oriented marketing capabilities and their impact on business performance. To analyze the impact of marketing capabilities on business performance in young firms, a two-step mixed-method approach was deemed most appropriate. Although involving more effort on behalf of the researcher, the definition of the constructs and the modelling of the relationship of marketing capabilities and business performance for young firms is a complex topic and, therefore, requires a clear definition of the constructs themselves in a first step, which will be followed by a thorough analysis of the causal model.

3.1.1. Description of Hypothesis and Definition of Constructs

Resource-Based Theory serves the author as an overarching framework for her research. In this theory, firms' capabilities influence performance and managers' task is to acquire, structure and if necessary shed capabilities so they become sustained competitive advantages for the firm. As previously described, the causal relationship between marketing capabilities and business performance has been persuasively argued by a number of researchers. When customer- and brand-orientation is high, revenues, profits and sales are positively influenced and organizational effectiveness increases. Especially young firms are very often faced with a turbulent environment and restrained resources (e.g. Covin & Slevin, 1989, p. 75). They need to establish an awareness and a differentiated position for their brand on the one hand and develop a customer base on the other hand, while defining and creating a product or service that fit their needs. Therefore, to be successful they must develop marketing capabilities. Following this reasoning, the author postulates the following hypothesis for her research:

H: Marketing capabilities of young firms are positively related to their business performance.

For a more detailed investigation of the relationship of marketing capabilities with business performance, the hypothesis is operationalized as two independent conceptual theses:

- Thesis$_1$: Customer-oriented marketing capabilities of young firms are positively related to their business performance.
- Thesis$_2$: Brand-oriented marketing capabilities of young firms are positively related to their business performance of young firms.

For the creation of the single constructs, the author draws on the definition of marketing capabilities in Resource-Based Theory-literature. Capabilities are very often described as latent constructs comprised of a set of measurable items. As previously discussed, marketing capabilities are variables that are interpreted individually based on the research question analyzed and must be translated into operational indicators. The constructs and their indicators used in literature have been described in detail in Chapter 2. As previously described, these constructs will be further elaborated on and adapted to the specific situation of young firms through qualitative research. Below, the constructs defined in the marketing capability matrix and the definition of business performance described by the author are therefore only briefly summarized:

Customer-oriented marketing capabilities

Customer-orientation is based on the firm's customer relationship management and how the product or service fulfills the needs of the consumer. This construct is made up of two sets of strategic customer-oriented marketing capabilities, such as customer relationship management capabilities, customer responsiveness, or market sensing capabilities, and functional customer-oriented marketing capabilities, such as the generation of customer feedback on products and product development capabilities have to be developed to provide a sustained competitive advantage to the firm.

Brand-oriented marketing capabilities

Brand-orientation focuses on the brand and how it is positioned and communicated. Strategic brand-oriented marketing capabilities, such as branding capability, pricing or brand performance, as well as more functional brand-oriented marketing capabilities, like the definition of brand elements such as the brand name and logo, market planning, marketing communication or marketing implementation have to be developed to provide a sustained competitive advantage to the firm.

Business performance

Business performance is a construct used to measure organizational effectiveness. Measures such as return on shareholder equity, return on investment and other profit ratios are used to assess financial performance. The sole use of financial indicators might be misleading since the competitive environment is not reflected. Therefore, these measures are combined with measures for product market performance, such as sales levels, sales growth, market share and market share growth to reflect the market situation.

Since all three variables are based on a very broad set of constructs and have been assessed by different indicators, the author uses qualitative interviews to further qualify the concepts for young firms and identify the key components of these constructs to use in the quantitative analysis of young firms of up to 10 years of existence.

3.1.2. Application of the Mixed-Methods Approach

From a business perspective as well as in academic research, there is a growing interest in the measurement of the marketing-discipline's contribution to performance and first research has already indicated a positive impact of marketing capabilities on business performance. As previously described, there are two important groups of marketing capabilities that influence business-performance. Customer-oriented marketing capabilities, such as customer relationship management, market sensing capabilities or product development capabilities, have been proven to contribute to business performance. The same holds true for brand-oriented capabilities such as branding, pricing or functional brand implementation and marketing communication. Analyses comparing customer-oriented and brand-oriented marketing capabilities have provided different results. Higher levels of customer- and brand-oriented marketing capabilities have been found to result in higher financial performance (e.g. Vorhies et al., 2011, p. 752). Even though the overall effect of these marketing capabilities on profit growth rates is positive, there have been findings pointing in different directions with regards to the effects of revenue growth and margin growth rate (Morgan, Slotegraaf et al., 2009, pp. 289–290). Later research confirms that the combination of customer- and brand-oriented capabilities is beneficial to business performance as it improves the outcome and even future earnings of the firm (e.g. Angulo-Ruiz et al., 2014, p. 395). These previous findings suggest a strong causal relationship between marketing capabilities – customer- and brand-oriented – and business performance. Based on the findings in the empirical literature in the field of Resource-Based Theory on marketing-capabilities, data analyses or surveys were the preferred sources of data employed for testing hypotheses. Especially when venturing into new topics of Resource-Based Theory-research, such as the analysis of new marketing capability constructs or causal relationships, authors applied a mixed-methods approach to analyze marketing capabilities. Because the research question posed by the author is still a much undefined topic and previous research is limited, the author identified the mixed methods design as appropriate approach to analyze her research question. The mixed-methods approach is defined as "the class of research where the researcher mixes or combines quantitative and qualitative research techniques, methods, approaches, concepts or language in one single study." (Johnson & Onwuegbuzie, 2004, p. 17) This research-approach has been widely adopted in literature and is gaining popularity also in social sciences (Molina-Azorin, 2011, p. 33). The advantages of the mixed-method approach are multiple: A single-method approach, especially qualitative interviews with key informants needs to be validated, preferably by the application of another different research method (Phillips, 1981, p. 409). The application of the mixed method approach allows the author to triangulate the research question and gather detailed insights on the context of marketing-capabilities used by young firms and the relationship between customer- and brand-oriented variables and their relationship. Triangulation is defined as the use of multiple research-methods to ensure that the variance is explained by the analyzed phenomenon and not the research method (Johnson et al., 2007, pp. 1 13). The combination of methods makes findings more comprehensive, adds more depth to the findings and makes them more generalizable. As described in Chapter 2.1, the constructs of marketing capabilities vary between authors and how they classify and compose the single components of these constructs varies based on the research question. Since the topic of marketing capabilities in young firms is a quite untouched research subject, the author wanted to ensure that all relevant components of customer-oriented and brand-oriented capabilities and business performance indicators for young firms are accounted for in the constructs. Therefore, the author decided to use a two-step mixed-method approach procedure as the most appropriate method to analyze her research question. In this approach, the author uses qualitative interviews with founders of young firms to acquire more in-depth knowledge on the marketing capabilities applied in young firms which are perceived as important to create a sustained competitive advantage. Based on these findings, she will develop research hypotheses and a causal model for the quantitative analysis which she conducts to generate the final research results.

3.2. Formalization of Constructs for Young Firms

As seen in the literature review, authors define the components of constructs measuring marketing capabilities in different ways. Marketing capabilities have been previously described as capabilities involved in the creation and management of brands, the management and development of customer relationships and the building of marketing innovation and knowledge on a strategic as well as a functional level. As previously described in Chapter 1.3.2., firms in the first phases of their life cycle face a very specific situation. The development of the organization and concepts are not final, and products and services are neither existent nor fully conceptualized yet. The so-called “big idea” needs to be translated into concrete plans and actions. These firms need to test and experiment with their developments and focus on innovation. In this phase, firms are most likely facing a lot of throwbacks and sometimes must reinvent themselves and their products. Many of these young firms also need to operate under the limitation of constraint resources. In this challenging phase, management needs to take strategic decisions and identify which capabilities need to be developed. Since marketing capabilities have been identified as crucial capabilities to create competitive advantages and support business performance in general, these capabilities need to be developed already in the early stages of the firm. Marketing capabilities are key strategic drivers for firms and young firms have to make some significant decisions in the early development stages of brand-oriented marketing capabilities, such as the name of the product / service and or the firm, and customer-oriented marketing capabilities, such as the feedback generation of customers in the first stages of product development. Even though this specific phase is so crucial for the firm, the literature on the development of resources and capabilities in this phase is not very extensive and empirical findings for this period are very scarce. In order to gain preliminary insights and ensure that the marketing capabilities chosen by the author reflect the situation of young firms, the author used qualitative research as a starting point to facilitate quantitative research.

To assess the characteristics of marketing capabilities as well as business performance in young firms, the author decided to use semi-structured expert interviews as the most appropriate research instrument for the first step of her research. The goal of this part of the research is to gain insights from young firms on the marketing-capabilities they had developed, their strategic view on marketing capabilities in their current stage of the life cycle and their judgment regarding the impact of their marketing capabilities on their business performance. The newly identified capabilities are a supplement to the previously defined concepts of the literature review, allowing the researcher to further structure the findings generated in Chapter 2. These capabilities are compared to the general marketing capabilities identified and categorized in the matrix structure, which has been defined in the previous literature review. The general items identified in the literature review will be compared with the specialist experiences of the founders of young firms. The results of the qualitative analysis are meant to provide information for the selection of the items to be included in the latent constructs of customer-based and brand-based marketing capabilities as well as business performance so that the causal model can be further formalized before its quantitative statistical testing. The approach of adapting indicators for latent variables to the special research topic has been previously employed by several researchers in the field of Resource-Based Theory- and brand-research (e.g. Rode & Vallaster, 2005, p. 127; Bresciani & Eppler, 2010). The interview questions were structured to analyze how strategic and functional marketing capabilities were targeted towards customer-orientation and brand-orientation in young firms. The author used the flexibility of this research method to prepare an interview-guide, allowing for the possibility of adding questions or changing the order of questions when probing the components for the previously described classification of marketing capabilities and the indicators of business performance.

3.2.1. Founders of Young Firms as Key Informants

The author adopts the principle of the key informant technique to identify interview-partners. Based on this technique, the ideal informant should have a role in the community in which he/she has permanent access to the information sought. Moreover, he/she should have transformed this information into knowledge, should be willing to share this knowledge and have a minimal personal bias to the topic (Tremblay, 1957, p. 692). The choice of the appropriate knowledge carriers has a main impact on reliability and validity. One potential disadvantage of this qualitative research method is the challenge of a valid generalization to a wider population. Therefore, some researchers assume that qualitative studies are not usually designed to allow systematic generalization (Maxwell, 1992, p. 293). Since the present research is not intended to show generable results, but is targeted at theory building and not theory-testing, this is not seen a problem. The question of generalization also automatically leads to the question of sampling. As generalization is not possible, an increase of the sample cannot support generalization. The number of cases analyzed is based on the judgement of the researcher. To generate relevant results, it is recommended to identify typical cases. The selection of typical cases is meant to provide a similar concept to the principle of representativeness of sampling to case studies. It is important to choose cases that display the typical characteristics which are intended to be analyzed. Furthermore, relevant variables of the study should be varied, since this variation allows for a comparative description of the cases. The sample should display a spectrum of possible cases (Gläser & Laudel, 2006, pp. 95–96). Therefore, the author choses founders of young firms as interview-partners, who started their business in the last 10 years and whose firms are still in business. Since the goal of the author is to analyze firm-level performance, the author further focuses on single-business firms. The surveys do have an interview schedule, but questions are broader and the interviewer has the flexibility to further probe some answers when significant replies are received (Bryman & Bell, 2011, p. 204). To avoid any bias in the firms selected due to the focus on a specific market, industry, product or country, a broad variation of firms has to be selected.

As previously mentioned, one of the criteria to select a key informant is his/her willingness to communicate the knowledge, which can be an obstacle when identifying founders of young firms. Therefore, the author uses different sources to acquire the above described founders as interview partners. One source is the authors' professional network of business accelerators and incubators. Business accelerators and incubators are organizations which support nascent organizations in the development of their business through legal, financial, technological and business-support (Cohen & Hochberg, 2014, p. 9). To reduce any potential bias and influence internal validity of the study, the author also turns to websites of successful accelerators and crowdfunding sites based on the evaluation of CrunchBase, which provides information and contact data of the founding members. CrunchBase is the main database of the startup ecosystem including incubators and accelerators (Tech Crunch, 2014). The pages of the accelerators are reviewed for potential startups to be contacted. A list of websites used to identify potential interview-partners and their description is displayed in Appendix 5. Based on these three sources, the author selected a set of founders fitting the criteria mentioned above and contacted them for interviews.

3.2.2. Indicators for Customer- & Brand-Orientation and Business Performance

For the interviews, the questions and an interview-guide are prepared following the recommendations for such qualitative interviews with knowledge carriers (Gläser & Laudel, 2006, pp. 138–148). The questionnaire is split into different sections covering questions about the founders who were selected as respondents, their firms and their current stage of development as well as their marketing capabilities and their measures of success of both these capabilities and their business. The structure and the questions are created in a flexible order so that they can be changed in order to allow the structure of the interview to follow the input of the respondent. Depending on the statements given by the interviewed founder, the author could modify the order of the sections during the interview. One main question in qualitative research is the one of reliability and validity. Especially descriptive and interpretative validity are influenced by the way information is obtained from the respondents and then interpreted (Maxwell, 1992, pp. 282–291). To enhance descriptive validity, the interviews with the founders are taped and transcribed by the author for further analysis. The interviews are analyzed and the statements and responses are allocated in a pre-defined grid based on the criteria of marketing capabilities defined in the capability-matrix in Chapter 2.2 and the indicators for organizational performance defined in Chapter 2.3. In regard to interpretative validity, the author adjusts the language and usage of the terms for the constructs to the language used by the respondents during the interviews, as recommended by experts. In the actual interviews, many respondents did not differentiate between “brand” and “company” or “product” and used the technical terms interchangeably. Also, there were different terms used for marketing activities and branding. To ensure that the meaning of the expressions is interpreted correctly and to avoid any misunderstandings, the author asks the interviewees to explain the terms and then used them throughout the interview in the previously defined meaning (e.g. Polkinghorne, 2005, p. 139; Gläser & Laudel, 2006, pp. 169–170). The interview guide can be found in Appendix 6. The main structure of the survey and the sections are given in Table 3-1.

Table 3-1: Questionnaire sections of qualitative questionnaire

Section	Content
1) Information of founder	• Confirmation of Name • Position in the firm • Role in the founding of the firm
2) Information on purpose of the firm	• Questions on "big idea" • Description of product / service • Industry of operation • Market environment
3) Brand-oriented marketing capabilities	• Description of brand • Reason for development of brand • Purpose of brand • Brand elements
4) Customer-oriented marketing capabilities	• Participants in brand-development • Process of brand / product development • Brand-meaning for customers and stakeholders • Differentiation of brand
5) Performance indicators	• Indicators of success of brand • Indicators of success of firm • Performance indicators of brand • Performance indicators of firm
6) Outlook	• Future development of brand and firm
7) Firm data	• Size of founding team • Number of employees • Founding date

Source: structure by author

The interview was divided into seven sections. After receiving some information on the founder, several questions are aimed at gathering information about the "big idea" of the firm, the products and services of the firm and their differentiation towards competitors. The following sections are dedicated to generating input on the development of brand-oriented and customer-oriented marketing capabilities, their measurement and performance as well as an outlook regarding future development. The questionnaire is completed with detailed information on firm size and other background information. The questions generated by the author are pre-tested for logical consistency and unambiguity with seven managers holding leadership positions in startup-accelerators, venture capital firms and entrepreneurial consulting in the startup-environment as well as two academic marketing experts. After obtaining the confirmation of the founders that they are willing to participate in the study, a brief summary of the research was sent to the respondents via e-mail prior to the personal interview. In this email, the objectives of the research were clearly stated. The email also contained the information that the interview would not take longer than 30 minutes. In preparation for the interview, the author did research on the firm's financial background if data was available as well as on the founder or CEO who would be her interview partner. For cost and time reasons, the interviews are mostly held via skype. The consent of the participant and the technical setup provided, the interviews are done in form of video conferences and taped so the author is able to transcribe them for further analysis. All interviews are held on a one-on-one basis and conducted between March and July 2014.

3.2.3. Definition of Constructs for Young Firms

The interviews varied in length depending on the level of knowledge and affinity towards marketing of the respondents. All founders interviewed confirmed the importance of marketing capabilities. However, they were in different stages in the development of these capabilities. Every firm had already created a brand, even if it was only preliminary and had developed first marketing capabilities. Table 3-2 on the next page provides an overview of the fourteen interview partners and also gives some information on their firms. The interview partners all hold CEO positions and are owners of their firm at the time of the interview. They are all founders or part of the founding team. The number of founders of the companies varies between one to five people. The founding years of the firms acquired are between 2008 and 2014. In terms of gender, only two of the founders interviewed are female. This reflects the underrepresentation of women as entrepreneurs (Adema et al., 2014, p. 11). There is a wide selection of products and services, catering to different markets of business-to-consumer

Table 3-2: Profiles of founders interviewed and their respective firms

Founder	Gender	Product / Service Description	Market	Product / Service	Founding Year	Number of Founders	Employees at the time	Country
A	M	Subscription cancelling service	B2C	Service	2008	2	8	Germany
B	M	Individual car-wrapping	B2C/B2B	Mixed	2012	2	0	Germany
C	M	Video technology nurse service	B2C/B2B	Mixed	2013	5	20	USA
D	M	Online and offline art auctions	B2C/B2B	Service	2012	3	171	Germany
E	M	Sports performance tracker	B2C	Good	2011	2	6	USA
F	M	Baby shopping community	B2C	Service	2013	2	5	Germany
G	M	Restaurant coupon service	B2C/B2B	Service	2014	2	0	USA
H	M	Content software	B2B	Mixed	2013	3	0	USA
I	M	Language learning software	B2C	Good	2014	1	0	USA
J	M	Booking tool for fitness clubs	B2C	Service	2013	2	3	Germany
K	M	Online tracking optimization tool	B2B	Mixed	2012	2	24	Germany
L	M	Electricity management device	B2C	Good	2013	3	2	USA
M	F	Stand-up comedy theater	B2C	Service	2010	3	3	USA
N	F	Consulting for usability design	B2B	Service	2013	1	0	Germany

Source: construct by author

(B2C), business-to-business (B2B), or a combination of both (B2C / B2B). The products and services of the firms analyzed also cover a broad field. Likewise, company size varies considerably, ranging from no employees to 171, whereas the majority of the companies only have a low number of employees at the time of the interview. To avoid national differences, the companies are chosen from two countries, namely Germany and the USA, the two strongest economies for innovation following the small economies of Switzerland and Singapore (Weissenberger-Eibl, et al., 2013, p. 21). This broad variety enables the author to account for general marketing capabilities in young firms and identify performance indicators applicable to various markets. The measurement of capabilities in general is not easy, since “one can only *see* the inputs that a firm uses and the outputs that it achieves, but one can only *infer* its abilities in converting one to another.” (Dutta et al., 2005, p. 278) For an empirical analysis following Resource-Based Theory, researchers very often create causal models where capabilities are defined as latent variables to analyze the impact of these capabilities. As previously discussed, these latent constructs for marketing capabilities have to be interpreted individually as they are based on the research questions. They must be translated into operational measures and the constructs of these variables are comprised of several sets of measurable items which are broken down into single questions. Based on the results of the interviews, the author compared the findings with the items used by other authors to define and analyze the variables of customer-oriented and brand-oriented marketing capabilities as well as business performance. When possible, the author has decided to draw on suitable measures from other authors which have been previously used and decided to modify them based on her findings. An overview of the variables is offered in Table 3-3.

Table 3-3: Items and scales for latent variables

Latent Variable	Item	Measure
Customer-oriented marketing capabilities (COMC)	Strategic items (SCOMC)	Customer-oriented selling scale
	Functional items (FCOMC)	Product uniqueness & -capability development scale
Brand-oriented marketing capabilities (BOMC)	Strategic items (SBCOMC)	Marketing Proficiency scale
	Functional items (FBOMC)	Naming capability scale
Business Performance (BP)	Financial Performance items (FP)	Financial performance scale
	Product Market Performance items (PMP)	Market effectiveness scale
Strategic Posture (SP)	Strategic posture items	Strategic posture scale

Source: construct by author

These constructs have been previously tested for internal and external validity and have been proven to be reliable measures for the items of the latent constructs. However, this was not always possible and some items were added to accurately reflect the input of the interviews. Based on the indications in life cycle and entrepreneurship-literature as well as the findings in qualitative research, the author decided to introduce an additional moderating variable for strategic posture into the construct. The single items for the latent variables and the scales chosen by the author for their measurement in the qualitative research are described below.

Customer-oriented marketing capabilities

Looking at the interviews results, the customer is seen as an important factor for every founder. Young firms often identify a customer need in their immediate environment and then create products or services based on further customer feedback. Innovation is quite commonly developed in direct interaction with customers. The identification of needs is in line with the definition of customer-oriented items by other authors (e.g. Ramaswami et al., 2009, p. 1180). Sources are direct selling activities, contact with customers who bought or used the product or service or social media feedback from internet platforms such as Facebook. Firms also use this direct interaction to build trust and relationships with potential and existing customers. The generation of customer feedback is mainly of qualitative nature and unstructured. Depending on the level of professionalization, firms already plan or have systematic interaction with their customers. When possible, all firms also tracked user behavior, e.g., online to generate knowledge to further develop their products and services. Since the organizations are still small, there are mostly no employees dedicated to gather customer feedback and very often, the contact firms have with their customers is based on their selling-activities; therefore, the sales-unit is named as the main provider of customer-feedback. When possible, the tracked online consumer behavior was also utilized to generate knowledge to further develop a firm’s products and services. This finding confirms previous findings on small firms by Merrilees (Merrilees et al., 2011, p. 374), who found companies to build their innovation capabilities directly through feedback from consumers because they discovered them to more directly interact with them than bigger firms. Therefore, customer relationship management and input systems, described as indicators for customer-orientation by some authors (e.g. Hult et al., 2005, p. 1180), do not apply for most young firms.

<u>*Strategic Customer-Oriented Marketing Capabilities (SCOMC):*</u> Founders perceive the anticipation of customer needs and requirements and the development of customer responsiveness as a clear competitive advantage for the firm. This goes in line with findings

from previous research (e.g. Hooley et al., 2005, p. 26) and therefore needs to be included as an item in the survey for young firms. To cover the strong customer-oriented mindset and strategic generation input of customer feedback identified in the qualitative interviews, the author has chosen to adopt a reduced version of the customer-oriented selling construct of the Selling Orientation - Customer Orientation Scale from Saxe and Weitz to account for the strategic customer-oriented marketing capabilities. It includes and summarizes all relevant components applied by other customer-oriented strategic constructs (Saxe & Weitz, 1982, pp. 345–346). This construct reflects the direct contact with the customer and the capabilities required in the early stages of young firms, which have also been described in the qualitative interviews. The concept has been widely used and adapted in literature - also in Resource-Based Theory-research - for the analysis of strategic customer-orientation in marketing (e.g. Homburg, Wieseke, & Bornemann, 2009; Ramaswami et al., 2009; Bagozzi et al., 2012). The benefit of this construct is that the items focus on the direct interaction between the firm and the customer while it also includes components measuring the relationship between the customer and the firm. Both are important for young firms to be successful and capture the main characteristics of customer-oriented marketing capabilities at that age.

Functional Customer-Oriented Marketing Capabilities (FCOMC): Besides the above-mentioned strategic items, there are also functional items of customer-orientation. As mentioned in the definition of functional customer-oriented marketing capabilities in Chapter 2.2.2., one part of functional customer-orientation is the ability to understand the needs of the customers and to adjust and customize the products accordingly based on the needs (e.g. Hooley et al., 2005, p. 20; Song et al., 2007, p. 21). For the founders of the young firms, these product-related factors were the main items of functional customer-orientation. In this stage, firms still develop their products and services and seek customer-input to develop them. These product-related capabilities, which are mentioned as items by several authors, are highly relevant for young firms. Very often, the products and services of young firms are not yet finalized and still in development. As indicated in the qualitative interviews, there is still no clear definition of customer needs and firms have to react quickly to the changing market environment. Therefore, product management and differentiation capabilities are seen as key functional capabilities in customer-orientation during this phase. Other research has also found that the development of high quality products can contribute to a positive reputation-development, especially for new firms (Petkova, Rindova, & Gupta, 2008, p. 328). Therefore, one main customer-oriented marketing capability is the capability of the firm to provide a valuable, scarce, in-imitable and non-substitutable product or service to the customer; for this reason, firms should use the feedback generated by consumers to improve the product and the ability to develop the product faster than competitors. Product uniqueness and product capability development can be assessed as key measures for functional customer-oriented marketing capabilities through the scale for product uniqueness developed by Steensma and Corley (Steensma & Corley, 2000, p. 1067). The author has chosen to use this scale as a measure for functional components of customer-oriented marketing capabilities in her empirical research. This concise scale does not only provide measures for customer-oriented marketing capabilities of product management, but it also puts them into a competitive perspective.

Brand-oriented marketing capabilities

The customer-base of young firms is still very small and might even be subject to change. In the interviews, it was indicated that for some of the young firms, the firm's customer-base can even change over time and shift to another group which expresses different requirements of the service or product and, subsequently, marketing capabilities have to be adapted. Therefore, items used in other research which focus on detailed process development, such as market intelligence development or relationship marketing activities (e.g. Morgan, Vorhies et al., 2009, p. 919), or strategic developments associated with the fact that the brand already owns some brand equity that can be leveraged for positioning or in communication channels (e.g. Hirvonen et al, 2013, pp. 625), cannot be applied as main items to young firms. The firms are still in the process of identifying the different market characteristics and the market potential of their newly developed products and services (e.g. Song & Montoya-Weiss, 2001, p. 65). They need to build up capabilities in inside-out-directed brand-oriented marketing. The term brand and brand-oriented capabilities are described and conceptualized very differently by the several the founders, but, according to their records, they all had created a brand that was clearly differentiated based on the market characteristics of their product or service and the identified potentials. The level and depth of this strategic brand-orientation varied very much between the firms: Some founders defined brand as the name and color of the logo, while others defined it as the key differentiator and some as a personality. Even though they were very articulate about their product or service and its benefits, the majority of the respondents could not clearly describe the values their firm stood for and how they differed in their positioning against competitors. This is in line with the findings by other researchers in the field of startups and branding, who also criticize this lack of clarity (Rode & Vallaster, 2005, pp. 125–126). The creation of the strategic and functional brand was described as an iterative process.

Strategic Brand-Oriented Marketing Capabilities (SBOMC): In the very early stages of a young firm and the creation of a new brand, the interviewed founders perceived it as an advantage to have previous work experience in the industry the firm is operating in. In any case, it is crucial to understand the market conditions as well as the potentials for differentiation of the own brand. Brand-orientation plays a key role in shaping the business model. In the early phase, a focus on how the firm wants to present itself, which values it stands for, the nature of the brand personality and its key benefits should be communicated. At this stage, a rather narrow interpretation of branding as just being the brand name and logo is exhibited quite commonly (e.g. Wong & Merrilees, 2005, p. 157). As described in the findings of the interview, these path-breaking decisions regarding the strategic setup of the brand are made in the early stages of the firm. Especially in the creation-phase of the brand, it is also essential to conduct marketing tests and create a solid pricing strategy. Therefore, the author decided to draw from the "Marketing Proficiency" indicator created by Song and Montoya-Weiss (Song & Montoya-Weiss, 2001, p. 79). It summarizes an elaborate set of capabilities, which cover the main factors of strategic brand management; therefore, the author will use constructs such as the definition of marketing characteristics, market potential analysis, competitive analysis, identification of key differentiators and testing to measure brand-oriented strategic marketing capabilities.

Functional brand-oriented marketing capabilities (FBOMC): In terms of functional brand-oriented marketing capabilities, the name is described as the most important element of the brand. Other functional brand elements, such as design, varied based on the product or service. Other functional brand-oriented marketing capabilities mentioned by authors in previous literature reviews, such as marketing programs, advertising initiatives and the selection of appropriate marketing channels, were not (yet) seen as important factors. Young firm are still in the process of developing functional brand-oriented marketing capabilities. In most cases, brand guidelines are not developed and marketing planning and communication are not considered yet. Very often, the product or service is not finalized at this point and therefore, communication and advertising is not needed yet. Moreover, financial constraints limit marketing activities and subsequently the development of capabilities in this field (e.g. Bresciani & Eppler, 2010, pp. 359–361). Based on these findings, the author has decided to limit the measurement of functional brand-oriented marketing capabilities to brand naming. The brand name is the first functional element of a brand that most firms develop. It is also the most important element of the brand and the most difficult to change. The items to be used in the study are based on the indicators defined by Aaker about successful brand naming (Aaker, 1991, p. 196). As indicated in the description of the results of the qualitative interviews, these criteria have also been mentioned by the respondents. The scale has been enhanced by the inclusion of the requirement regarding the availability of the web-address (URL), which has also been confirmed by the founders in the interviews, and the potential of the name to be “verbalized” (e.g. google => googling). The identification of the right name is an iterative but non-structured process and, companies spend a significant time on finding an appropriate name. Due to its significant importance, the author decided to put a focus on naming for the analysis of functional brand-oriented marketing capabilities.

Business performance

The indication of a business being successful in terms of performance varies based on the stage of the firm and the complexity of the market environment. Firms that are still conceptualizing their products or services measure their performance in terms of the relationships they are establishing with opinion leaders. Because the product and service is still very new, the adoption in the market is a crucial topic. Therefore, another popular measure, which was used by the majority of the founders interviewed, is the number of customers using the service and returning customers. For some firms in the early stages, the usage of the product or service is more important than financial performance and the product is thus offered to potential customers either for free or at a reduced price. This indicator of usage or trial as indicator for business performance is common and rather specific of young firms and not as commonly used in other research assessing performance in relation to capabilities. Therefore, the author decided to include the usage of the product or service and the purchase of the product or service in the construct of business performance. Finally, most firms reported to use revenue, profit and indicators for market adoption to measure business success. Since numbers are still small, they often look at growth rates rather than actual numbers and also focus on returns. Regarding the specific measurement of the brand’s and marketing activities’ impact, most founders reported that the effort for measuring the success was too high at this organizational stage. Therefore, most firms also indicated that they turned to business performance indicators to measure the performance of their marketing efforts. Based on these findings, the author has decided to measure organizational effectiveness based on business performance. The latent variable of business performance is therefore composed of two sets of items, namely financial performance and product market performance.

Financial performance (FP): As identified in qualitative research, there is no specific differentiation for the measurement of financial indicators for young firms. The author therefore turned to the financial performance scale by Gupta and Govindarajan (Gupta & Govindarajan, 1984, p. 34), which includes a broad spectrum of financial measures and covers the most relevant performance measures; moreover, it has been already adapted to SME-research. The indicators covered include all measures mentioned in the interviews and range from sales levels to the ability to fund business growth through profits.

Product market performance (PMP): As previously described, financial performance measures are often complemented by other performance indicators to ensure that market effectiveness is fully captured. For young firms, the number of customers engaging with and buying their product has been reported to be a strong performance indicator. Therefore, the author has decided to include market effectiveness measures based on the concept by Vorhies and Morgan (Vorhies & Morgan, 2005, p. 92) and the measures used by managers to assess marketing-related activities (Mintz & Currim, 2013, p. 20) as indicators for product market performance. These additional measures for business performance include the number of customers using the product without payment and the number of returning customers without payment. As previously mentioned, getting customers to test the product or service and use it is very important for young firms in order to generate trial for their product and transform customers into paying customers. Finally, the number of buyers as well as repeat buyers are also included in this indicator.

Strategic posture

Another observation won from the interviews was the role of the founders in the development of the firm. Their values and perceptions significantly shaped the organizational development and strategy of the firm. Respondents mentioned that their personalities have a major impact on path-breaking decisions for the firm regarding the acquisition, development and shedding of marketing capabilities. Moreover, the factors and indicators taken into consideration when measuring business performance are also influenced by managers and their market assessment. The decision, which capabilities to focus on and which marketing activities to pursue, is significantly influenced by the founders' competitive orientation, risk-taking and innovation-capabilities (e.g. Covin & Slevin, 1989). This effect of management attitude and the underlying strategic assumptions about the market were also apparent when focusing on the development of customer- and brand-oriented marketing capabilities. Therefore, the author has decided to also consider this factor of strategic posture in the model for quantitative analysis.

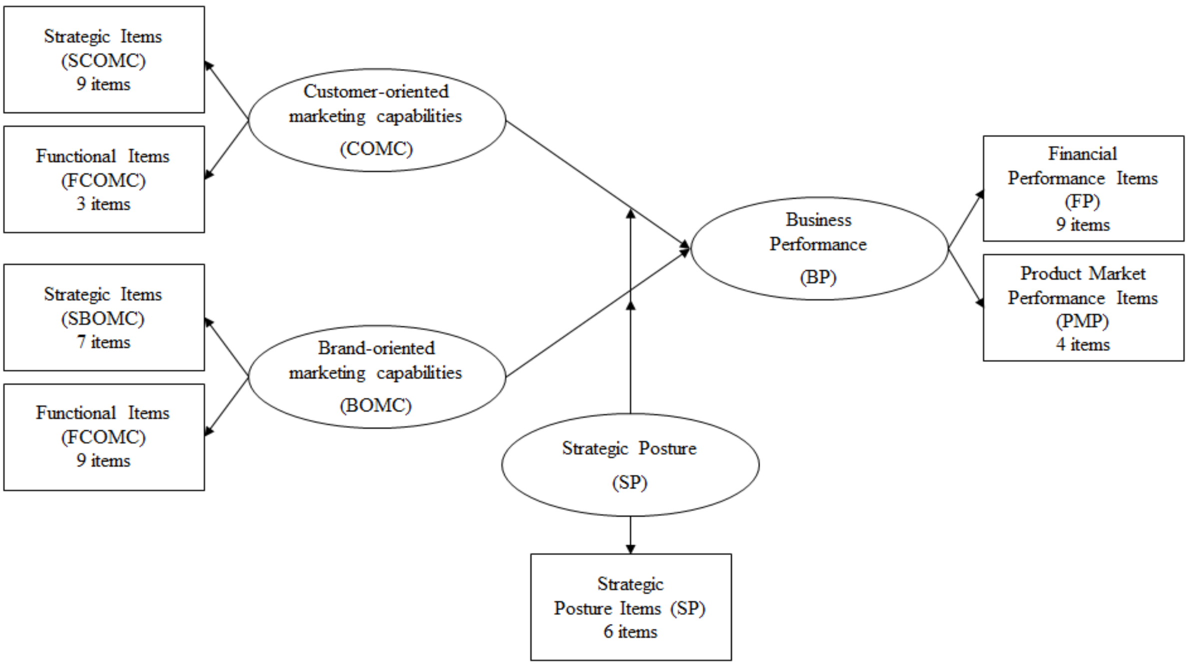
Strategic posture (SP): There is a substantial body of research dedicated towards the characteristics of strategic posture. As previously described, managers of young firms have to be innovative and open to innovation, proactive and embrace risk-taking to ensure the success of their firm (e.g. Alvarez & Barney, 2010, p. 563). Since strategic posture has a high impact on the development of marketing capabilities as well as business performance, the author decided to consider these factors in the model. The concept of strategic posture by Covin and Selvin is a commonly used measure for the firm's competitive orientation (Covin & Slevin, 1989, p. 75). It is defined as the way in which management addresses innovation, their motivation to take business risks and how proactively they address development. To ensure that this special situation of founders and young firms is reflected in the model, the author has decided to introduce a moderating latent variable of strategic posture, which moderates the relationship between customer-oriented marketing capabilities and business performance as well as the relationship between brand-oriented marketing capabilities and business performance.

3.3. Quantitative Analysis of the Causal Relationship for Young Firms

In Resource-Based Theory, which serves as the author's overarching framework, firms which establish valuable, rare, in-imitable and non-substitutable capabilities are able to gain a competitive advantage over their competitors as described, researchers have found a positive impact of marketing capabilities on business performance. Depending on the research question, these capabilities are structured in different ways. One way which has been commonly used in literature to segment marketing capabilities is by their customer- or brand-orientation. Several authors have discussed the interplay between these two orientations and argue that a firm has to adopt capabilities matching both views in order to become successful (e.g. Leone et al., 2006, p. 130; Day, 2011, p. 187). For this research, the author previously hypothesized that customer-oriented and brand-oriented marketing capabilities are both positively related to the business performance of young firms. She argues that especially in the first stages of development, where young firms are limited regarding resources and access to market based information, and environmental conditions are a greater threat to survival, these marketing capabilities can provide a sustained competitive advantage. Since the capability-constructs are very broad, the author has conducted qualitative interviews to identify the main items for the capabilities. Based on the constructs used in literature and the findings of her own analysis, the final constructs of the causal model can be defined and the quantitative research can be conducted.

3.3.1. Measures for Quantitative Research Constructs and the Causal Model

As previously described, the model analyzes the formative relationship between the latent exogenous variables of customer-oriented marketing capabilities (COMC), brand-oriented marketing capabilities (BOMC) and the latent endogenous variable of business performance (BP). The relationship between the latent variables and their respective measurement indicators is directly reflective, since the model specifies direct effects from the latent variables on the single items (Edwards & Bagozzi, 2000, p. 161). As previously mentioned, the manager's strategic posture (SP) is believed to have a moderating effect on the relationship between the customer-oriented marketing capabilities (COMC) as well as the brand-oriented marketing capabilities (BOMC) and business performance (BP). Therefore, the author introduces the construct of strategic posture (SP) as a moderator variable. The preliminary model is depicted in Figure 3-1.



Source: model created by author

Figure 3-1: Hypothesized causal model

Based on this model, a survey is created to measure the items and generate data for quantitative analysis. After the introductory section, which includes information on the purpose, the ethical code regarding confidentiality of data and the description of the reward for participation, filter questions are created to exclude participants that do not meet the criteria for the survey. As target audience, the author has defined founders or managers of firms founded between 2004 and 2014. To ensure that the participants can answer the questions posed in the survey regarding their current firm, the founders had to have been involved in the creation of the firms' brand. Potential interview-partners were filtered accordingly. The questionnaire was structured in the sections described in Table 3-4.

Table 3-4: Questionnaire sections of qualitative questionnaire

Section	Content
1) Introduction	• Description of survey purpose & content • Description of reward
2) Filter questions	• Founding Month / Year of company • Involvement in brand creation
3) BOMC	• Strategic items: Marketing Proficiency scale • Functional items: Naming capability scale
4) COMC	• Strategic items: Customer-oriented selling scale • Functional items: Product uniqueness & -capability development scale
5) SP	• Strategic posture items: Strategic posture scale
6) BP	• Financial Performance items: Financial performance scale • Product Market Performance items: Market effectiveness scale
7) Firm information	• Industry of business • Number of employees (firm size)
8) Participant information	• Job title • Founding member
9) Contact details	• Contact data required to receive survey reward

Source: constructed by author

In the first section, the founding date and the involvement in the brand creation were requested as elimination criteria for the survey. In the following sections, the measures for the items of the latent variables as well as the moderating variable are gathered based on the previously described measures. The items were composed of groups of three to nine statements. These items are measured by use of 7-item Likert-scales for agreement (1 = not at all – 7 = fully), importance (1 = not at all – 7 = extensively) or similar statements. These scales provide the benefit of a short testing time while providing less uncertain responses (Matell & Jacoby, 1972, p. 508). The questions for the single items and the respective scales of the latent variables can be found in Appendix 7. In the following sections, information on the firm and the founder were collected, which were also used as a second filter for the usable surveys. To prevent early cancellation, the author decided to put these personal questions for the participants at the end of the survey. *Section nine* was optional for respondents who wanted to provide their contact data to enter the raffle for the reward. The questionnaire was pilot tested with five academic marketing-experts for logical and functional consistency as well as contextual relevance of the measures and questions. The final questionnaire was published and the survey was available on the internet between 13.05.2014 and 27.06.2014.

3.3.2. Sampling Considerations for Founders of Young Firms

The topic of sampling is a common issue in the research of young firms, because the population is not easily identified and access to proprietary firm- and founder-data is limited. As previously described, the target audience for the survey consisted of founders who had founded a firm between 2004 and 2014, which still existed and with the founder still working at the firm at the time of the survey. The actual population size for this group cannot be determined, since it is not possible to clearly identify newly founded firms and their founders. Therefore, the author chose a judgement-based sample of non-probability nature, which is common in international entrepreneurial research (Coviello & Jones, 2004, p. 493). Considering this uncertain population size and regarding common t-levels ($t = 1.96$) and a set error rates ($e = 0.05$), a minimum sample size of 370 is recommended for a population of 10,000 or more (Bartlett, Kotrlik, & Higgins, 2001, p. 48). To avoid coverage error, the sampling frame was composed of three main types of sources: 1) entrepreneurial associations, which distributed the survey through their newsletters and promoted the study for the author, 2) address databases of firms, where members were contacted directly via email, 3) entrepreneur-related groups in business- and social-networks where the survey was distributed online. The author chose these sources because of the topical relevance to the target audience. The groups will be described in more detail on the following pages. An overview of the sample sources is provided in Table 3-5.

Table 3-5: Overview of sample sources

Address databases	Entrepreneurial associations	Business & social networks
• Yelp • Resource USA • Rice Alliance Partners • Startup Databases	• Berkeley Entrepreneurs Association • Center for Digital Technology and Management • Strascheg Center for Entrepreneurship • Mozilla WebFWD • Hackers / Founders	• LinkedIn Groups • Xing Groups • Facebook Fan pages

Source: construct by author

Address databases: In total, 1,574 firms were contacted via email which was followed by a reminder mail two to three weeks after the first contact, inviting them to participate in the online-survey. The author used four different databases: 1) *Yelp* is an online-platform promoting local businesses. (Yelp Inc., 2014) Out of this database, a random selection of single businesses (non-franchise) providing their email-information was chosen. 2) *Reference USA* is a business database listing more than 20 million businesses in the USA. Out of this database, a random selection of single businesses (non-franchise) providing their email-addresses was chosen (Reference USA, 2014). 3) The *Rice Alliance for Technology and Entrepreneurship*, a startup-initiative of Rice University (Rice Alliance for Technology and Entrepreneurship / Jones Graduate School of Business, 2014) provided the author with their database of alumni and startup partners. In addition to this list, the author collected single email-addresses of publicly available 4) *startup databases*, mainly the Wharton/University of Pennsylvania Business Plan Competition (Wharton University of Pennsylvania, 2014) and the Alphalab Accelerator. (Alphalab, 2014, p. 1)

Entrepreneurial associations: To further distribute the survey, the author contacted entrepreneurial associations and asked them to include the survey in their member-newsletters which was distributed to subscribers. The associations who agreed to include the information and the link to the study in their newsletter were 1) the following university-associations in the entrepreneurial field, who sent their newsletters to their alumni and members: *Berkeley Entrepreneurs Association* of the Haas School of Business (Berkeley Entrepreneurs Association, 2014), *Center for Digital Technology and Management (CDTM)* of Technische Universität and Ludwig Maximilians Universität, and *Strascheg Center for Entrepreneurship (SCE)* of Hochschule für angewandte Wissenschaften München (Strascheg Center for Entrepreneurship der Hochschule für angewandte Wissenschaften München, 2014) as well as

2) the startup accelerators *Mozilla WebFWD* (Mozilla WebFWD, 2014) and Hackers/ Founders Accelerator (Hackers / Founders, 2014).

<u>*Business- and social networks:*</u> To additionally increase the reach of the survey, the author published the link to the study in special interest groups for entrepreneurs and owners of young firms on the business networks *LinkedIn* and *Xing* as well as in relevant groups on the social network *Facebook*. To ensure high reach, the groups were chosen based on their size in terms of group members. In Appendix 8, the number of group members at the time the survey was distributed is listed. Unfortunately, these numbers just indicate the members registered in these groups and do not give an indication of their activity or login frequency. This information was not available to the author. An example for the promotion used is also displayed in Appendix 9.

As previously described, the survey was distributed to the target audiences either via e-mail or via selected platforms. To avoid non-response bias, up to two reminders were sent to the email-respondents 3 and 7 days after the first email in case they had not responded yet. Also, online-posts were refreshed on a regular basis, informing potential respondents about the purpose of the study and the data usage (Rogelberg & Stanton, 2007, p. 197). Unfortunately, not all sources were equally detailed in the data available for tracking the conversions of responses. The channel of address-databases provides the most continuous tracking possibilities. Looking at the rate of usable surveys from this source, the overall conversion reached a rate of almost 10 percent across all databases. Conversions per channel are displayed in Appendix 10. The total share is in line with the studies of other authors conducting quantitative studies on capabilities for SMEs (e.g. Wilden et al. (8.3 percent) (Wilden, Gudergan, Nielsen, & Lings, 2013), Hirvonen et al. (8.4 percent) (Hirvonen et al., 2013)). For the other channels, the conversion could not be calculated. The entrepreneurial associations did forward the information themselves and did not disclose the number of participants. The groups in which the information was posted had 1,000,912 members at the time, but there was no information on how many of them were active and exposed to the information. An overview of the respondents generated through the different sources and contacts made when available (e-mail or members) is provided in Table 3-6.

Table 3-6: Overview of respondents generated

Address databases	Entrepreneurial associations	Business & social networks
1,574 email addresses	Not available (invitation was forwarded by associations)	1,000,912 members
9.9% conversion	Not available	
156 Usable Surveys	257 Usable Surveys	

Source: construct by author

Excluding all incomplete datasets, the final number of usable surveys amounted to 413. This sample size exceeds the recommended population size of 380 respondents. Appendix 11 provides an overview of the sample, split by firm age, firm size and industry. As expected, the majority of young firms (80.1 percent) had the size of micro-firms with up to nine employees. This share of respondents reflects the actual situation of the economy and is in line with the statistics of the OECD, which report that most firms are micro-enterprises (70 to 90 percent) (OECD Publishing, 2014, p. 26). Regarding firm age, firms founded within the last two years made up the biggest share (42.1 percent). Since official data measures the share of firm age in comparison to the ages of all firms and not only to those of up to ten years, a direct comparison cannot be made. However, analyzing official birth and death rates of firms, it is obvious that nascent firms hold the biggest share of young firms. To avoid any bias, the author of the study wanted to generate a broad distribution of respondents in terms of industry. 23 percent of the participants were from the Information Technology industry. There is evidence that the Information Technology sector is a substantial contributor to business growth, innovation and consequentially a very good environment to found new firms (e.g. Müller et al., 2012, p. 10; van Ark et al., 2008, p. 35). It is followed by the industry of personal services (12.3 percent), accommodation and food services (10.7 percent) and Life Sciences (9.9 percent), which are typical fields for young companies. Other industries are represented in shares of less than ten percent. Since there is no clear indication of the international distribution of firms of up to ten years of age based on industry, the sample cannot be compared to the population. However, the broad distribution of different industries suggests that there is no bias based on industry in the sample.

3.4. Summary and Implications of the Qualitative Findings

In the third Chapter of this research, the research design has been defined. The author has limited the scope of the research to the analysis of the impact of customer-oriented and brand-oriented marketing capabilities on business performance for young firms. Qualitative interviews were conducted with fourteen founders as key informants to gain insight from young firms regarding their marketing-capabilities and their strategic setup of these capabilities in their current stage of the life cycle. The findings of the interviews were integrated into the definition of the items and scales representing marketing capabilities specifically for young firms. Also as result of the qualitative findings, a control variable for strategic posture was introduced into the model. After eliminating surveys that did not meet the required criteria or on grounds of non-completion, 413 complete datasets were generated for evaluation in the causal model.

4. CAUSAL MODEL AND IMPLICATIONS FOR YOUNG FIRMS

In the fourth chapter, the author will conduct a quantitative analysis to analyze the hypotheses and assumptions proposed in the previous chapter. As previously described, the author has defined and operationalized four latent variables to be analyzed. Customer-oriented marketing capabilities (COMC) and brand-oriented marketing capabilities (BOMC) are latent exogenous variables. Business Performance (BP) is the latent endogenous variable. The hypothesis and the two theses presume an influence of the marketing capabilities on the dependent variable of business performance. Strategic posture (SP) has been identified as a moderating variable. This hypothesized model will be evaluated through structural equation modelling and an analysis of variance.

4.1. Assessment of Construct Validity

Before further analysis of the model is conducted, the theoretical construct must be tested for construct validity. In this assessment of construct validity, it has to be ascertained that the influence of the independent, exogenous variables of customer-oriented marketing capabilities (COMC) and brand-oriented marketing capabilities (BOMC) on the dependent, endogenous variable BP assessed in the model, is explained correctly. In the calculation of a causal model, the validity of the construct ensures that the items measuring a construct are consistent. (Ho, 2006, p. 239) The author has considered previously used theoretical constructs in the creation of the variable items to minimize the risk of an invalid construct. To get a first indication of the constructs, the author conducted a simple correlation analysis. This analysis already confirmed that the single indicators are in relation with each other. The detailed correlations-table can be found in Appendix 12. However, this analysis only offers a first indication.

In a second step, the author further tested the validity of the model. A widely used method to assess the internal validity of reflective constructs is the calculation of the Cronbach's Alpha value (e.g. Jarvis, Mackenzie, & Podsakoff, 2003, p. 199). All variables used in the causal model are reflective variables; therefore, the author computed the Cronbach's alpha values for the three related variables of the causal model, the exogenous variables of customer-orientation (COMC), brand-orientation (BOMC) and the endogenous variable of business performance (BP). Since strategic posture (SP) is a moderating variable, it was not included in the analysis. The results for the Cronbach's Alpha values for the variables are displayed in Table 4-1.

Table 4-1: Validity analysis for reflective constructs

Construct	Cronbach's Alpha	No. of Items
Customer-oriented marketing capabilities (COMC)	0.777	12
Brand-oriented marketing capabilities (BOMC)	0.820	16
Business Performance (BP)	0.907	13

Source: construct by author

The Cronbach's Alpha value indicates a score for reliability. The analysis provided a coefficient of 0.770 for COMC, 0.820 for BOMC and 0.907 for BP. There are different recommendations in literature as to which value represents a reliable level for a construct. Peterson has conducted a meta-analysis of 4,286 studies and recommends that an alpha value of 0.7 stands for a minimally acceptable validity (Peterson, 1994, p. 385). Since all three results are well above 0.7, it can be concluded that the three constructs provide adequate internal consistency. Therefore, the constructs and all of their items can be used for further evaluation of the model.

4.2. Principal Component Analysis of Model Variables

Principal component analysis converts the set of observations of the potentially correlated variables into a set of principal components, which are linearly uncorrelated. Compared to a common factor analysis, principal component analysis is more suitable for exploratory research because it allows for a more accurate description of factor loadings and a higher factor reduction, which then leads to more accurate research results (Widaman, 1993, p. 307). As part of the exploratory factor analysis for the assessment of the relationship between the latent exogenous variables customer-oriented marketing capabilities (COMC), brand-oriented marketing capabilities (BOMC) and the latent endogenous variable business performance (BP), a principal component analysis was conducted to reduce and simplify the previously described rather large number of intercorrelated items to a representative set of constructs. The author computed a principal component analysis including factor reduction for all three constructs and for the moderator using a Varimax rotation with Kaiser Algorithm. The rotation revealed six iterations.

Based on this analysis, the single items of the variables were grouped and reduced to a smaller set of factors for each of the variables. According to the "rule of three" by Freeze and Raschke, single factor measurement models as the one which to be evaluated in the present study should have at least three indicators. With three factors for customer-oriented marketing capabilities (COMC), four factors for brand-oriented marketing capabilities (BOMC) and three factors for business performance (BP), this rule is fulfilled, and therefore, allows "for the covariance among the measures to be used to estimate the factor loading." (Freeze & Raschke, 2007, p. 1484) The cumulative percentage variance is quite high and the three newly aggregated items for customer-oriented marketing capabilities (COMC), COMC_1, COMC_2 and COMC_3 explain 58 percent of the variance for this variable. For brand-oriented marketing capabilities (BOMC), 56 percent of the variance is explained by the newly aggregated items BOMC_1, BOMC_2, BOMC_3 and BOMC_4. For business performance (BP), even 74 percent of the variance is explained by the three new items BP_1, BP_2 and BP_3. The components of the latent constructs with a calculated Eigenvalue higher than 1.0 are summarized and reported in Table 4-2.

Table 4-2: Summary of principal component analysis statistics for latent variables

	Initial Eigenvalues	% of Variance	Cumulative %
Customer Oriented Marketing Capabilities (COMC)			
COMC_1	4.55	37.91	37.91
COMC_2	1.37	11.40	49.31
COMC_3	1.05	8.78	58.09
Brand Oriented Marketing Capabilities (BOMC)			
BOMC_1	4.48	28.03	28.03
BOMC_2	2.19	13.70	41.73
BOMC_3	1.20	7.48	49.22
BOMC_4	1.04	6.48	55.69
Business Performance (BP)			
BP_1	6.74	51.85	51.85
BP_2	1.64	12.63	64.49
BP_3	1.24	9.53	74.02

Source: construct by author

The correlation patterns are used to specify the Structural Equation Model. Depending on the calculation, the number of principal components can be at maximum the number of original variables. In most cases, the number of variables will be reconfigured and reduced. Therefore, principal component analysis allows the researcher to identify the most important factors through their Eigenvalue and their Scree plot (DeVellis, 2012, p. 128). In addition to the factor loading measures, the author has also created scree plots to visualize the factors and get a better assessment of cutoff points. The Scree Plots of all factor reductions can be found in

Appendix 13. In the analysis of component loadings, all factor loadings lower than 0.4 were suppressed for clarification reasons. For all constructs analyzed, all remaining loadings (above 0.4) were positive. Some factors did load on two components. In this case, the stronger loaded component was highlighted, but the factor loading of the other component was still displayed. The full data for the component loadings of each factor is displayed in Appendix 14. Based on the results of principal component analysis, the previously defined items were regrouped into new components and these components were contextually interpreted based on the survey-questions they were composed of. The newly aggregated components for the variables had to be described in the new context and were renamed accordingly. Based on the patterns discovered, the component loadings can be explained for each construct.

Component Loadings of the variable Customer-Oriented Marketing Capabilities (COMC)

For customer-oriented marketing capabilities (COMC), the twelve measures for strategic and functional marketing capabilities are aggregated into three components. The analysis and contextual interpretation of the factors of the variable of customer-oriented marketing capabilities indicates that the most important and strongest driver for these capabilities in young firms is a strategic customer-oriented mindset, which focuses on solving customer problems and integrates the customer need in its strategic development. Product-related functional customer-orientation also plays a role through the capability to customize products and services based on customer needs and the capability to create unique products, which are differentiated against the competition. The first component, COMC_1, includes the same items as the previously defined strategic customer-oriented marketing capabilities (SCOMC) and therefore, is again named Strategic Customer-Orientation. The previously defined functional customer-orientation (FCOMC) is split into two components, which are, after contextual review, named Product Customization (COMC_2) and Product Uniqueness (COMC_3). Table 4-3 on the next page displays the rotated component matrix with detailed factor loadings for each component of the latent variable; below each component is described in detail.

COMC_1 – Strategic Customer-Orientation The strongest component for the variable of customer-oriented marketing capabilities is COMC_1, on which nine measures load. These measures are composed of all strategic customer-oriented marketing capabilities and are mainly concerned with the relationship of the young firm and the customer. Hence, a customer-oriented mindset, the willingness to support customers in pursuing their goals and providing a helpful product or service are the main drivers of this capability for young firms. Since the component describes the capability to understand customers and leverage their input, needs and feedback in their strategy, the author decided to keep the naming consistent to support clarity and name this component Strategic Customer-Orientation.

Table 4-3: Customer-oriented marketing capabilities rotated component matrix

	Component			
Measure	**COMC_1**	**COMC_2**	**COMC_3**	**Question**
SCOMC5	**.804**			We answer a customer's questions about products as correctly as we can
SCOMC8	**.755**			We try to give customers an accurate expectation of what the product will do for them
SCOMC3	**.754**			We try to influence a customer by information rather than by pressure
SCOMC2	**.749**			A good company has to have the customer's best interest in mind
SCOMC4	**.660**			We try to find out what kind of product/ service would be most helpful to a customer
SCOMC1	**.649**			We try to help customers achieve their goals
SCOMC6	**.618**			We try to bring a customer with a problem together with a product that helps him solve that problem
SCOMC9	**.592**	.489		We try to figure out what a customer's needs are
SCOMC7	**.520**			We are willing to disagree with a customer in order to help him make a better decision
FCOMC3		**.845**		Our company is capable of customizing our products/ services
FCOMC1			**.831**	Many of our competitors had fundamentally similar products/ services to us (R)
FCOMC2			**.728**	Few credible substitutes compete with our products/ services

Source: construct by author

<u>*COMC_2 – Product Customization:*</u> The second-strongest component, COMC_2, is fully loaded by the measure for the factor of product customization and partially loaded by one of the strategic measures, which describes the ability to identify customers’ needs. The component COMC_2 is very closely connected to the first component, Strategic Customer-Orientation (COMC_1). However, it focuses more on the product-development process itself and describes the ability to create and customize the products to the specific needs and wishes of the customer of the young firm. Therefore, the author decided to name it Product Customization.

COMC_3 – Product Uniqueness: The third-strongest component, COMC_3, loads on the two remaining measures of the functional consumer-oriented marketing capabilities for young firms, which focus on the similarity of competitive products or services to the products of the firm and the existence of substitutes for the products or services. Other than the first two components, this component is more concerned with the market situation, evaluating competitive products or services and substitutes. The more differentiated and unique the product or service of the young firm is and the less other products or services can provide a similar solution to the customer, the more successful will the product be in the market. This component summarizes the capability of the firm to provide unique, in-substitutable products or services. Therefore, the component is named Product Uniqueness.

Component Loadings of the variable Brand-Oriented Marketing Capabilities (BOMC)

For the variable brand-oriented marketing capabilities (BOMC), the sixteen measures describing it are aggregated into four main components. Analyzing the items of the single components of this variable for young firms, the main driver of brand-orientation for young firms is the strategic development of the brand, which is mainly driven by the identification of market potentials and opportunities for brand differentiation. Along with this need for differentiation, a clear naming and a distinct brand are key for a strong brand-oriented marketing capability. Similar to the components of the customer-oriented marketing capabilities, the items of the previously defined strategic brand-orientation (SBOMC) are also aggregated as one component into the newly structured variable. In alignment with the structure of the previous variable, BOMC_1 was named Strategic Brand-Orientation. The previously defined functional brand-orientation (FBOMC) is split into three components, based on the contextual interpretation, the author decided to name them Name Clarity (BOMC_2), Name Protection (BOMC_3) and Brand Distinctiveness (BOMC_4). A description of the single items and a listing of the factor loadings can be found below (Table 4-4 on the next page).

BOMC_1 – Strategic Brand-Orientation: Seven factors load on the first component of the brand-oriented marketing capabilities, BOMC_1. The measures describing this component are concerned with the strategic analysis of the potential for and the development of a differentiated brand and brand strategy for the young firm, including pricing and channel strategies for the brand’s rollout. These measures are aggregated in the component which has been named by the author as Strategic Brand-Orientation.

BOMC_2 – Name Clarity: The second component of the variable of brand-oriented marketing capabilities, BOMC_2, is composed of five measures of functional brand-oriented marketing capabilities. Analyzing the single measures for this component, all are concerned with the comprehensibility of the brand name and its linguistic clarity. The measures include requirements for the name to be easy to spell, easy to remember, its ability to evoke the appropriate emotional response, its potential to be “verbalized” and its ability to describe what the product or service is about. Therefore, the author decided to name BOMC_2 as Name Clarity.

Table 4-4: Brand-oriented marketing capabilities rotated component matrix

	Component				
Measure	**BOMC _1**	**BOMC _2**	**BOMC _3**	**BOMC _4**	**Question**
SBOMC2	**.795**				Conducting a detailed study of market potential
SBOMC7	**.737**				Developing a channel strategy
SBOMC3	**.728**				Appraising existing and potential competitors and their products/ services
SBOMC5	**.708**				Conducting marketing tests
SBOMC1	**.688**				Determining market characteristics and trends
SBOMC4	**.615**				Identifying characteristics to differentiate and sell your products/ services
SBOMC6	**.608**				Determining a pricing strategy
FBOMC7		**.809**			The brand name is easy to spell
FBOMC3		**.760**			The brand name is easy to remember for customers and other stakeholders
FBOMC9		**.627**			The brand name produces the appropriate emotional response
FBOMC4		**.482**			The brand name has potential to be "verbalized" (e.g. google => googling)
FBOMC1		**.435**			The brand name clearly describes what our product/service is about
FBOMC6			**.797**		The web-address (URL) for the brand name is still available
FBOMC5			**.781**		The brand name is available and legally protectable
FBOMC8				**.722**	The other brand elements (e.g. imagery, logo) support the name
FBOMC2				**.583**	The brand name is distinctive and cannot be confused with competitors' names

Source: construct by author

BOMC_3 – Name Protection: Component BOMC_3 is very closely related to the component of Name Clarity (BOMC_2). However, while BOMC_2 is concerned with the name itself and its linguistic potential, the component of BOMC_3 focuses on measures that ensure a clear functional and legal separation and protection of the name against any other firm. The component is made up of two measures, the availability of the web-address for the name and the legal availability and protectability of the name. To describe BOMC_3, the author decided to name it Name Protection.

BOMC_4 – Brand Distinctiveness: Like BOMC_2 (Name Clarity) and BOMC_3 (Name Protection), the fourth component, BOMC_4, also focuses on ensuring that the brand of the young firm is distinct and that it clearly separates the firms' brand from any other brand. However, this component differs from the other two components in that it broadens the name's purpose from the mere functional naming and the legal separation by making it a part of the overall brand. It is described by two measures - the support of other brand elements for the name on the one hand and the distinctiveness of the brand name towards competitors on the other hand, which is especially crucial for young firms. As BOMC_4 is concerned with the distinction of the overall brand against others, the author has decided to name it Brand Distinctiveness.

Component Loadings of the variable Business Performance (BP)

For the variable of business performance (BP), the thirteen measures for financial performance and product market performance were aggregated into three components. The main drivers for this variable are financial indicators which directly describe the returns and profits of the organization. They are summarized into the component of Financial Growth (BP_1). Sales- and purchase-related measures, which more indirectly relate to the performance of the firm, are aggregated into the second component called Sales Efficiency (BP_2). As previously described, there are also measures related to the trial and usage of the product or service without payment, which are summarized into the component Product Usage (BP_3). They are relevant for very young firms which might not generate any returns yet. In this construct, a total of six measures overlapped for the component one, Financial Growth and component two, Sales Efficiency. This fact can be explained by the circumstance that financial performance and market effectiveness measures are strongly connected. A detailed description of the three components and the respective factor loadings can be found in Table 4-5 on the next page.

<u>*BP_1 – Financial Growth:*</u> The component BP_1 clearly has the strongest loading on the variable of business performance. Two measures loaded fully and six measures loaded partially on the first component of BP_1. Of these six measures, five loaded mainly on the first component. All measures loading on the component originally loaded on the previously defined construct of financial performance (FP). Two of the measures of this construct load stronger on component two (BP_2). Both measures focus on sales values and are apparently are more directly related to other measures of component two. However, it can be assumed that there is a close connection between sales and revenues and, therefore, the analysis is also supported by the contextual logic that BP_1 and BP_2 are closely related. Since the measures of this first component are mainly directed towards the overall financial growth of the firm, the author has decided to name BP_1 Financial Growth.

Table 4-5: Business performance rotated component matrix

	Component			
Measure	**BP_1**	**BP_2**	**BP_3**	**Question**
FP8	**.817**	.		Return on investment
FP7	**.770**	.435		Profit to sales ratio
FP6	**.768**	.491		Net profit from operations
FP5	**.754**	.480		Gross profit margin
FP4	**.740**			Return on shareholder equity
FP9	**.662**	.507		Ability to fund business growth from profits
FP3	**.601**	.551		Cash flow
PMP2		**.848**		Number of customers buying the products/ services
PMP3		**.846**		Number of repeat buyers of your products/ services
FP1		**.744**		Sales levels
FP2	.434	**.726**		Sales growth rate
PMP1			**.900**	Number of customers registering for or downloading the products/ services (without payment)
PMP4			**.884**	Number of customers returning to your products/services (without payment)

Source: construct by author

BP_2 – Sales Efficiency: As previously described, the second component, BP_2, is strongly related with BP_1, Financial Growth. However, this component clearly targets the sale of the product or service of the young firm. It is combined with measures assessing market efficiency in regard to sales, namely the number of buyers and the number of repeat buyers, sales levels and sales growth rates. Moreover, financial measures such as cash flow, ability to fund business growth from profits, net profit from operations, gross profit margin and profit to sales ratio partially load on this component. Therefore, the component BP_2 has been named Sales Efficiency.

BP_3 – Product Usage: The third component, BP_3, centers on the preliminary stage of revenues as well as the usage of the product. To generate revenues, young firms need to acquire customers first who are interested in the product and willing to test it. Two measures load on this product, namely the number of customers registering for the service and the number of returning customers without payment. The component BP_3 is thus named Product Usage because it summarizes the ability to attract visitors for the product or service, even though without payment.

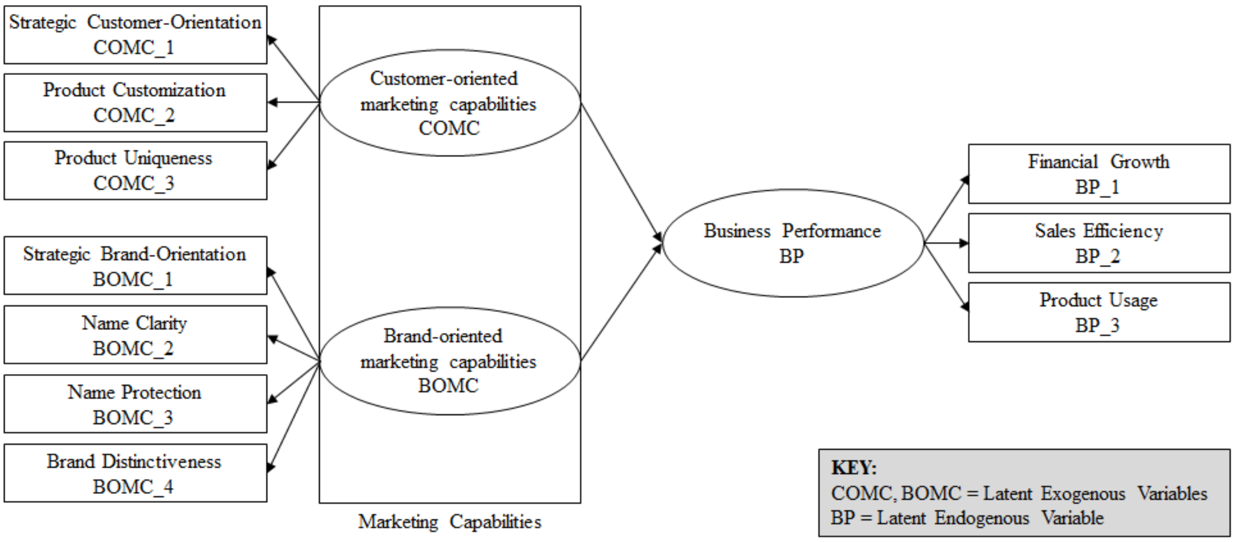
From the above described components, new items were calculated as regressions in SPSS. These new items as described above were used in the calculation of the confirmatory factor analysis. With these new components, the author will continue to analyze the model through structural equation modelling.

4.3. Calculation and Analysis of the Causal Model for Young Firms

After testing the construct and calculating the final components, the author turns to structural equation modelling to analyze and test the proposed model. The use of structural equation models allows the author to asses causal relationships amongst constructs in more detail than traditional correlation analyses and enables researches to model complex latent variables and operationalize constructs (Bagozzi & Yi, 2012, pp. 11–12). It is also a widely used statistical model in management research that allows researchers to assess and test relationships between latent constructs of capabilities as used in Resource-Based Theory. Several authors analyzing marketing capabilities and their impact on business performance have used structure equation models in their analysis which are similar to the model proposed by the author. Therefore, structural equation modeling was selected as an appropriate method to evaluate the hypotheses to be tested in this research.

4.3.1. Confirmatory Factor Analysis for New Constructs

As it is widely used in management research, the author has decided to utilize the analytical method of structural equation modelling also in her project as it allows her to analyze latent, unobserved variables represented by data from single, observable indicators (Williams, Vandenberg, & Edwards, 2009, p. 544). To construct the final model, a confirmatory factor analysis using the maximum likelihood method was conducted (Weston & Gore, 2006, p. 720). Confirmatory factor analysis is one research method within structural equation modeling, which is commonly used to analyze hypothesized relations among Likert-type items or other ordinary variables (Flora & Curran, 2004, p. 466). As previously described, all measures have been assessed by use of 7-item Likert scales. In Figure 4-1, the hypothesized model is depicted with the previously described newly created items and components aggregated through principal component analysis.



Source: construct by the author

Figure 4-1: Adjusted model based on principal component analysis results

Three reflective constructs and one formative relationship need to be measured in the model. While measurement errors must be considered on the item level in reflective models, the error needs to be addressed on the construct level in formative models (Jarvis et al., 2003, p. 201). After conducting an extensive literature review and the previously described qualitative interviews, the author is very confident regarding the model construct. In addition, after conducting the principal component analysis, the author is also very confident that the items used in the model fit the research question. The author has calculated the model and has already generated acceptable values in the first calculation. To improve the rather high p value of 0.106, the author optimized the model by eliminating the component of Name Protection (BOMC_3). It was removed because it is in contextual comparison to the other factors, combining elements of both a clear name (Name Clarity – BOMC_2) and a distinctive brand (Brand Distinctiveness – BOMC_4). The removal of this factor did not only result in an optimized p value, rendering it acceptable at 0.086, but also the CFI and AGFI have been slightly improved. Results of the original model and the improved model as well as recommended values in literature can be seen in Table 4-6.

Table 4-6: Summary statistics of structure equation model

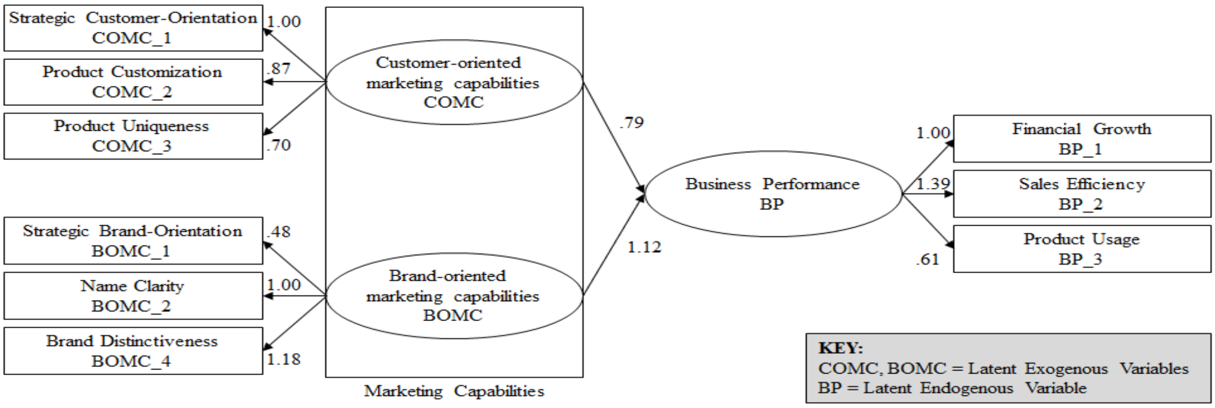
Model Fit Indicator	Recommended Value	Original Model	Adjusted Model
Chi Square (X^2)	no recommendation	43.41	**35.14**
Degrees of freedom (df)	no recommendation	33	**25**
Chi Square / Degrees of freedom (X^2/df)	<= 2.5 (Homburg & Baumgartner, 1995, p. 172)	1.315	**1.406**
P-Value for Model Fit (p)	< 0.05 (Bagozzi & Yi, 1988, p. 77)	0.106	**0.086**
Root Mean Square Error of Approximation (RMSEA)	<= 0.05 (Browne & Cudeck, 1992, p. 239)	0.028	**0.031**
Root Mean Square Residual (RMR)	<= 0.08 (Hu & Bentler, 1999, p. 27)	0.037	**0.037**
Standardized Root Mean Square Residual (SRMR)	<= 0.08 (Hu & Bentler, 1999, p. 27)	0.037	**0.037**
Comparative Fit Index (CFI)	>= 0.95 (Hu & Bentler, 1999, p. 27)	0.93	**0.94**
Goodness of Fit Index (GFI)	0-1, the closer to 1 the better (Joreskog & Sorbom, 1982, p. 408)	0.98	**0.98**
Adjusted Goodness of Fit Index (AGFI)	0-1, the closer to 1 the better (Joreskog & Sorbom, 1982, p. 408)	0.96	**0.97**

Source: construct by author

To measure the inferential quality criteria of the model, the traditional method would use the Chi Square measure. The ratio of the Chi Square value to the model's degrees of freedom (X^2/df) provides a measure for absolute fit indices. Its value in the adjusted model is 1.315

and therefore well in the suggested range of below 2. However, this value might be misleading since the requirements for a correct calculation of the Chi Square value are hardly fulfilled in reality. Hence, it is recommended to eliminate them as criterion to evaluate model fit (Browne & Cudeck, 1992, p. 239). Chi Square values mainly depend on sample size and therefore might underestimate the fit of complex models (Steiger, 1990, pp. 173–179). However, these values can still be used as reference values and therefore are reported for this model. As an alternative value, the author turned to the Root Mean Square Error of Approximation (RMSEA) as a more reliable measure for inferential quality. With a value of 0.028 it is definitely lower than the suggested .05 and, thus, indicates an appropriate fit. The value of 1.315 is well in the suggested range of below 2. Another value the author has chosen to refer to is the Standardized Rood Mean Square Residual (SRMR) as a measure for absolute fit, which is also the more contemporary measure than the RMSEA. For the sake of completeness, also the Root Mean Square Residual (RMR) is reported. A value of zero would indicate a perfect model fit. With a value of .04, the rule of thumb requirement for being below .08 or even the conservative threshold of .06 is fulfilled. Looking at incremental fit measures, the Comparative Fit Index (CFI) is reported and fulfils the required criteria with a value of 0.93. In addition to these measures, the Goodness of Fit Index (GFI) and the Adjusted Goodness of Fit Index (AGFI) are assessed and with a value of 0.98 (GFI) and 0.96 (AGFI), they meet the cutoff-criteria. In comparison to similar studies that also analyzed marketing capabilities in Resource-Based Theory and conducted a Confirmatory Factor Analysis on Marketing Capabilities, these values were quite satisfactory. (The author has summarized the values in a table in Appendix 15). In a final calculation of the factor reliability and the average variance extracted for the three latent variables, the values are within the acceptable range and above the cutoff points (e.g. Bagozzi & Yi, 1988, pp. 80–82; Fornell & Larcker, 1981, pp. 45–46). The calculation is given in Appendix 16. These calculations all indicate that the model has a good fit and is reliable.

The final model was derived of the factor analysis with the maximum likelihood method that describes the relations between customer-oriented marketing capabilities, brand-oriented marketing capabilities and business performance in terms of unstandardized regression weights. Looking at the factor loadings of the latent variables and their indicators, they are all above the cutoff point of 0.4 (Bagozzi & Baumgartner, 1994, p. 402). Therefore, all the relationships are valid. (The full model can be found in Appendix 17). To ensure that the assessed impact of the marketing capabilities can be clearly attributed to each of the two exogenous variables and that the covariance of the two exogenous variables is acceptable, the author calculated the correlation between them as suggested by Jarvis and colleagues (Jarvis et al., 2003, p. 215). The correlation is 0.11, which is not a very high value and therefore acceptable for the model. To display the relations between these three latent variables more clearly, the moderating (control) variable strategic posture (SP) has been omitted in the graph in Figure 4-2.



Source: construct by author

Figure 4-2: Final model calculated with unstandardized regression weights

Analyzing the results of the exploratory and confirmatory factor analysis, the proposed relationships are strongly supported. Customer-oriented marketing capabilities (COMC) as well as brand-oriented marketing capabilities (BOMC) do have a causal impact on business performance (BP). Thesis_1 proposed that customer-oriented marketing capabilities of young firms were positively related to their business performance and, thus, can be confirmed with a factor loading of .79. Thesis_2 proposed that brand-oriented marketing capabilities of young firms were positively related to their business performance of young firms; with an even stronger factor loading of 1.12 it can be confirmed as well. Based on these results, the hypothesis that marketing capabilities of young firms are positively related to their business performance can be confirmed. Looking at the reflective relationships of the single latent variables, some additional findings could be derived:

Customer-oriented marketing capabilities (COMC)

For the reflective relationships of the variable of customer-oriented marketing capabilities, the loading of all three components is relatively high with a low variance, which indicates that all components are almost equally influenced by the variable. The capability of customer-orientation loads the strongest on Strategic Customer-Orientation (COMC_1) with a factor of

1.00. With a loading of .87 respectively .70, the variable also loads strongly on the two product-related components of Product Customization (COMC_2) and Product Uniqueness (COMC_3). These results prompt that customer-oriented marketing capabilities have a strong impact on young firms' strategic generation and integration of customer feedback, their way of adapting the product or service to customer needs and their ability to differentiate the product against competitive products or services as well as substitutes. The strategic integration of customers' feedback and the focus on their best interest already in the birth phase of young firms is very important. This is also supported by the results of the interviews, during which several founders emphasized the importance of including customer feedback and setting a focus on the customer for their business performance. Since the teams are mostly still very small, teams often directly interact with the customers and the feedback is immediately integrated in the process of product development. Due to this close connection to customers, all departments generate a good understanding of customers' needs and perceptions of competitive products or substitutes, which allows for a customer-oriented overview of the market and gives them detailed insights to use for future strategic development.

Brand-oriented marketing capabilities (BOMC)

As previously mentioned, the variable of brand-oriented marketing capabilities has a stronger overall impact on business performance than the variable of customer-oriented marketing capabilities. Looking at the reflective relationships of the variable with its three components, the functional components of Brand Distinctiveness (BOMC_4) and Name Clarity (BOMC_2) with a factor loading of 1.18 and 1.00 are influenced much stronger than the Strategic Brand-Orientation (BOMC_1) with a loading of only .48. Based on these findings, brand-oriented marketing capabilities of young firms have a strong impact on the creation of a differentiated brand and brand-design as well as a clearly understandable and distinct name. The strategic brand-orientation component is barely relevant at this stage. This finding is in line with the results of the qualitative interviews, where brands were described as being rather functional. The level and depth of this strategic brand-orientation varied considerably between the firms: Most founders defined the brand solely as the name and color of the logo, while others defined it as a key differentiator; some even saw it as a personality. Even though they were very articulate about their product or service and its benefits, the majority of respondents could not clearly describe the values their firms represented; neither, they were able to explain how the differed in their positioning against their competitors. Such findings are also supported by literature in the field of startups and branding, which also highlight this lack of clarity (Rode & Vallaster, 2005, pp. 125–126). The creation of the strategic and functional brand was described as an iterative process, starting with functional items. Apparently, young firms focus on functional items of brand-oriented marketing capabilities first.

Business Performance (BP)

Of all three variables, the exogenous variable of business performance exhibits the broadest variation in the loading on its individual constructs. Sales Efficiency (BP_2) is the component with the strongest loading with 1.39. It is followed by Financial Growth (BP_1) with a factor loading of 1.00 and Product Usage (BP_3) with a factor loading of .61. This distribution can be explained by the situation of young firms, especially in their very early stages, where financial structures are not established yet and founders seek to generate first sales of their products or services. The construct of Sales Efficiency is comprised of a mix of the number of buyers / repeat buyers, the financial growth rate and the financial results of the sales activities with a clear focus on the first mentioned indicators. These findings are also supported by qualitative results, where founders mentioned that due to small sales numbers, they often look at growth rates of their selling activities more than actual numbers. Financial Growth (BP_1) is the second most important component influenced by business performance. As every firm strives for profit, this aggregation of financial indicators should be influenced by a successful business performance. However, to reach financial returns and generate sales, young firms need to find customers who are interested in their products and services. Therefore, even if it does not load as strongly as the other two components, Product Usage (BP_3) of customers without payment is also an item that is influenced by business performance. Summarizing the findings, the most important impact of business performance is on the sales numbers and revenues of the young firms, which are related to the growth of financial indicators, such as revenues and profits. However, they also impact product usage in general.

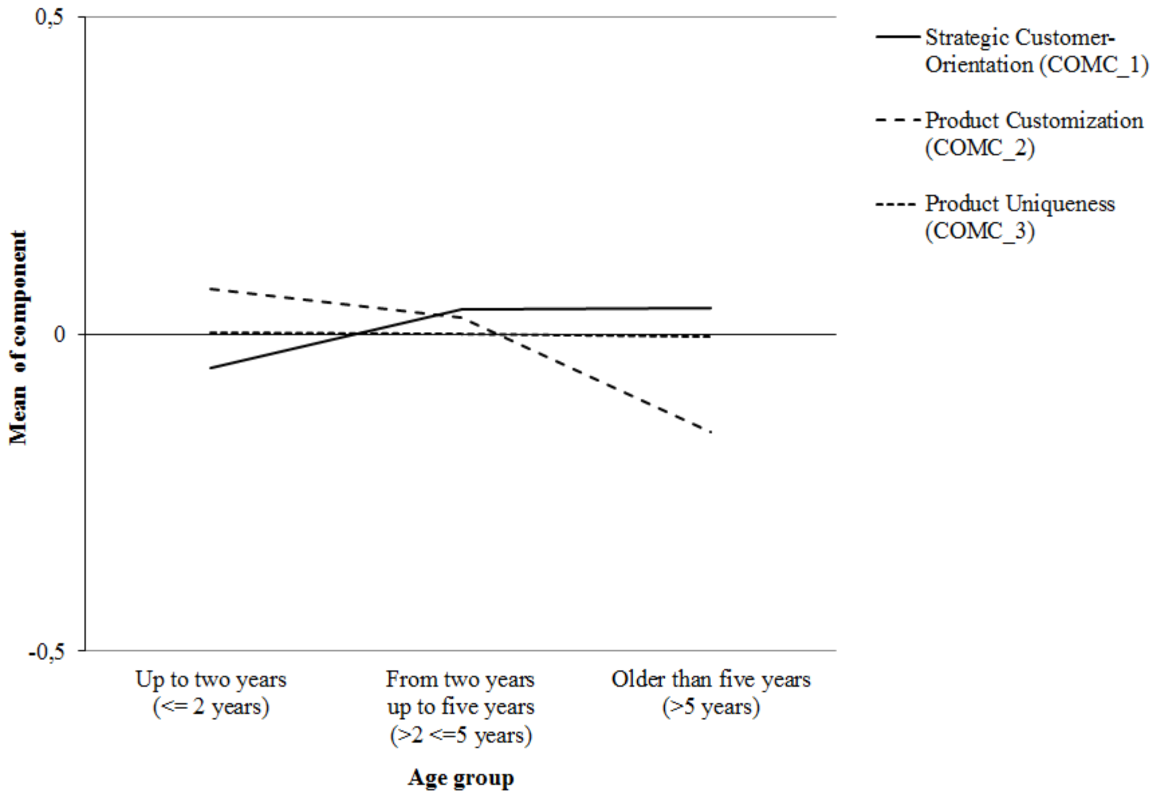
4.3.2. Analysis of Variance for Age Groups of Young Firms

As previously defined, young firms are firms of up to ten years of age. Findings in literature and the qualitative research of the author prompt that during this period, firms undergo rapid changes. To analyze potential differences in the development of the three variables of customer-oriented marketing capabilities (COMC), brand-oriented marketing capabilities (BOMC) and business performance (BP) during the first ten years, the author decided to conduct an additional analysis of variance, splitting the firms of the sample in three age groups. The analysis of variance (ANOVA) is a research method commonly used in management research to compare the means of three or more unrelated samples (Bryman & Cramer, 2011, p. 177). Since more change takes place in the early years of most firms, the indicator of firm age was varied in the following three different conditions: the age of up to two years (<= 2 years), the age range from two years to up to five years (>2 <=5 years) and the age of older than five years (>5 years). The first results of the analysis prompt the following conclusion: while no significant differences in effects are reported between the three age groups for customer-oriented marketing capabilities (COMC), there are significant differences in effects for the component of Strategic Brand-Orientation (BOMC_1) of $F(2.410) = 7.43$, $p= 0.001$ for brand-oriented marketing capabilities. Also for business performance, the components of Sales Efficiency (BP_2) and Product Usage (BP_3) show some significant effects with $F(2.410) = 11.15$, $p = 0.000$ and $F(2.410) = 4.59$, $p = 0.001$ for the three age conditions (p-level $p< .05$). All other components are not significantly different between the three age groups. (The complete descriptives of this analysis of variance are documented in Appendix 18 while and the one-way between subjects analysis of variance can be found in Appendix 19.)

To further explain these findings, a post hoc analysis was conducted. Whereas the analysis of variance just proves that there are significant differences between mean values, a post hoc analysis generates a paired comparison between mean values and therefore identifies which means are significantly different. To reflect the variation of sample sizes, the Scheffé test was chosen as an appropriate method (Tukey, 1991, p. 116), as it is more likely to identify significant differences between groups (Bryman & Cramer, 2011, pp. 182–183). In the post hoc analysis, the same three factors are confirmed to be significantly different between age groups. The full results of the Scheffé Post Hoc Comparison can be found in Appendix 20. Cross-tabulations with the values of the Tukey- and Bonferroni-Test provide similar values and are therefore not included. Based on these results, it can be confirmed that the weight of the three components Strategic Brand-Orientation (BOMC_1), Sales Efficiency (BP_2) and Product Usage (BP_3) vary between age groups. To gain a better picture of the findings, the author has aggregated the mean plots for each factor of the three variables for each age groups.

Differences between age groups for customer-oriented marketing capabilities

As previously mentioned, there are no significant variances between the means of the age groups for the components of the variable of customer-oriented marketing capabilities. The factors across the different age groups for Strategic Customer-Orientation (COMC_1), Product Customization (COMC_2) and Product Uniqueness (COMC_3) only vary slightly. The visualization of the differences between the three age groups for the three factors of customer-oriented marketing capabilities is given in Figure 4-3 below. The full one way mean plots and stem leave plots of the analysis of variance for each age group can be found in Appendix 21.



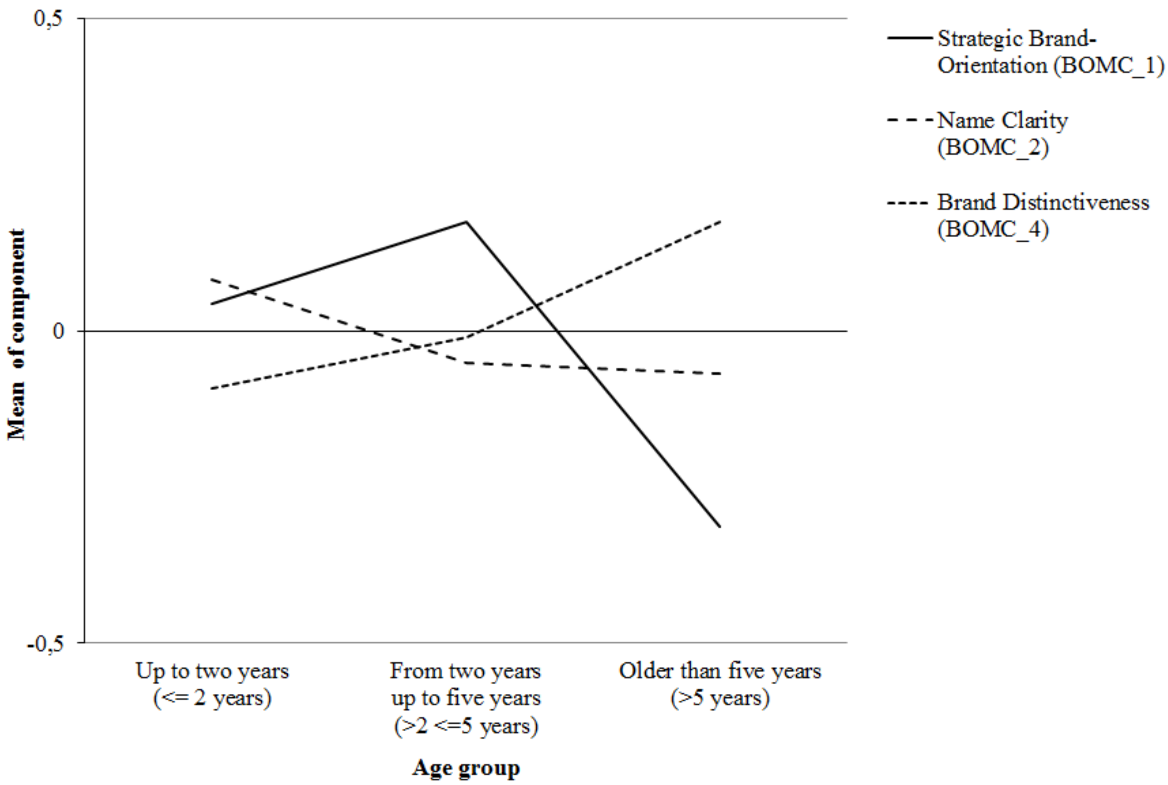
Source: construct by author

Figure 4-3: Mean plot for customer-oriented marketing capabilities (COMC)

Product Uniqueness stays almost flat. Strategic Customer-Orientation increases very slightly from the age group of up to two years to the other two age groups. Product Uniqueness declines continuously between the three age groups, however not significantly. With an increase of age after the first two years, young firms grow in Strategic Customer-Orientation and decline in Product Customization. The decline of Product Customization continues for young firms older than five years. These trends can also be explained by the previously described qualitative findings, which suggest that in the beginning of the firm, when teams are small, customer-orientation is not structured and strategically managed yet. With the development of the firm, products and services are standardized further and, therefore, the customization to single needs continuously declines with the age of the firm.

Differences between age groups for brand-oriented marketing capabilities

For brand-oriented marketing capabilities, the three components vary in their means throughout the different age groups. However, only the change of Strategic Brand-Orientation (BOMC_1) is significant in the birth phase. As indicated in the analysis of variance and the post hoc comparison (Scheffé), significant changes of means occur for Strategic Brand-Orientation (BOMC_1) between the group of firms of up to two years of age and the group of older than five years of age with a mean difference of +/-.36, and a standard error of .12, as well as for the group from two years to up to five years of age and the group of older than five years of age with a mean difference of +/-.49 and a standard error of .13. Name Clarity (BOMC_2) slightly decreases, while Brand Distinctiveness (BOMC_4) slightly increases – both changes are nonetheless not significant. Looking at the visualization of the differences between mean plots for the components by age group, these differences can be confirmed (see Figure 4-4 below). The full one way mean plots and stem leave plots of the analysis of variance for the components by age group can be found in Appendix 22.



Source: construct by author

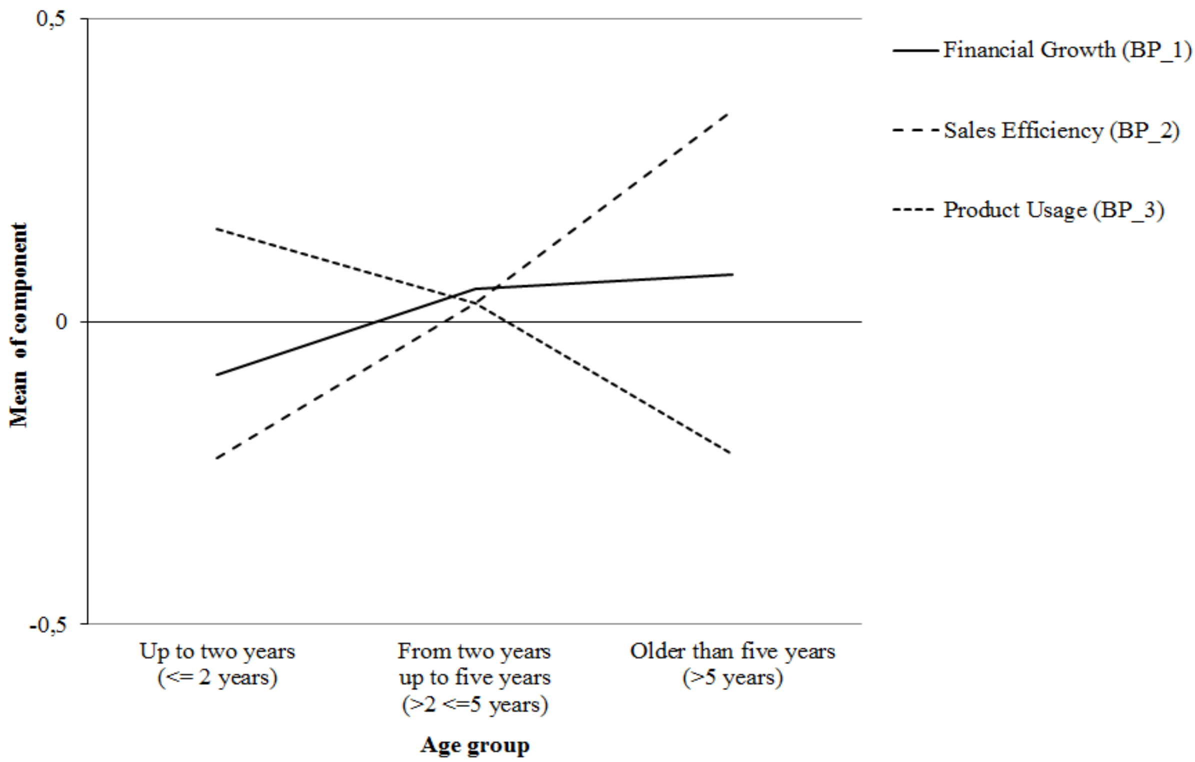
Figure 4-4: Mean plot for brand-oriented marketing capabilities (BOMC)

In general, the components of brand-oriented marketing capabilities (BOMC) vary more between the groups than the components of customer-oriented marketing capabilities (COMC). Based on these findings, the need for strategic development of the brand-orientation increases for young firms after the age of up to two years and then drastically declines when the young firms are older than five years. The component of Strategic Brand-Orientation (BOMC_1) includes typical items for the beginning phases of young firms, like the identification of market potential, a competitive appraisal and the identification of differentiation characteristics for the product or service. These tasks are typical for the first few years of the young firm. Once they are defined and optimized, the strategic development of the brand becomes an important capability again in the later phases of the life cycle, when the firm needs to decide how it wants to continue after reaching maturity (e.g. Helfat & Peteraf, 2003, p. 1003; Sirmon et al., 2011, p. 1402). Even though the differences for the other two components are not significant, they are still interesting for research. Apparently, the mean of Name Clarity (BOMC_2) declines, while the mean of Brand Distinctiveness (BOMC_4) increases. Since the name of the young firm becomes more known, factors like the ease of perceptibility or its descriptive value are not as relevant anymore, while the distinctiveness of the whole brand and its differentiation against competitors becomes more important over time.

Differences between age groups for business performance

For the variable of business performance (BP), there is an evident significant crossover-interaction between the two factors of Sales Efficiency (BP_2) and Product Usage (BP_3). The post hoc comparison (Scheffé) confirms the significant differences identified by the analysis of variance for the two components. For Sales Efficiency (BP_2), the differences occur between the age group of up to two years (<= 2 years) and the group of older than five years (>5 years) with a mean difference of +/-.57 and a standard error of .12, as well as the age group from two years to up to five years (>2 <=5 years) and the group of older than five years (>5 years groups) with a mean difference of +/-.32 and a standard error of .12. For the other component, Product Usage (BP_3), there is only a significant variation between the group of up to two years of age (<= 2 years) and the group of older than five years of age (>5 years) with a mean difference of +/-.37 and a standard error of .12. The visualization of the differences between the mean plots of the three age groups for the three factors of business performance are displayed in Figure 4-5 on the next page. The full one way mean plots and stem leave plots of the analysis of variance for each component by age group is calculated and plotted in Appendix 23.

While the mean of Sales Efficiency (BP_2) increases, the mean of Product Usage (BP_3) decreases between the three age groups of young firms. This crossover-effect is logical since the component of Product Usage summarizes the usage of the product or service without payment, whereas the component of Sales Efficiency is comprised of measures for buying customers as well as sales levels and sales growth rates. This data is also supported by the results of the qualitative interviews, during which founders of young firms indicated that they provide their products and services for free or at a reduced rate in the early stages of the firm to generate usage. In later stages, when the product or service is already established, sales and financial performance become more important. These findings also support the increase of the means of the component Financial Growth (BP_1), which however is not statistically significant. These findings are very interesting, since they imply a change in focus regarding the different components for the assessment of business performance between the three age groups of young firms.



Source: construct by author

Figure 4-5: Mean plot for business performance (BP)

Looking at the overall results of the analysis of variance, there are some differences in the variance between the three age groups, for firms of up to two years of age (<= 2 years), firms from two years to up to five years of age (>2 <=5 years) and firms older than five years (>5 years) for brand-oriented marketing capabilities and business performance, which provide relevant insights for the development of young firms and can be explained through findings made in the qualitative research. However, since this is not a longitudinal study, the author suggests to further test these findings through additional research.

4.4. Summary and Results of the Quantitative Analysis

Summarizing the results of the analysis, the hypothesis H: Marketing capabilities of young firms are positively related to their business performance <u>is supported</u>. Marketing capabilities do have a positive impact on business performance in young firms. With a factor loading of .79, the latent exogenous variable customer-oriented marketing capabilities and, with an even stronger factor loading of 1.12, the latent exogenous variable of brand-oriented marketing capabilities have a positive impact on the latent endogenous variable of business performance.

Looking at the single variables and their reflective components, the twelve measures of customer-oriented marketing capabilities (COMC) are aggregated into three components: Strategic Customer-Orientation (COMC_1), Product Customization (COMC_2) and Product Uniqueness (COMC_3). The sixteen measures for the variable brand-oriented marketing capabilities (BOMC), are aggregated into four main components: Strategic Brand-Orientation (BOMC_1), Name Clarity (BOMC_2), Name Protection (BOMC_3) and Brand Distinctiveness (BOMC_4). In the model testing, the third component, Name Protection was eliminated. For the variable of business performance (BP), the thirteen measures were aggregated into three components, Financial Growth (BP_1), Sales Efficiency (BP_2) and Product Usage (BP_3).

A final analysis of variance of the components by age group indicated that there are significant differences in effects for the component of Strategic Brand-Orientation (BOMC_1), Sales Efficiency (BP_2) and Product Usage (BP_3). For customer-oriented marketing capabilities (COMC), no significant difference of effects between the three age groups was identified. These findings were confirmed by a post hoc analysis, but should be further tested through additional research.

CONCLUSIONS AND SUGGESTIONS

Conclusions

1. The analysis of literature has contributed to an understanding of the development of marketing capabilities in the context of the life cycle of the firm. Marketing capabilities in general have a positive impact on business performance. An increase in resource deployment in marketing has a statistically significant effect on economic firm-level performance. Customer- and brand-oriented capabilities are highly relevant as effective and efficient creators of sustainable wealth for a firm. They need to be combined to best support the value-generation of the firm and share the same goals of business performance.

2. Resources and capabilities which provide a sustained competitive advantage change over time. This is influenced by external factors, such as changing customer preferences and the competitive situation, as well as the internal developments of the firm. In the early stages of a firm, the main task is the organization of resources and a flexible development of capabilities. Depending on the stage of development, resources and capabilities as well as resource management need to be adapted to the organizational requirements. The firm is still in the process of setting the central objectives and is involved in entrepreneurial activities. With the evolution of the life cycle of the firm, requirements change. The system measuring branding- and marketing-activities needs to capture these changes.

3. Customer-oriented marketing capabilities are positively related to business performance. In analyzing the results of the exploratory and confirmatory factor analysis for young firms, the positive causal relationship can also be confirmed. However, these capabilities have a slightly different focus than for older firms. The measures for customer-orientation can be broken down in three main components: The main and strongest driver for these capabilities in young firms is Strategic Customer-Orientation, which is comprised of a strategic customer-oriented mindset, which is focused on solving customer problems and integrating the customer needs in its strategic development. Customer interaction and feedback is mainly driven by selling activities, contact with customers, who bought or used the product. Measures reflecting this strong focus on the interaction with sales are necessary to properly assess strategic customer-orientation of young firms. Product Customization, the second component, is very closely connected to the first component, but has a stronger focus on the development of the product or service. It comprises the abilities of the firm to develop and adapt the products or services to the specific requirements of the customer. The firms are

still very focused on the development and specification of their product or service. A stronger focus on product development than in more mature firms is therefore important to represent and measure functional customer-orientation in young firms. The third component, Product Uniqueness, stands for the ability of the firm to provide unique, in-substitutable products or services. Differentiation and the creation of unique products in the light of the market situation are important to positively influence this component. With highly developed customer-oriented marketing capabilities, young firms will succeed in Strategic Customer-Orientation, Product Customization and Product Uniqueness.

4. Brand-oriented marketing capabilities also do have a positive impact on business performance of young firms and have an even higher influence on business performance than customer-oriented marketing capabilities. Looking at these capabilities, young firms are still in the process of identifying the different market characteristics and the market potential of their newly developed products and services. The functional development of the brand design such as the creation of a name, a logo and design is a very strong priority. The three main components being influenced by brand-oriented marketing capabilities and hence factors of success are Strategic Brand-Orientation, Name Clarity and Brand Distinctiveness. The measures describing the component of Strategic Brand-Orientation are concerned with the strategic analysis of the potential for and the development of a differentiated brand and brand strategy for the young firm, including pricing and channel strategies for the rollout of the brand. The second component, Name Clarity, is focused on the understandability of the brand name and its' clarity. The name is the most important element of the brand and is therefore the main factor of functional brand-oriented marketing capabilities. The third measure of Brand Distinctiveness is concerned with the integration of the whole brand of the young firm and the differentiation of the brand towards competitors.

5. The indication for business performance in young firms varies by the stage of the firm and the complexity of the market environment. For some firms in the early stages, the usage of the product or service is more important than financial performance and it is offered to potential customers without payment or at a reduced price. This indicator of usage or trial as indicator for business performance is rather specific for young firms. In terms of financial performance for young firms, numbers are still small and therefore, success is very often measured in growth rates more than actual numbers and the firms are also focusing on returns. The main three components, business performance is influencing are Financial Growth, Sales Efficiency and – as previously described – Product Usage itself. Financial

Growth is summarizing the main indicators that are directly describing the returns and profits of the organization. Sales- and purchase-related measures, which are more indirectly indicating the performance of the firm are aggregated the component of Sales Efficiency. The third component, Product Use, is focused on the preliminary stage of revenues, the usage of the product. It summarizes the ability to attract visitors for the product or service, however without payment.

6. The role of the founders in the development of the firm is crucial. Resources need to be constantly bundled, structured and leveraged by their managers. Their values and perceptions shape the organizational development and strategy of the firm and also the development of its marketing capabilities. Decisions regarding which capabilities to focus on and which marketing activities to pursue are significantly influenced by the founders' competitive orientation, as well as the founders' perceptions and addressing of risks and capabilities regarding their innovation potential. This strategic posture of the founder has a high impact on the development of customer- and brand-oriented marketing capabilities for the young firm and moderates the relationship between these capabilities and business performance.

7. While customer-oriented marketing capabilities maintain their importance for all young firms, the tasks involved with strategic brand orientation vary amongst the different age groups. They gain importance for young firms between two and five years of age and then significantly loose in importance at the age of more than five years. For business performance, there is a change of focus in the assessment of the different measures. While the indication of the bare usage of the products and services is important for very young firms, it is more important to generate sales, the older the firm gets.

Suggestions

<u>Suggestions for founders:</u>

- The development of marketing capabilities in young firms is currently rather unstructured. When acquiring and structuring the capabilities of their firm, founders should focus from the beginning on the development of marketing capabilities for both views - the customer-oriented ("outside-in") and the brand-oriented ("inside-out") view - to increase their overall brand equity.
- When developing customer-oriented capabilities in the early stages of the firm, sales teams or people involved with sales activities are a valuable source of customer input. Managers

should consider training sales teams to systematically gather feedback from the customer and establish structures to professionally collect and pass on this input to the other employees of the firm.

- The creation of the brand name is the most important task of a functional brand. To ensure an instant connection with the product or service and the solution it provides, the name should be able to evoke the appropriate emotional response. To ensure that the products or services can be easily found, it has to be easy to spell and to remember. Ideally, it also has the potential to be "verbalized" (e.g. google => googling).
- To generate a sound understanding of the strategic brand-potential, the author suggests for young firms to conduct detailed studies to identify the market's potential, the competitive environment as well as market characteristics and trends.
- In the beginning of the firm, it is useful to focus on one brand, preferably the product- or service-brand first, and define a structured process to develop distinctive brand attributes and conduct marketing tests on how these attributes resonate with consumers.
- When the product or service is not established yet, free trials of the product or service generate first customers and provide a source of valuable insight and feedback for further development.

<u>Suggestions for managers of young firms:</u>

- In regard to customer-oriented capabilities, founders themselves should invest substantial time in the identification of customer needs and the strategic management of customer relations across the different customer segments. This capability is of considerable importance throughout all age groups of the young firms. The dissemination of customer knowledge throughout the organization is therefore one of the key roles of management and marketing.
- The ability to customize products or services for the firms' customer segments and their specific needs, which are also unique in the market, is key to successful product development in all firms, but specifically for young firms which are still in the process of establishing their specific offering and position in the market. Managers of young firms should specifically focus on customer-orientation and its inclusion in the product development process when developing and leading their product teams.
- Strategic brand development is an iterative process and the strategic elements of the brand should be reviewed on a regular basis, especially in the first years. A clear understanding and definition of the values and the vision by the management team should be shared by all employees. To ensure a consistent brand experience, brand personality, benefits and brand

positioning should be based on these values and vision and should be developed alongside the functional brand to ensure consistency.

- It is important to ensure that the product or service provided by the firm is unique, perceived differently and is regarded as superior solution when compared to competitive offers. A constant analysis of the market and review of competitive offers are key to a successful market positioning.
- In regard to measures for business performance, managers should consider that the indicators for financial- and product market performance are subject to change based on the development of the young firm. Therefore, depending on the focus and the growth phase of the firm, the assessment of these key performance indicators needs to be revised and potentially adjusted to the current business situation.

Suggestions for investors:

- The development of marketing capabilities is a continuous process and brand equity needs are derived from a constant strive to improve customer- and brand-orientation. Based on the findings regarding the impact of marketing capabilities on business performance, it is suggested to investors to look for both customer- and brand-orientation in the firm that they plan to invest in. It is important to support founders in analyzing both the “outside in” and the “inside out” view on their firm.
- It is important to investigate the findings of the founders on customer feedback on their product or service. This feedback has to be collected systematically by the firm and should not be based not on the founders’ assumptions. As an investor, it is recommended to ask founders to provide their findings and review these findings before investing in the firm.
- In regard to product development, unique products in the perception of the market and their solution to a customer’s problem are key. Investors should encourage young firms to customize their products and services to customers’ needs and to also constantly monitor the market for competitive solutions to ensure that they provide the best solution possible.
- In terms of branding, firms should have developed a clear understanding of their brand, its differentiation and how they plan to market and promote the brand to generate awareness. Advertising activities can be quite intense in terms of financial resources. Therefore, it is recommendable to fully assess their potential and how they support the brand in generating awareness as well as understanding how it addresses the selected target audience.
- Marketing capabilities are highly important. If founders do not have experience in marketing, training and consultancy regarding the acquisition of customer-oriented and marketing-oriented marketing capabilities should be provided.

- To properly assess the status of the business, investors should assess different indicators for business performance. Besides the classic indicators of financial performance such as ROI, return on shareholder equity, profit to sales ratio, cash flow etc., product performance indicators like the number of customers using the service or returning visitors (even without payment) should be considered to get the full picture of the firm's performance.

Suggestions for researchers:

- The study provides suggestions to further advance Resource-Based Theory theoretically by clarifying classifications of customer- and brand- oriented capabilities. It is suggested to consider the direction of view when defining marketing capabilities and consider the distinctive features of the two orientations in research.
- Based on the findings regarding the development of capabilities and business performance in young firms, it is also suggested to take into consideration firm age when conducting analyses of the impact of capabilities on business performance and consider the changes in the importance of different factors of business performance over time.
- It is expected that just like the differences in the setup and emphasis on specific factors of customer- and brand-oriented capabilities for young firms, other capabilities also vary in their characteristics depending on the stage of the lifecycle of the firm. Therefore, it is recommended to researchers to carefully assess capabilities in regards of the development of the firm in their research. The same considerations should be taken when assessing business performance for young firms. Especially in the nascent stages of the firm, successful performance is assessed differently than when the firm is already growing. This aspect has to be reflected in the composition of the research setup.

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APPENDIX

Appendix 1: Studies on marketing-capabilities and business performance 2005-2014

Author(s) & Year	Method	Data & Sample	Topic
(Hooley et al., 2005)	Interview/ Survey	1) interviews in 24 firms 2) 5000 CMOs / 485 usable questionnaires	The relationship between marketing support resources influencing customer performance and market performance through market-based resources.
(Hult et al., 2005)	Survey / data	1) 1136 firms / 217 usable questionnaires 2) Data analysis, Compustat	The effect of cultural and information-processing elements of market-orientation on performance
(Kor & Mahoney, 2005)	Data	60 technology-based firms going IPO in life science (1990-1995) 2) Data analysis, Compustat	The impact of development of, management experience in and institutional investor ownership of R&D and marketing on firm performance
(Song et al., 2005)	Survey	971 joint ventures / 466 usable questionnaires	The impact of technology-related, marketing-related and the interaction of technology- and marketing-related capabilities on performance
(Vorhies & Morgan, 2005)	Focus group / survey / data	1) interviews with 63 marketing managers 2) 748 company executives / 230 usable questionnaires 3) Calculation ROA for 109 firms	The effect of marketing capabilities on overall firm performance, considering marketing capability interdependence.
(Menguc & Auh, 2006)	Survey	750 firms (pretest with 15) / 242 usable questionnaires	The effect of market orientation and innovativeness on firm performance
(Slater et al., 2006)	Survey	2000 marketing executives / 380 usable questionnaires	The effect of strategic orientation on situation analysis and performance, comprehensiveness and comprehensiveness of alternative evaluation and performance, and strategy formation process formalization and performance.
(Song et al., 2007)	Survey / data	800 companies / 216 usable questionnaires	The relationship between technology, IT, market-inking and marketing capabilities and profit margin moderated by the strategic types on the M-S scale.
(Dev, Zhou, Brown, & Agarwal, 2008)	Survey	558 hotels / 184 usable questionnaires	The impact of customer orientation in comparison to competitor orientation on organizational performance.
(Krasnikov & Jayachandran, 2008)	Study Datasets	114 studies	Finding variables moderating the capability-performance relationship. The capability types of marketing capability, R&D capability and operations in terms of the strength of their relationship.
(Harmancioglu et al., 2009)	Survey	600 general and marketing-managers / 306 usable questionnaires	The moderating effect of marketing execution proficiency and technical execution proficiency on the relationship between the strategic fit of a project (marketing & technological) and new product success
(Morgan, Vorhies et al., 2009)	Survey	748 firms / 230 usable questionnaires	The effect of market orientation and marketing capabilities on firm performance.
(Morgan, Slotegraaf et al., 2009)	Survey / data	1) 507 executives / 114 usable questionnaires 2) Data analysis, annual reports/ Compustat	The effect of CRM capabilities, brand management capabilities and market-sensing capabilities on financial performance of the firm

(Ramaswami et al., 2009)	Survey	200 firms / 88 usable questionnaires	The effect of market-based assets on performance in new product development, supply-chain and customer development and consequently financial performance.
(Chang et al., 2010)	Survey	434 marketing or CRM informants / 209 usable questionnaires	The effect of customer-centric management systems and customer-centric organizational culture on CRM Technology use. The effect on marketing capabilities and organizational performance
(Merrilees et al., 2011)	Survey	2877 firms / 367 usable questionnaires	The relationships between market orientation, management capability, branding capability, innovation capability and marketing performance as well as the impact of marketing performance on financial performance.
(Orr et al., 2011)	Survey / data	1) 406 firms / 168 usable questionnaires 2) Data analysis, multiple sources	The moderating effect of marketing employee development on the effect of customer relationship management capabilities and brand management capabilities on customer satisfaction, market effectiveness and consequently, financial performance.
(Vorhies et al., 2011)	Interviews / survey / data	1) Interviews with 44 firms 2) 406 firms / 169 usable questionnaires 3) Data analysis, multiple sources	The effect of marketing exploration compared to marketing exploitation on customer focused marketing capabilities.
(Menguc et al., 2013)	Survey	80 distributors of a manufacturer of building materials in Turkey / 259 usable questionnaires	The effect of task and outcome interdependence, empowering leadership through the process of customer knowledge creation capability on team customer relationship performance and team financial performance.
(Wilden et al., 2013)	Interviews / survey / data	1) Interviews with 16 senior managers and 4 researchers 2) 2747 marketing managers / 228 usable questionnaires	The effect of dynamic capabilities on organizational performance, moderated by organizational structure and competitive intensity.
(Wu, 2013)	Data analysis	World bank data with 44.000 firms / data of 19.653 firms in 73 emerging countries used	The context of marketing capabilities with emerging market specific topics, economic development, legislative systems and cultural individualism.
(Angulo-Ruiz et al., 2014)	Data analysis	160 observations in changes	The effect of customer-oriented marketing capability on forward-looking performance (firm's value on the stock market and analysts' stock recommendations)
(Rode & Vallaster, 2005)	Interview	CEOs of 9 startup companies	Analysis of the development of corporate brands in early phases of start-ups
(Wong & Merrilees, 2005)	Interview	8 Australian SMEs (varying from one to 150 employees) from the service sector	Branding's importance despite a lack of financial resources and "share of voice
(Bresciani & Eppler, 2010)	Interview	CEOs of the 15 largest successful startup companies in Switzerland (employees between 30 and 150, not older than five years - established between 2000 and 2003)	Exploration of branding approaches in young companies, brand building practices and activities.
(Hirvonen et al., 2013)	Survey	9454 Finnish SMEs / 797 usable questionnaires	Analysis of the moderating effects of firm-internal and market-related factors on the brand-orientation performance relationship.

Source: creation by the author

Appendix 2: Studies on marketing-capabilities and business performance 2005-2014 ctd.

Author(s) & Year	Country	Firm Size	Industry
(Hooley et al., 2005)	UK	firms employing more than 20 people	consumer products, consumer services, business products, business services
(Hult et al., 2005)	US	public firms from commercial database	n/a
(Kor & Mahoney, 2005)	US	Firms going IPO between 1990 and 1995	life science technology
(Song et al., 2005)	US	joint ventures formed between 1990 and 1997	Chemicals and related products; Electronic and electronical equipment; Pharmaceutical, drugs and medicines; Industrial machinery and equipment; Telecommunications equipment; Semiconductors and computer-related products; Instruments and related products
(Vorhies & Morgan, 2005)	US	top marketing executives of 748 US firms	Consumer durables, consumer nondurables, consumer services, business durables, business nondurables, business services
(Menguc & Auh, 2006)	AU	list of the 750 largest firms form private databank company	n/a
(Slater et al., 2006)	US	manufacturing and service business with >500 employees	operating in 20 different 2-digit SIC code industries
(Song et al., 2007)	US	firms from two business firm lists Ward's Business Directory and the Directory of Corporate Affiliations	Final sample included the following industries: computer related products; electronics; electric equipment and household appliances; pharmaceuticals, drugs and medicines; machinery; telecommunications equipment; instruments and related products; air-conditioning; chemicals and related products; transportation equipment.
(Dev et al., 2008)	56 countries	List of hotels from the Global Hoteliers Club. Hotels employed on average 433 people, offered 365 rooms and had been operating for almost 23 years.	Hotel-industry
(Krasnikov & Jayachandran, 2008)	n/a	n/a	n/a
(Harmancioglu et al., 2009)	US	North-American firms	Chemical, biochemical and pharmaceutical industries.
(Morgan, Vorhies et al., 2009)	US	US firms	Consumer and business markets offering both services and goods
(Morgan, Slotegraaf et al., 2009)	US	Publicly traded, single-business dominant US companies	Computer hardware, computer software, electronic equipment, specialty retail, pharmaceuticals, consumer packaged goods, and business services

(Ramaswami et al., 2009)	US	Fifty companies of four big Midwestern cities (84 public and 116 private, sole proprietorship companies)	n/a
(Chang et al., 2010)	Korea	list of top 500 Korean firms	various industries
(Merrilees et al., 2011)	Australia	Sample from Dun and Bradstreet Australia and Business Who's Who of Australia, firm size less than 500 employees	Standard Industrial Classification 87: manufacturing, construction, services, etc. (Services, fast moving consumer goods, consumer durable goods, repeat industrial goods, capital industry equipment)
(Orr et al., 2011)	US	primarily single-business US firms	Consumer or business markets offering either services or goods (durable and non-durables).
(Vorhies et al., 2011)	US	Single business unit firms	Several goods and services industries and consumer and business markets
(Menguc et al., 2013)	Turkey	distributors of one manufacturer	building materials and specialty construction products
(Wilden et al., 2013)	Australia	Large Australian organizations with more than 150 employees	various industries
(Wu, 2013)	73 countries	Data from world bank survey with 44.000 firms in 79 countries	n/a
(Angulo-Ruiz et al., 2014)	US	Variables from 2000 to 2006, observations gathered from Advertising age, Crain communications, ACSI	Food and kindred products; Tobacco products; Chemicals and allied products; Rubber and Miscellaneous plastic products; Industrial machinery and equipment; Electrical, other electrical equipment, excluding computers; Transportation equipment; Motor freight transportation, warehouse; Communications; Building materials; General merchandise stores; Food stores; Furniture and home furnishing stores; Eating and drinking places; Business services; Motion pictures
(Rode & Vallaster, 2005)	Germany & Austria	One German and eight Austrian startups in the second to fourth year of existence from various industries	Tourism, e-business, services provided to offices, consulting strategy and marketing, structural engineering, IT consulting, Call center and marketing, public relations agency, advertisement
(Wong & Merrilees, 2005)	Australia	1-150 employees	Service
(Bresciani & Eppler, 2010)	Switzerland	30-150 employees	various industries
(Hirvonen et al., 2013)	Finland	SMEs	various industries

Source: creation by the author

Appendix 3: Classification of measuring items of marketing-capabilities concepts

Author	**Construct**	**Measuring item**	**Focus**	**Other authors using concept**
Hooley 2005	Market Orientation	Our commitment to serving customers is closely monitored	Customer / Functional	
Hooley 2005	Market Orientation	Customer satisfaction is systematically and frequently assessed	Customer / Functional	Song 2005
Hooley 2005	Market Orientation	Objectives and strategies are driven by creation of customer satisfaction	Customer / Strategic	Song 2005
Hooley 2005	Market Orientation	Competitive strategies are based on understanding customer needs	Customer / Strategic	Menguc 2006
Hooley 2005	Market Orientation	Functions are integrated to serve market needs	Customer / Strategic	
Hooley 2005	Market Orientation	Strategies are driven by increasing value for customers	Customer / Strategic	
Hooley 2005	Market Orientation	Managers understand how employees contribute to value for customers	Customer / Strategic	
Hult 2005	Customer orientation	Our strategies are driven by beliefs about how we can create greater value for customers	Customer / Strategic	Menguc 2006
Hult 2005	Information generation	We are fast to detect changes in our customers' product preferences	Customer / Functional	Song 2005
Hult 2005	Information generation	We are fast to detect fundamental shifts in our industry (e.g. competition technology	Customer / Functional	
Song 2005	Channel-bonding capabilities	Creating durable relationships with channel members such as wholesalers, retailers	Customer / Strategic	Song 2007
Song 2005	Customer linking capabilities	Creating and managing durable customer relationship	Customer / Strategic	Hooley 2005, Song 2007
Song 2005	Market-sensing capabilities	Predicting changes in customer preferences	Customer / Strategic	Hooley 2005, Song 2007
Vorhies 2005	Market information management	Using market research skills to develop effective marketing programs	Brand / Strategic	
Vorhies 2005	Market information management	Making full use of marketing research information	Brand / Strategic	
Vorhies 2005	Market information management	Analyzing our market information	Brand / Strategic	
Vorhies 2005	Market information management	Tracking customers wants and needs	Customer / Functional	
Vorhies 2005	Market information management	Gathering information about customers and competitors	Customer / Strategic	
Vorhies 2005	Market planning	Marketing planning skills	Brand / Functional	Morgan 2009a, Chang 2010
Vorhies 2005	Market planning	Developing creative marketing strategies	Brand / Functional	Morgan 2009a, Chang 2010
Vorhies 2005	Market planning	Thoroughness of marketing planning process	Brand / Functional	Morgan 2009a, Chang 2010
Vorhies 2005	Market planning	Ability to effectively segment and target market	Customer / Strategic	Morgan 2009a, Chang 2010
Vorhies 2005	Market planning	Marketing management skills and processes	Brand / Strategic	Morgan 2009a
Vorhies 2005	Marketing communication	Developing and executing advertising programs	Brand / Functional	Morgan 2009a
Vorhies 2005	Marketing communication	Advertising management and creative skills	Brand / Functional	Morgan 2009a

Vorhies 2005	Marketing communication	Public relations skills	Brand / Functional	Morgan 2009a
Vorhies 2005	Marketing communication	Brand image management skills and processes	Brand / Functional	
Vorhies 2005	Marketing communication	Managing corporate image and reputation	Brand / Functional	
Vorhies 2005	Marketing implementation	Allocating marketing resources effectively	Brand / Functional	Morgan 2009a, Chang 2010
Vorhies 2005	Marketing implementation	Organizing to deliver marketing programs effectively	Brand / Functional	Morgan 2009a, Chang 2010
Vorhies 2005	Marketing implementation	Translating marketing strategies into action	Brand / Functional	Morgan 2009a, Chang 2010
Vorhies 2005	Marketing implementation	Executing marketing strategies quickly	Brand / Functional	Morgan 2009a, Chang 2010
Vorhies 2005	Marketing implementation	Monitoring marketing performance	Brand / Strategic	
Vorhies 2005	Pricing	Using pricing skills and systems to respond quickly to market changes	Brand / Functional	Morgan 2009a
Vorhies 2005	Pricing	Knowledge of competitors' pricing tactics	Brand / Strategic	Morgan 2009a
Vorhies 2005	Pricing	Doing an effective job of pricing products/services	Brand / Strategic	Morgan 2009a
Vorhies 2005	Pricing	Monitoring competitor's prices and price changes	Brand / Strategic	Morgan 2009a
Vorhies 2005	Product development	Test marketing new products/ services	Brand / Strategic	Morgan 2009a
Vorhies 2005	Product development	Insuring that product/service development efforts are responsive to customer needs	Customer / Functional	Morgan 2009a
Menguc 2006	Customer orientation	We closely monitor and asses or level of commitment in serving customers	Customer / Functional	
Menguc 2006	Customer orientation	Our business objectives are driven primarily by customer satisfaction	Customer / Strategic	
Menguc 2006	Customer orientation	Business strategies are driven by the goal of increasing customer value	Customer / Strategic	
Menguc 2006	Customer orientation	We pay close attention to after-sale service	Customer / Strategic	
Song 2007	Market linking capabilities	Capabilities of creating durable relationships with our suppliers	Customer / Strategic	
Song 2007	Marketing capabilities	Effectiveness of advertising programs	Brand / Functional	
Song 2007	Marketing capabilities	Integration of marketing activities	Brand / Functional	
Song 2007	Marketing capabilities	Skill to segment and target markets	Customer / Strategic	
Song 2007	Marketing capabilities	Effectiveness of pricing programs	Brand / Strategic	
Song 2007	Marketing capabilities	Knowledge of customers	Customer / Strategic	
Morgan 2009a	Market intelligence generation	In this business unit, we meet with customers at least once a year to find out what products/services they will need in the future	Customer / Strategic	
Morgan 2009a	Market intelligence generation	In this business unit, we do a lot of in-house market research	Customer / Strategic	
Morgan 2009a	Market intelligence generation	We poll end-users at least once a year to assess the quality of our products / services	Customer / Strategic	
Morgan 2009a	Market intelligence generation	We often talk with or survey those who can influence our end users' purchases (e.g. retailers or distributors)	Customer / Strategic	

Morgan 2009a	Market intelligence generation	In this business unit, intelligence on our competitors is generated independently by several departments	Customer / Strategic	
Morgan 2009a	Market intelligence generation	We periodically review the likely effect of changes in our business environment (e.g. regulations) on customers	Customer / Strategic	
Morgan 2009a	Responsiveness to market intelligence	We periodically review or product/service development efforts to ensure that they are in line with what customers want	Customer / Functional	
Morgan 2009a	Responsiveness to market intelligence	If a major competitor were to launch an intensive campaign targeted at our customers, we would implement an immediate response	Customer / Functional	
Morgan 2009a	Responsiveness to market intelligence	Customer complaints fall on deaf ears in this business unit [R]	Customer / Strategic	
Morgan 2009b	Brand management capabilities	Establishing desired brand associations in customers' minds	Brand / Functional	Orr 2011, Vorhies 2011
Morgan 2009b	Brand management capabilities	Maintaining a positive brand image relative to competitors	Brand / Functional	Orr 2011, Vorhies 2011
Morgan 2009b	Brand management capabilities	Using customer insights to identify valuable brand positioning	Brand / Strategic	Orr 2011, Vorhies 2011
Morgan 2009b	Brand management capabilities	leveraging brand equity into preferential channel positions	Brand / Strategic	Orr 2011, Vorhies 2011
Morgan 2009b	Brand management capabilities	Tracing brand image and awareness among target customers	Customer / Strategic	
Morgan 2009b	Customer relationship management capabilities	Identifying and targeting attractive customers	Customer / Strategic	
Morgan 2009b	Customer relationship management capabilities	Establishing a "dialogue" with target customers	Customer / Strategic	Orr 2011, Vorhies 2011
Morgan 2009b	Customer relationship management capabilities	Getting target customers to try out products / services	Customer / Strategic	Orr 2011, Vorhies 2011
Morgan 2009b	Customer relationship management capabilities	Focusing on meeting target customers' long-term needs to ensure repeat business	Customer / Strategic	Orr 2011, Vorhies 2011
Morgan 2009b	Customer relationship management capabilities	Maintaining loyalty among attractive customers	Customer / Strategic	Orr 2011, Vorhies 2011
Morgan 2009b	Customer relationship management capabilities	Enhancing the quality of relationships with attractive customers	Customer / Strategic	Vorhies 2011
Morgan 2009b	Customer relationship management capabilities	Maintaining positive relationships when migrating unattractive customers	Customer / Strategic	
Morgan 2009b	Market-sensing capabilities	Learning about customer needs and requirements	Customer / Strategic	
Morgan 2009b	Market-sensing capabilities	Gaining insights about the channel	Customer / Strategic	
Morgan 2009b	Market-sensing capabilities	Identifying and understanding market trends	Customer / Strategic	
Morgan 2009b	Market-sensing capabilities	Learning about the broad market environment	Customer / Strategic	
Ramaswami 2009	Customer asset orientation	Our firm recognizes customers as assets	Customer / Strategic	
Ramaswami 2009	Customer asset orientation	Our firm is willing to spend dollars to nurture our customers	Customer / Strategic	
Ramaswami 2009	Customer asset orientation	We have designed systems to better understand and serve our customers	Customer / Strategic	
Ramaswami 2009	Customer asset orientation	We look upon CRM as the most important business process for driving financial performance	Customer / Strategic	
Ramaswami 2009	Customer responsiveness	We try to help customers achieve their goals	Customer / Strategic	

Ramaswami 2009	Customer responsiveness	We educate the customer on the kind of product (even if it is not ours) that would best suit their needs	Customer / Strategic	
Ramaswami 2009	Customer responsiveness	We do not mind disagreeing with a customer in order to help him make better business decisions	Customer / Strategic	
Ramaswami 2009	Customer-driven development	We typically co-design our products with our customers	Customer / Functional	
Ramaswami 2009	Customer-driven development	During the development of our products, we often have the users try out whatever we have developed up to that point.	Customer / Functional	
Ramaswami 2009	Customer-driven development	We typically rely on the user to help us define and clarify the user's needs in developing our new products	Customer / Strategic	
Ramaswami 2009	Customer-driven development	We typically try to put working prototypes in the user's hands as early as possible in our development efforts	Customer / Strategic	
Merrilees 2011	Branding Capability	Better able to communicate a consistent brand meaning	Brand / Functional	
Merrilees 2011	Branding Capability	Better able to identify simple brand meaning	Brand / Strategic	
Merrilees 2011	Branding Capability	Uses brands as operational tool	Brand / Functional	
Merrilees 2011	Branding Capability	Is more likely to treat its brands as assets	Brand / Strategic	
Merrilees 2011	Branding Capability	Able to get staff to support the brand	Brand / Strategic	
Merrilees 2011	Market Orientation	Is more likely to target customers where we have a competitive advantage	Brand / Strategic	
Merrilees 2011	Market Orientation	Responds more quickly to customer requirements	Customer / Functional	
Merrilees 2011	Market Orientation	More likely to plan ahead to satisfy customers in the future	Customer / Strategic	
Merrilees 2011	Market Orientation	Places a priority on making changes to improve customer satisfaction	Customer / Strategic	
Merrilees 2011	Market Orientation	Undertakes market research to measure satisfaction	Customer / Strategic	
Hirvonen 2013	Brand orientation	Branding is essential to our strategy	Brand / Strategic	
Hirvonen 2013	Brand orientation	Branding flows through all our marketing activities	Brand / Strategic	
Hirvonen 2013	Brand orientation	Branding is essential in running this company	Brand / Strategic	
Hirvonen 2013	Brand orientation	Long-term brand planning is critical to our future success	Brand / Strategic	
Hirvonen 2013	Brand orientation	The brand is an important asset	Brand / Strategic	
Hirvonen 2013	Brand performance	Our advertising messages / promotions create the desired brand image in the market	Brand / Functional	
Hirvonen 2013	Brand performance	Our firm has built a strong brand awareness in the target market	Brand / Strategic	
Hirvonen 2013	Brand performance	Our firm has built a solid reputation	Brand / Strategic	
Hirvonen 2013	Brand performance	Our firm has built strong customer brand loyalty	Brand / Strategic	

Source: creation by the author

The authors referred to are: Hooley 2005: (Hooley et al., 2005); Hult 2005: (Hult et al., 2005); Song 2005: (Song et al., 2005); Vorhies 2005: (Vorhies & Morgan, 2005); Menguc 2006: (Menguc & Auh, 2006); Song 2007: (Song et al., 2007); Morgan 2009a: (Morgan, Vorhies et al., 2009); Morgan 2009b: (Morgan, Slotegraaf et al., 2009); Ramaswami 2009: (Ramaswami et al., 2009); Chang 2010: (Chang et al., 2010); Merrilees 2011: (Merrilees et al., 2011); Orr 2011: (Orr et al., 2011); Vorhies 2011: (Vorhies et al., 2011); Hirvonen 2013: (Hirvonen et al., 2013)

Appendix 4: Measurements used for business performance of marketing capabilities

Author(s) & Year	Returns	Profit	Sales	Market	Other
(Hooley et al., 2005)	ROI	Profit Levels Profit Margin		Market performance	Customer performance
(Hult et al., 2005)	ROA ROI ROE				
(Song et al., 2005)	ROI	Profit margin	Sales		
(Vorhies & Morgan, 2005)	ROI ROS ROA	Current profitability	Sales revenue growth	Market share growth New customers Financial goals	Customer satisfaction
(Menguc & Auh, 2006)	ROI ROS ROA	Profit growth Profitability Cash flow form market operations	Sales growth	Market share growth	
(Song et al., 2007)		Profit margin			
(Dev et al., 2008)		Operating profit		Market share	Relative occupancy
(Morgan, Vorhies et al., 2009)	ROI ROS	Business unit profitability	Sales to current customers Sales revenue	Market share growth New customers Financial goals	
(Morgan, Slotegraaf et al., 2009)		Profit growth rate Margin growth rate	Revenue growth rate		
(Ramaswami et al., 2009)	ROA	Net profits	Sales	Market share	
(Chang et al., 2010)	ROI	Profitability	Sales to current customers Sales revenue	Market share growth New customers Financial goals	
(Merrilees et al., 2011)	ROI	Profitability	Sales to current customers Sales revenue	Market share size New customers Financial goals	
(Orr et al., 2011)	ROA		Growth in sales	Market share growth	
(Vorhies et al., 2011)	Relative ROA				

Source: creation by the author

Appendix 5: Accelerator- and Crowdfunding Sites

Name & Website	Description
Alpha Lab alphalab.org	A startup accelerator providing seed capital, mentoring & space to innovative companies headquartered in Pittsburgh, Pennsylvania
Capital Factory capitalfactory.com	A seed stage mentoring program for startups in Austin, Texas
DreamIt Ventures dreamitventures.com	A venture capital and seed accelerator headquartered in Philadelphia, Pennsylvania
Kickstarter kickstarter.com	The world's largest funding platform for creative projects based in New York City, New York
Techstars techstars.com	A startup accelerator that provides mentorship-driven seed-stage investment services for technology-oriented companies.
Y-Combinator ycombinator.com	A startup accelerator based in Mountain View, California.

Source: Tech Crunch Database, aggregated by the author (Tech Crunch, 2014),

Appendix 6: Interview guide for qualitative interviews

[Individual introduction]

Thank you for taking the time to talk to me. In the interview, I want to learn more about how you developed your brand and how you structured it. Also, I would like to find out more about how you apply it in your company and what role it plays. The conversation will not take longer than 30 minutes.

Of course, your answers will be treated confidentially and I will only use them for my research purposes.

Is it alright with you if I tape our conversation so I can transcribe it later?

- At first, I would like to know how you came up with the idea for your startup. How did you come up with the idea for [name of product/ firm]?
- How would you describe your product?
- How do you think your product / service is different from other products / services?
- How is your market environment?
- How would you describe the brand of your company?
- What was the reason for developing a brand for your company?
- How did you develop the brand of your company?
- What do you use/ need your brand for?
- What are the elements of your brand?
- Why did you choose these elements?
- Who was involved in creating these elements?
- How was the process of developing those elements? / When did you develop which elements?
- What values does your brand stand for?
- How do you relate to those values?
- Does your brand mean the same for your customers and your employees?
- How do you think your brand is different from other brands?
- Did you involve customers in the development of your brand and products/services? How?
- What are your indicators for your brand / your company being successful?
- Do you measure the performance of your brand / your company? If yes, how?
- What's the future of your brand / your company going to be?

As last questions from my side I would like to confirm / ask you for some information about your company. [Confirm size of founding team, number of employees and founding date]

That would be all questions form my side. Are there any questions I can answer for you?

Thank you very much for this interesting conversation. It is very helpful for my research.

Source: creation by the author

Appendix 7: Variable-constructs and question items of the qualitative survey

CUSTOMER-ORIENTED MARKETING CAPABILITIES

Strategic customer-oriented marketing capabilities (SCOMC)
How strongly do you agree or disagree with each of the following statements?
(Not at all – fully) 7-item Likert scale

SCOMC1 We try to help customers achieve their goals
SCOMC2 A good company has to have the customer's best interest in mind
SCOMC3 We try to influence a customer by information rather than by pressure
SCOMC4 We try to find out what kind of product/ service would be most helpful to a customer
SCOMC5 We answer a customer's questions about products as correctly as we can
SCOMC6 We try to bring a customer with a problem together with a product that helps him solve that problem
SCOMC7 We are willing to disagree with a customer in order to help him make a better decision
SCOMC8 We try to give customers an accurate expectation of what the product will do for them
SCOMC9 We try to figure out what a customer's needs are

Functional customer-oriented marketing capabilities (FCOMC)
Please rate the following statements
(Not at all important – Extremely important) 7-item Likert scale

FCOMC1 Many of our competitors had fundamentally similar products/ services to us *[Reverse coding]*
FCOMC2 Few credible substitutes competed with our products/ services
FCOMC3 Our company is capable of customizing our products/ services

BRAND-ORIENTED MARKETING CAPABILITIES

Strategic brand-oriented marketing capabilities (SBOMC)
To what extent did you consider each of the following factors when you were launching your company?
(Not at all – fully) 7-item Likert scale

SBOMC1 Determining market characteristics and trends
SBOMC2 Conducting a detailed study of market potential
SBOMC3 Appraising existing and potential competitors and their products/ services
SBOMC4 Identifying characteristics to differentiate and sell your products/ services
SBOMC5 Conducting marketing tests
SBOMC6 Determining a pricing strategy
SBOMC7 Developing a channel strategy

Functional brand-oriented marketing capabilities (FBOMC)
When you were choosing your brand, how important were the following criteria for you when choosing the brand?
(Not at all important – extremely important) 7-item Likert scale

FBOMC1 The brand name clearly describes what our product/service is about
FBOMC2 The brand name is distinctive and cannot be confused with competitors' names
FBOMC3 The brand name is easy to remember for customers and other stakeholders
FBOMC4 The brand name has potential to be "verbalized" (e.g. google => googling)
FBOMC5 The brand name is available and legally protectable
FBOMC6 The web-address (URL) for the brand name is still available
FBOMC7 The brand name is easy to spell
FBOMC8 The other brand elements (e.g. imagery, logo) support the name
FBOMC9 The brand name produces the appropriate emotional response

BUSINESS PERFORMANCE

Financial performance (FP)
How much importance does your company attach to each of the following financial performance criteria? (Not important at all – extremely important) 7-item Likert scale

How satisfied are you currently with your company's performance on these criteria? (Very dissatisfied – Very satisfied) 7-item Likert scale

FP1 Sales levels
FP2 Sales growth rate
FP3 Cash flow
FP4 Return on shareholder equity
FP5 Gross profit margin
FP6 Net profit from operations
FP7 Profit to sales ratio
FP8 Return on investment
FP9 Ability to fund business growth from profits

Product market performance (PMP)
How much importance do you attach to each of the following financial performance criteria? (Not important at all – extremely important) 7-item Likert scale

How satisfied are you currently with your company's performance on these criteria? (Very dissatisfied – Very satisfied) 7-item Likert scale

PMP1 Number of customers registering for or downloading the products/ services (without payment)
PMP2 Number of customers buying the products/ services
PMP3 Number of repeat buyers of your products/ services
PMP4 Number of customers returning to your products/services (without payment)

STRATEGIC POSTURE

Strategic posture (SP)
Please rate the following statements regarding your company
Semantic differential, 7-item Likert scale

SP1 In general, we favor... A strong emphasis on the marketing of tried and true products and services // A strong emphasis on R&D, technological leadership and innovations
SP2 In dealing with competitors, we... Typically respond to actions which competitors initiate // Typically initiate actions which competitors then respond to
SP3 We... are very often the first business to introduce new products/services, administrative techniques, operating technologies, etc. //
are very seldom the first business to introduce new products/services, administrative techniques, operating technologies, etc. *[Reverse coding]*
SP4 Typically, we... seek to avoid competitive clashes, preferring a "live-and-let-live" posture // Adopt a very competitive, "undo-the-competitors" posture
SP5 In general, we have... A strong proclivity for low-risk projects (with normal an certain rates of return) // A strong proclivity for high-risk projects (with chances of very high returns)
SP6 When confronted with decision-making situations involving uncertainty, we typically... Adopt a bold, aggressive posture in order to maximize the probability of exploiting potential opportunities //
Adopt a cautious, "wait-and-see" posture in order to minimize the probability of making costly decisions *[Reverse coding]*

Source: creation by the author

Appendix 8: Founder-Groups for the distirbution of the survey

	Members at time of research
Facebook Pages	
Startup Weekend	154,849
Gründerszene	54,005
deutsche startups	40,982
Houston Startups	1,368
LinkedIn Groups	
On Startups	405,351
I love Startups	125,516
Startups and Entrepreneurs get funded	24,626
Startup Weekend	7,872
Xing Groups	
Gründer & Selbständige	92,778
IT Connection	78,733
Startup Szene	9,765
Startup Berlin	2,630
Startups Hamburg	2,437

Source: creation by the author

Appendix 9: Screenshots of promotion examples employed in the survey

Promotion in the Berkeley Entrepreneurs Association newsletter sent on 13.06.2014

Source: information by the author used by Berkeley Entrepreneurs Association

Promotion of the survey in the Houston Startups Group on Facebook on 30.05.2014

Source: texts creation by the author

Appendix 10: Conversion rates of mails sent to database-addresses

Source	Sent	Usable Surveys	Conversion
Rice Alliance Partners*	418	83	19.9%
Startup Databases	222	21	9.5%
Yelp	587	39	6.6%
Reference USA	569	34	6.0%
TOTAL	1574	156	9.9%

Source: creation by the author

*Since the research was conducted at Rice University, the exceptionally high response rate in the group of Rice Alliance Partners with 19.9 percent can be attributed to the excellent network management of Rice Alliance.

Appendix 11: Sample description: firm age, firm size, industry

Firm Age		
0-2 years	174	42.1%
2-5 years	138	33.4%
5-10 years	101	24.5%

Firm Size*		
1-9 employees	331	80.1%
10-49 employees	64	15.5%
50-249 employees	12	2.9%
> 250 employees	3	0.7%
not disclosed	3	0.7%

*employees including founding members

Industry		
Information Technology	95	23.0%
Personal services (e.g., Beauty, Cleaning, Pet Care)	51	12.3%
Accommodation and food services (Hospitality)	44	10.7%
Life Science & Medicine	41	9.9%
Retail	35	8.5%
Media	21	5.1%
Manufacturing of Consumer Goods	19	4.6%
Arts, entertainment and recreation	17	4.1%
Professional scientific services (e.g. Consulting, Marketing)	17	4.1%
Energy and Electricity	16	3.9%
Education	15	3.6%
Real Estate	7	1.7%
Finance and Insurance	6	1.5%
Transportation or Warehousing	5	1.2%
Wholesale	3	0.7%
Other	21	5.1%

Source: creation by the author

Appendix 12: Correlations Table

	Mean	Std. Deviation	SCOMC1	SCOMC2	SCOMC3	SCOMC4	SCOMC5	SCOMC6	SCOMC7	SCOMC8	SCOMC9	FCOMC1	FCOMC2	FCOMC3	SBOMC1	SBOMC2	SBOMC3	SBOMC4	SBOMC5	SBOMC6
SCOMC1	6.43	1.114																		
SCOMC2	6.39	1.024	.484**																	
SCOMC3	6.29	1.134	.421**	.519**																
SCOMC4	6.24	1.152	.452**	.428**	.487**															
SCOMC5	6.57	.908	.381**	.510**	.546**	.505**														
SCOMC6	6.19	1.361	.470**	.383**	.403**	.464**	.396**													
SCOMC7	5.71	1.511	.355**	.304**	.317**	.292**	.349**	.404**												
SCOMC8	6.51	.949	.456**	.470**	.469**	.423**	.605**	.422**	.329**											
SCOMC9	6.47	1.037	.447**	.375**	.314**	.551**	.446**	.420**	.352**	.500**										
FCOMC1	4.32	1.760	.080	.077	.111*	.089	.074	.072	.027	.007	.037									
FCOMC2	4.31	1.937	.100*	.008	.050	.152**	.072	.088	.019	.092	.081	.277**								
FCOMC3	5.61	1.618	.205**	.096	.104*	.253**	.036	.199**	.131**	.100*	.291**	.072	.224**							
SBOMC1	5.48	1.583	.092	.069	.059	.137**	-.010	.069	.005	.092	.055	.076	.029	.130**						
SBOMC2	4.34	2.039	.033	-.038	.072	.100*	-.068	.077	.056	.082	.017	.161**	.020	.061	.530**					
SBOMC3	5.46	1.664	.139**	.049	.159**	.121*	.017	.110*	.137**	.112*	.007	.090	.053	.055	.473**	.546**				
SBOMC4	6.12	1.264	.054	.029	.095	.120*	.076	.082	.034	.158**	.048	.126*	.049	.034	.453**	.403**	.465**			
SBOMC5	3.21	1.968	-.018	.010	.018	.123*	-.050	.131**	.050	-.007	.016	.050	-.024	.103*	.400**	.579**	.419**	.301**		
SBOMC6	4.68	1.824	.044	.054	.169**	.158**	.175**	.112*	.097*	.167**	.060	-.064	.025	.048	.292**	.342**	.387**	.356**	.325**	
SBOMC7	4.02	2.004	.037	-.048	.069	.099*	.055	.104*	.174**	.090	.062	-.031	-.004	.104*	.409**	.508**	.373**	.327**	.511**	.498**
FBOMC1	5.02	1.736	.045	.032	.064	.054	.076	.099*	-.011	.119*	-.016	.030	.118*	.034	.107*	.115*	.115*	.161**	.078	.175**
FBOMC2	5.88	1.325	.092	.123*	.106*	.136**	.115*	.169**	.070	.137**	.134**	.023	.088	.139**	.139**	.095	.203**	.158**	.071	.154**
FBOMC3	5.95	1.344	.221**	.048	.104*	.228**	.147**	.202**	.097*	.134**	.188**	.083	.065	.195**	.226**	.173**	.208**	.198**	.183**	.109*
FBOMC4	3.86	2.149	.034	-.004	.022	.095	-.003	.084	-.023	.060	.068	.019	.111*	.127**	.167**	.236**	.124*	.181**	.220**	.132**
FBOMC5	6.00	1.387	.123*	.158**	.107*	.111*	.103*	.076	.043	.082	.062	.029	.079	.103*	.149**	.144**	.076	.050	.060	.156**
FBOMC6	5.76	1.729	.157**	.068	.091	.072	.052	.126*	.028	.054	.024	.049	.027	.064	.164**	.141**	.081	.035	.102*	.150**
FBOMC7	5.34	1.690	.154**	.028	.044	.154**	.082	.181**	.057	.135**	.131**	.034	-.024	.102*	.196**	.197**	.112*	.165**	.222**	.112*
FBOMC8	5.69	1.549	.088	.050	.085	.123*	.092	.108*	-.035	.104*	.101*	.107*	.091	.060	.167**	.098*	.155**	.251**	.023	.119*
FBOMC9	5.36	1.684	.067	.047	.136**	.195**	.119*	.162**	.007	.076	.137**	-.005	.093	.101*	.165**	.103*	.110*	.150**	.210**	.194**
FP1	23.5085	12.98648	.050	.162**	.127**	.138**	.206**	.126*	.044	.162**	.115*	-.082	.140**	.072	.079	-.105*	.043	.114*	.006	.237**
FP2	24.5956	13.03407	.065	.123*	.095	.146**	.174**	.124*	.035	.127**	.126*	-.049	.146**	.119*	.105*	-.071	.045	.117*	.019	.221**
FP3	23.9346	12.50604	.094	.104*	.080	.163**	.124*	.094	.028	.132**	.146**	-.036	.213**	.099*	.086	-.024	.004	.020	-.045	.064
FP	14.5617	11.19549	-.028	.041	.027	.098*	.049	.130**	.056	.003	.097*	.134**	.083	.049	.159**	.173**	.062	.075	.197**	.074
FP5	21.1671	12.22756	.034	.111*	.144**	.147**	.173**	.138**	-.001	.082	.137**	-.065	.163**	.046	.067	-.084	-.011	.066	.015	.162**
FP6	21.1889	12.79689	.052	.104*	.138**	.161**	.150**	.132**	-.008	.119*	.159**	-.082	.116*	.049	.038	-.078	-.041	.051	-.017	.164**
FP7	19.6174	12.55546	.042	.072	.119*	.156**	.162**	.120*	-.005	.108*	.152**	-.082	.120*	.040	.051	-.061	-.060	.060	.032	.161**
FP8	19.3947	12.45035	.026	.049	.066	.117*	.104*	.130**	.009	.035	.120*	-.005	.138**	.052	.101*	.052	-.015	.125*	.093	.070
FP9	22.0000	13.13540	.029	.090	.116*	.149**	.149**	.117*	.000	.130**	.142**	-.088	.144**	.072	.044	-.068	.007	.107*	.020	.159**
PMP1	13.7361	11.78614	.089	-.025	-.008	.036	-.010	-.005	-.045	-.071	.048	.148**	.017	.135**	.148**	.120*	.096	.064	.175**	.017
PMP2	28.0218	13.97769	.059	.169**	.163**	.189**	.211**	.053	-.048	.218**	.161**	-.078	.162**	.095	.005	-.090	.011	.089	-.033	.219**
PMP3	28.9443	14.60563	.088	.171**	.126*	.171**	.170**	.055	-.034	.195**	.200**	-.100*	.098*	.106*	.056	-.145**	-.049	.039	-.060	.143**
PMP4	16.5496	13.19847	.045	-.004	.048	.059	.038	.029	-.072	-.044	.034	.063	.083	.137**	.103*	.070	.072	.085	.113*	.102*

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

SBOMC7	FBOMC1	FBOMC2	FBOMC3	FBOMC4	FBOMC5	FBOMC6	FBOMC7	FBOMC8	FBOMC9	FP1	FP2	FP3	FP	FP5	FP6	FP7	FP8	FP9	PMP1	PMP2	PMP3
.042																					
.201**	.146**																				
.134**	.264**	.340**																			
.199**	.200**	.263**	.289**																		
.143**	.180**	.292**	.247**	.195**																	
.098*	.158**	.233**	.227**	.146**	.425**																
.075	.239**	.191**	.559**	.269**	.177**	.202**															
.109*	.238**	.351**	.339**	.251**	.261**	.176**	.202**														
.131**	.305**	.281**	.410**	.286**	.152**	.155**	.324**	.310**													
.012	.070	.108*	.090	.136**	.080	-.063	.030	.141**	.173**												
.052	.102*	.137**	.127**	.165**	.099*	-.022	.059	.154**	.173**	.838**											
-.009	.075	.066	.105*	.105*	.048	.008	.044	.133**	.076	.623**	.638**										
.157**	.028	.050	.087	.182**	.037	-.005	.024	.043	.098*	.310**	.308**	.406**									
.012	.112*	.125*	.086	.119*	.065	-.022	-.002	.124*	.193**	.638**	.634**	.677**	.456**								
-.002	.117*	.125*	.064	.100*	.033	-.033	-.005	.152**	.188**	.634**	.648**	.691**	.437**	.839**							
.042	.115*	.136**	.089	.168**	.049	-.009	.027	.135**	.190**	.568**	.622**	.632**	.393**	.816**	.865**						
.057	.093	.062	.099*	.186**	.048	-.014	.063	.084	.140**	.442**	.477**	.559**	.551**	.645**	.643**	.675**					
-.027	.114*	.085	.115*	.088	-.024	-.042	.042	.126*	.184**	.599**	.631**	.658**	.368**	.686**	.763**	.713**	.607**				
.113*	.006	.096	.061	.074	.018	.053	.022	.095	.080	.031	.105*	-.001	.092	-.047	-.040	-.004	.051	.023			
-.061	.129**	.049	.121*	.065	-.052	-.084	.004	.031	.135**	.573**	.558**	.494**	.192**	.492**	.482**	.442**	.352**	.498**	-.002		
-.052	.102*	.041	.063	.069	-.006	-.007	.040	.055	.169**	.574**	.566**	.540**	.195**	.505**	.520**	.480**	.361**	.480**	.055	.751**	
.131**	-.001	.093	.043	.136**	-.052	-.018	-.036	.112*	.107*	.163**	.199**	.140**	.188**	.106*	.096	.100*	.135**	.168**	.624**	.092	.183**

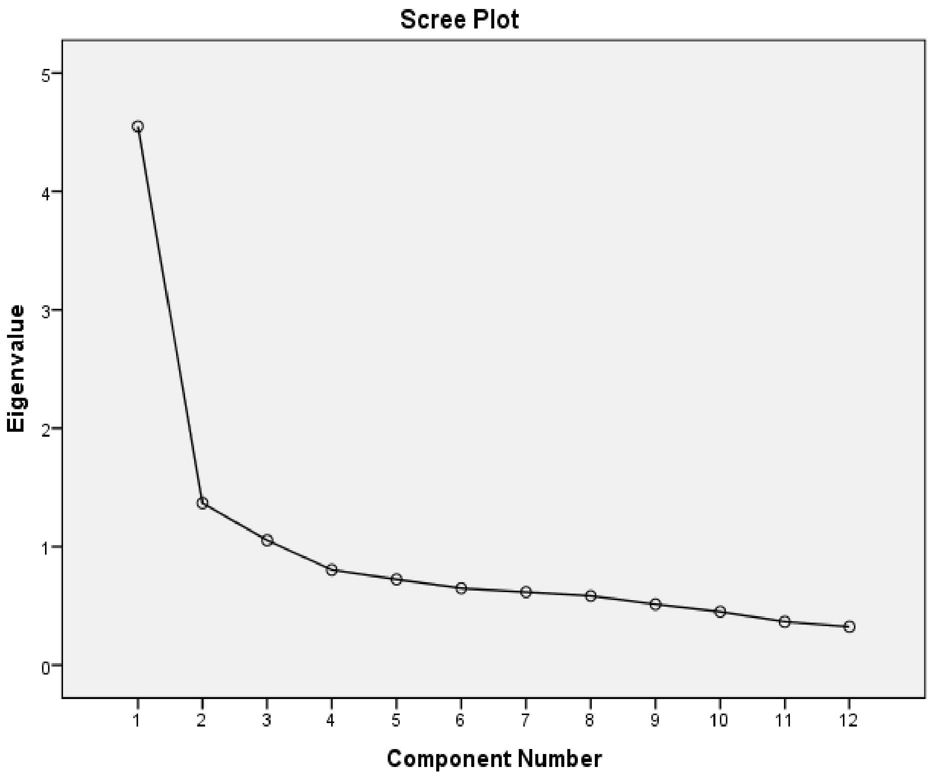
**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

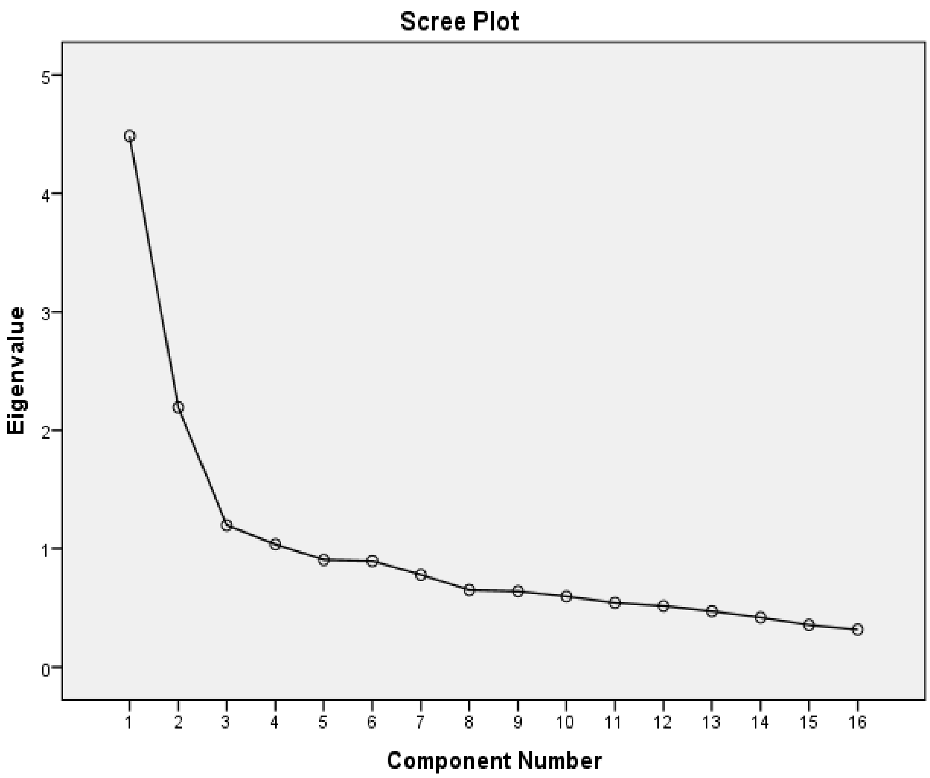
Source: creation by the author

Appendix 13: Scree Plots for Latent Variables and Moderator

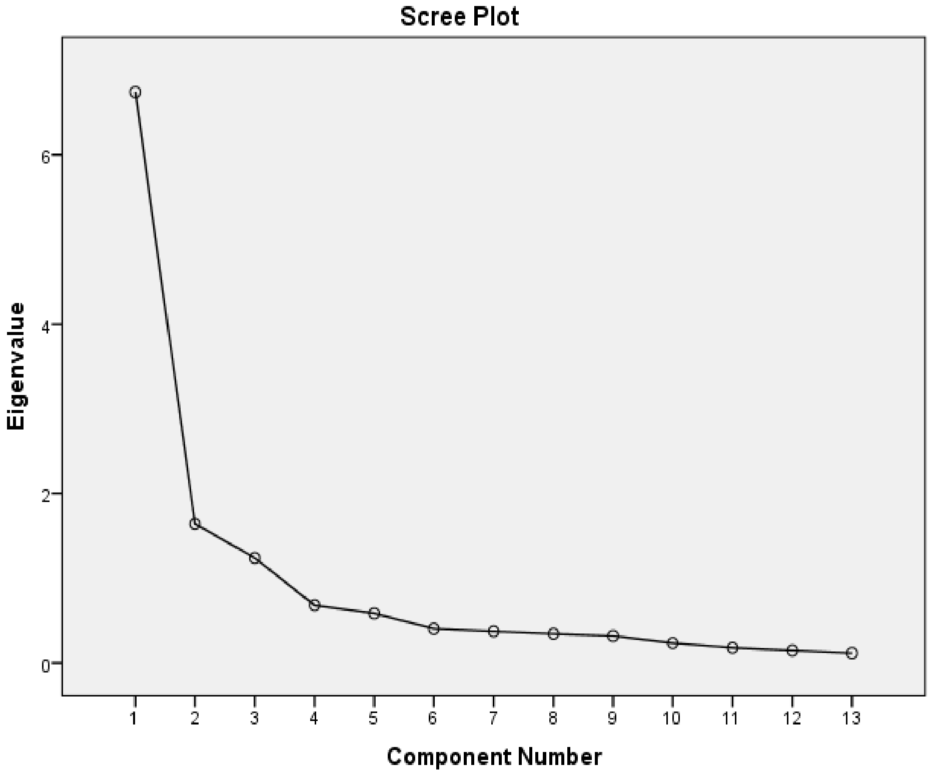
Scree Plot Customer Oriented Marketing Capabilities (COMC)



Scree Plot Brand Oriented Marketing Capabilities (BOMC)



Scree Plot Business Performance (BP)



Source: creation by the author

Appendix 14: Factor analysis components summarized described by content

a) Factors for Customer Oriented Marketing Capabilities

	COMC_1	COMC_2	COMC_3	Item Questions	Description
SCOMC5	**.804**			We answer a customer's questions about products as correctly as we can	Strategic Customer-Orientation
SCOMC8	**.755**			We try to give customers an accurate expectation of what the product will do for them	
SCOMC3	**.754**		.129	We try to influence a customer by information rather than by pressure	
SCOMC2	**.749**			A good company has to have the customer's best interest in mind	
SCOMC4	**.660**	.345	.115	We try to find out what kind of product/ service would be most helpful to a customer	
SCOMC1	**.649**	.296		We try to help customers achieve their goals	
SCOMC6	**.618**	.333		We try to bring a customer with a problem together with a product that helps him solve that problem	
SCOMC9	**.592**	.489		We try to figure out what a customer's needs are	
SCOMC7	**.520**	.251	-.119	We are willing to disagree with a customer in order to help him make a better decision	
FCOMC3		**.845**	.141	Our company is capable of customizing our products/ services	Product Customization
FCOMC1		-.106	**.831**	Many of our competitors had fundamentally similar products/ services to us (R)	Product Uniqueness
FCOMC2		.312	**.728**	Few credible substitutes compete with our products/ services	

Source: creation by the author

b) Factors for Brand Oriented Marketing Capabilities

	BOMC_1	BOMC_2	BOMC_3	BOMC_4	Item Questions	Description
SBOMC2	**.795**	.169		-.126	Conducting a detailed study of market potential	Strategic Brand-Orientation
SBOMC7	**.737**		.160		Developing a channel strategy	
SBOMC3	**.728**			.197	Appraising existing and potential competitors and their products/ services	
SBOMC5	**.708**	.282		-.281	Conducting marketing tests	
SBOMC1	**.688**	.169			Determining market characteristics and trends	
SBOMC4	**.615**	.120	-.213	.385	Identifying characteristics to differentiate and sell your products/ services	
SBOMC6	**.608**		.133	.232	Determining a pricing strategy	
FBOMC7		**.809**	.107	-.111	The brand name is easy to spell	Name Clarity
FBOMC3	.101	**.760**	.141	.173	The brand name is easy to remember for customers and other stakeholders	
FBOMC9		**.627**		.290	The brand name produces the appropriate emotional response	
FBOMC4	.183	**.482**	.135	.160	The brand name has potential to be "verbalized" (e.g. google => googling)	
FBOMC1		**.435**		.325	The brand name clearly describes what our product/service is about	
FBOMC6		.163	**.797**		The web-address (URL) for the brand name is still available	Name Protection
FBOMC5		.118	**.781**	.222	The brand name is available and legally protectable	
FBOMC8		.282	.104	**.722**	The other brand elements (e.g. imagery, logo) support the name	Brand Distinctiveness
FBOMC2	.111	.216	.318	**.583**	The brand name is distinctive and cannot be confused with competitors' names	

Source: creation by the author

c) Factors for Business Performance

	BP_1	BP_2	BP_3	Item Questions	Description
FP1	**.817**	.198		Return on investment	Financial Growth
FP7	**.770**	.435		Profit to sales ratio	
FP6	**.768**	.491		Net profit from operations	
FP5	**.754**	.480		Gross profit margin	
FP4	**.740**		.186	Return on shareholder equity	
FP9	**.662**	.507		Ability to fund business growth from profits	
FP3	**.601**	.551		Cash flow	
PMP2	.132	**.848**		Number of customers buying the products/ services	Sales Efficiency
PMP3	.155	**.846**		Number of repeat buyers of your products/ services	
FP1	.399	**.744**		Sales levels	
FP2	.434	**.726**	.122	Sales growth rate	
PMP1			**.900**	Number of customers registering for or downloading the products/ services (without payment)	Product Usage
PMP4	.101	.117	**.884**	Number of customers returning to your products/services (without payment)	

Source: creation by the author

Appendix 15: Comparison of model fit with other confirmatory factor analysis models

Author(s) & Year	N	Cronbach Alpha	X^2	df	X^2/df	RMSEA	RMR	GFI	AGFI	CFI
(Hooley et al., 2005) / Model1	485	n/a	140.7	68	2.1	0.07	n/a	0.92	n/a	0.93
(Hooley et al., 2005) / Model2	485	n/a	157.0	84	1.9	0.06	n/a	0.97	n/a	0.95
(Hooley et al., 2005) / Model3	485	n/a	34.7	16	2.2	0.07	n/a	0.97	n/a	0.95
(Hult et al., 2005)	217	n/a	432.4	327	1.3	n/a	n/a	n/a	n/a	0.99
(Song et al., 2005)	466	n/a	36.0 - 59.4	n/a	n/a	0.07	n/a	n/a	n/a	n/a
(Vorhies & Morgan, 2005)	229	0.71 - 0.95	1559.6	969	1.6	0.05	n/a	n/a	n/a	0.91
(Menguc & Auh, 2006)	242	0.76 - 0.88	902.6	n/a	n/a	0.07	n/a	0.90	n/a	0.92
(Slater et al., 2006)	380	n/a	656.4	260	2.5	0.06	n/a	n/a	n/a	0.96
(Morgan, Vorhies et al., 2009)	204	n/a	30.1 - 550	n/a	n/a	0.05 - 0.07	n/a	n/a	n/a	0.95 - 0.99
(Morgan, Slotegraaf et al., 2009)	114	n/a	94.3	62	1.5	0.07	n/a	n/a	n/a	0.95
(Ramaswami et al., 2009)	88	0.65 - 0.74	328.6	221	1.5	n/a	n/a	n/a	n/a	0.94
(Chang et al., 2010)	434	0.82 - 0.97	191.8	84	2.3	0.08	n/a	0.89	0.84	0.98
(Merrilees et al., 2011)	367	n/a	130.5	46	2.8	0.07	0.05	0.95	0.91	0.97
(Orr et al., 2011)	168	n/a	303.7	179	1.7	0.07	n/a	n/a	n/a	n/a
(Vorhies et al., 2011)	169	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
(Menguc et al., 2013) / Team	259	0.79 - 0.86	837.6	349	2.4	0.06	n/a	0.91	n/a	0.93
(Menguc et al., 2013) / Manager	80	0.81 - 0.91	188.5	125	1.5	0.07	n/a	0.90	n/a	0.92
(Hirvonen et al., 2013)	797	n/a	89.3	n/a	n/a	0.07	n/a	n/a	n/a	0.99
Author's model	413	0.78 - 0.91	35.1	25	1.4	0.03	0.04	0.98	0.97	0.94

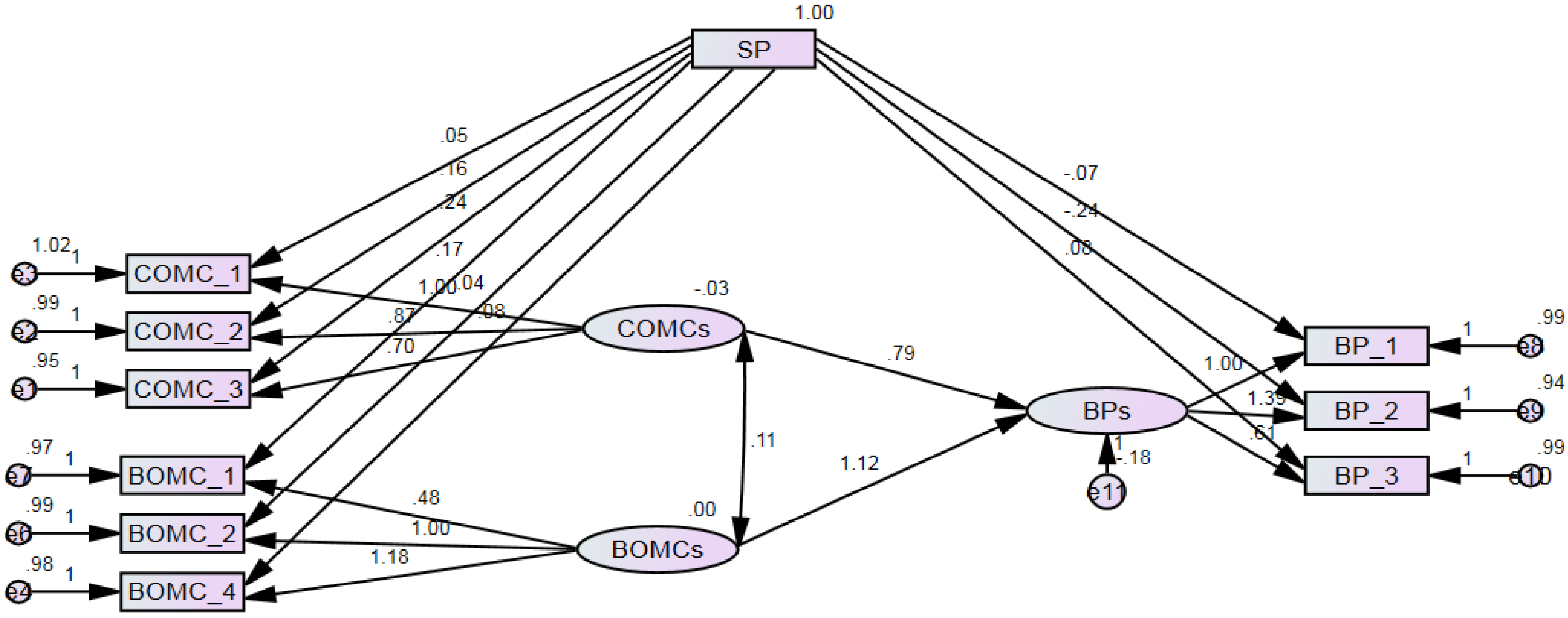
Source: creation by the author

Appendix 16: Factor reliability and average variance extracted

	Factor Loading	Loading Squares	REL	DEV
COMC	1	1.02	**1.75**	**0.80**
	0.87	0.99		
	0.7	0.95		
BOMC	0.48	0.97	**1.38**	**0.89**
	1	0.99		
	1.18	0.98		
BP	1	0.99	**0.70**	**1.12**
	1.39	0.94		
	0.61	0.99		

Source: creation by the author

Appendix 17: Final Model in SPSS Amos



Source: creation by the author

Appendix 18: Descriptives for ANOVA

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean Lower Bound	95% Confidence Interval for Mean Upper Bound	Min	Max
COMC_1	<= 2 years	174	-.05	1.01	.077	-.21	.10	-7.11	1.42
	>2<=5 years	138	.04	1.07	.091	-.14	.22	-7.20	1.32
	>5 years	101	.04	0.87	.087	-.13	.21	-2.99	1.21
	Total	**413**	**.00**	**1.00**	**.049**	**-.10**	**.10**	**-7.20**	**1.42**
COMC_2	<= 2 years	174	.07	0.90	.068	-.07	.20	-4.20	1.67
	>2<=5 years	138	.03	0.97	.082	-.14	.19	-3.05	2.28
	>5 years	101	-.15	1.18	.118	-.39	.08	-6.43	1.57
	Total	**413**	**.00**	**1.00**	**.049**	**-.10**	**.10**	**-6.43**	**2.28**
COMC_3	<= 2 years	174	.00	1.04	.079	-.15	.16	-2.57	2.12
	>2<=5 years	138	.00	0.94	.080	-.16	.16	-2.42	2.22
	>5 years	101	-.01	1.02	.101	-.21	.20	-2.36	1.95
	Total	**413**	**.00**	**1.00**	**.049**	**-.10**	**.10**	**-2.57**	**2.22**
BOMC_1	<= 2 years	174	.04	0.93	.070	-.10	.18	-3.36	1.82
	>2<=5 years	138	.17	0.99	.085	.01	.34	-2.84	2.07
	>5 years	101	-.31	1.06	.106	-.52	-.10	-2.57	1.64
	Total	**413**	**.00**	**1.00**	**.049**	**-.10**	**.10**	**-3.36**	**2.07**
BOMC_2	<= 2 years	174	.08	0.90	.068	-.05	.22	-2.33	1.91
	>2<=5 years	138	-.05	1.11	.094	-.24	.13	-3.23	1.74
	>5 years	101	-.07	1.01	.101	-.27	.13	-3.39	1.82
	Total	**413**	**.00**	**1.00**	**.049**	**-.10**	**.10**	**-3.39**	**1.91**
BOMC_4	<= 2 years	174	-.09	0.94	.071	-.23	.05	-3.50	2.24
	>2<=5 years	138	-.01	1.02	.087	-.18	.16	-2.86	2.96
	>5 years	101	.17	1.05	.105	-.03	.38	-3.23	2.43
	Total	**413**	**.00**	**1.00**	**.049**	**-.10**	**.10**	**-3.50**	**2.96**
BP_1	<= 2 years	174	-.09	0.93	.071	-.23	.05	-2.08	2.93
	>2<=5 years	138	.05	1.07	.091	-.13	.23	-2.17	3.44
	>5 years	101	.08	1.01	.100	-.12	.28	-1.76	2.63
	Total	**413**	**.00**	**1.00**	**.049**	**-.10**	**.10**	**-2.17**	**3.44**
BP_2	<= 2 years	174	-.23	0.91	.069	-.36	-.09	-1.85	1.89
	>2<=5 years	138	.03	1.04	.089	-.15	.21	-1.85	2.44
	>5 years	101	.35	0.99	.099	.15	.54	-2.54	2.49
	Total	**413**	**.00**	**1.00**	**.049**	**-.10**	**.10**	**-2.54**	**2.49**
BP_3	<= 2 years	174	.15	0.98	.074	.01	.30	-1.57	3.00
	>2<=5 years	138	-.03	1.04	.088	-.20	.14	-1.46	3.17
	>5 years	101	-.22	0.95	.094	-.41	-.03	-1.42	3.10
	Total	**413**	**.00**	**1.00**	**.049**	**-.10**	**.10**	**-1.57**	**3.17**

Source: creation by the author

Appendix 19: One-way between subject ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
COMC_1	Between Groups	.88	2	.44	.438	.646
	Within Groups	411.12	410	1.00		
	Total	**412.00**	**412**			
COMC_2	Between Groups	3.36	2	1.68	1.685	.187
	Within Groups	408.64	410	1.00		
	Total	**412.00**	**412**			
COMC_3	Between Groups	.00	2	.00	.002	.998
	Within Groups	412.00	410	1.00		
	Total	**412.00**	**412**			
BOMC_1	Between Groups	14.41	2	7.21	7.431	.001
	Within Groups	397.59	410	.97		
	Total	**412.00**	**412**			
BOMC_2	Between Groups	2.02	2	1.01	1.011	.365
	Within Groups	409.98	410	1.00		
	Total	**412.00**	**412**			
BOMC_4	Between Groups	4.56	2	2.28	2.294	.102
	Within Groups	407.44	410	.99		
	Total	**412.00**	**412**			
BP_1	Between Groups	2.34	2	1.17	1.169	.312
	Within Groups	409.66	410	1.00		
	Total	**412.00**	**412**			
BP_2	Between Groups	21.25	2	10.63	11.150	.000
	Within Groups	390.75	410	.95		
	Total	**412.00**	**412**			
BP_3	Between Groups	9.03	2	4.51	4.593	.011
	Within Groups	402.97	410	.98		
	Total	**412.00**	**412**			

Source: creation by the author

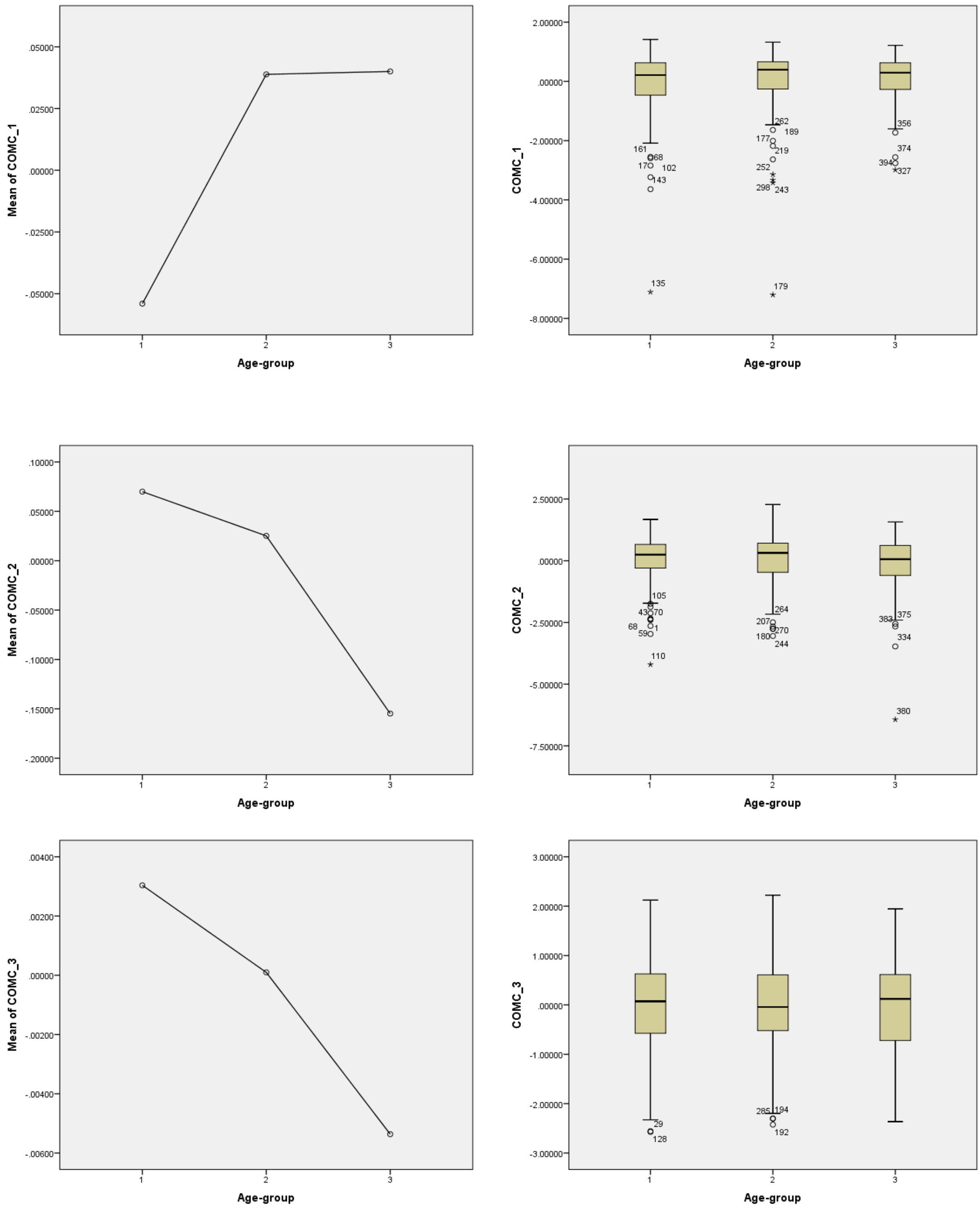
Appendix 20: Post Hoc Comparison Test (Scheffé)

Dependent Variable	(I) Age Group	(J) Age Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
COMC_1	<= 2 years	>2<=5 years	-.09	.11	.72	-.37	.19
		>5 years	-.09	.13	.75	-.40	.21
	>2<=5 years	<= 2 years	.09	.11	.72	-.19	.37
		>5 years	.00	.13	1.00	-.32	.32
	>5 years	<= 2 years	.09	.13	.75	-.21	.40
		>2<=5 years	.00	.13	1.00	-.32	.32
COMC_2	<= 2 years	>2<=5 years	.04	.11	.93	-.23	.32
		>5 years	.22	.12	.20	-.08	.53
	>2<=5 years	<= 2 years	-.04	.11	.93	-.32	.23
		>5 years	.18	.13	.39	-.14	.50
	>5 years	<= 2 years	-.22	.12	.20	-.53	.08
		>2<=5 years	-.18	.13	.39	-.50	.14
COMC_3	<= 2 years	>2<=5 years	.00	.11	1.00	-.28	.28
		>5 years	.01	.13	1.00	-.30	.32
	>2<=5 years	<= 2 years	.00	.11	1.00	-.28	.28
		>5 years	.01	.13	1.00	-.32	.33
	>5 years	<= 2 years	-.01	.13	1.00	-.32	.30
		>2<=5 years	-.01	.13	1.00	-.33	.32
BOMC_1	<= 2 years	>2<=5 years	-.13	.11	.50	-.41	.14
		>5 years	.36	.12	.02	.05	.66
	>2<=5 years	<= 2 years	.13	.11	.50	-.14	.41
		>5 years	.49	.13	.00	.17	.80
	>5 years	<= 2 years	-.36	.12	.02	-.66	-.05
		>2<=5 years	-.49	.13	.00	-.80	-.17
BOMC_2	<= 2 years	>2<=5 years	.13	.11	.50	-.15	.41
		>5 years	.15	.13	.48	-.16	.46
	>2<=5 years	<= 2 years	-.13	.11	.50	-.41	.15
		>5 years	.02	.13	.99	-.30	.34
	>5 years	<= 2 years	-.15	.13	.48	-.46	.16
		>2<=5 years	-.02	.13	.99	-.34	.30
BOMC_4	<= 2 years	>2<=5 years	-.08	.11	.77	-.36	.20
		>5 years	-.27	.12	.10	-.57	.04
	>2<=5 years	<= 2 years	.08	.11	.77	-.20	.36
		>5 years	-.18	.13	.37	-.50	.14
	>5 years	<= 2 years	.27	.12	.10	-.04	.57
		>2<=5 years	.18	.13	.37	-.14	.50
BP_1	<= 2 years	>2<=5 years	-.14	.11	.46	-.42	.14
		>5 years	-.16	.13	.42	-.47	.14
	>2<=5 years	<= 2 years	.14	.11	.46	-.14	.42
		>5 years	-.02	.13	.99	-.34	.30
	>5 years	<= 2 years	.16	.13	.42	-.14	.47
		>2<=5 years	.02	.13	.99	-.30	.34
BP_2	<= 2 years	>2<=5 years	-.26	.11	.07	-.53	.02
		>5 years	-.57	.12	.00	-.87	-.27
	>2<=5 years	<= 2 years	.26	.11	.07	-.02	.53
		>5 years	-.32	.13	.05	-.63	.00
	>5 years	<= 2 years	.57	.12	.00	.27	.87
		>2<=5 years	.32	.13	.05	.00	.63
BP_3	<= 2 years	>2<=5 years	.18	.11	.27	-.10	.46
		>5 years	.37	.12	.01	.07	.68
	>2<=5 years	<= 2 years	-.18	.11	.27	-.46	.10
		>5 years	.19	.13	.34	-.13	.51
	>5 years	<= 2 years	-.37	.12	.01	-.68	-.07
		>2<=5 years	-.19	.13	.34	-.51	.13

*. The mean difference is significant at a 0.05 level.

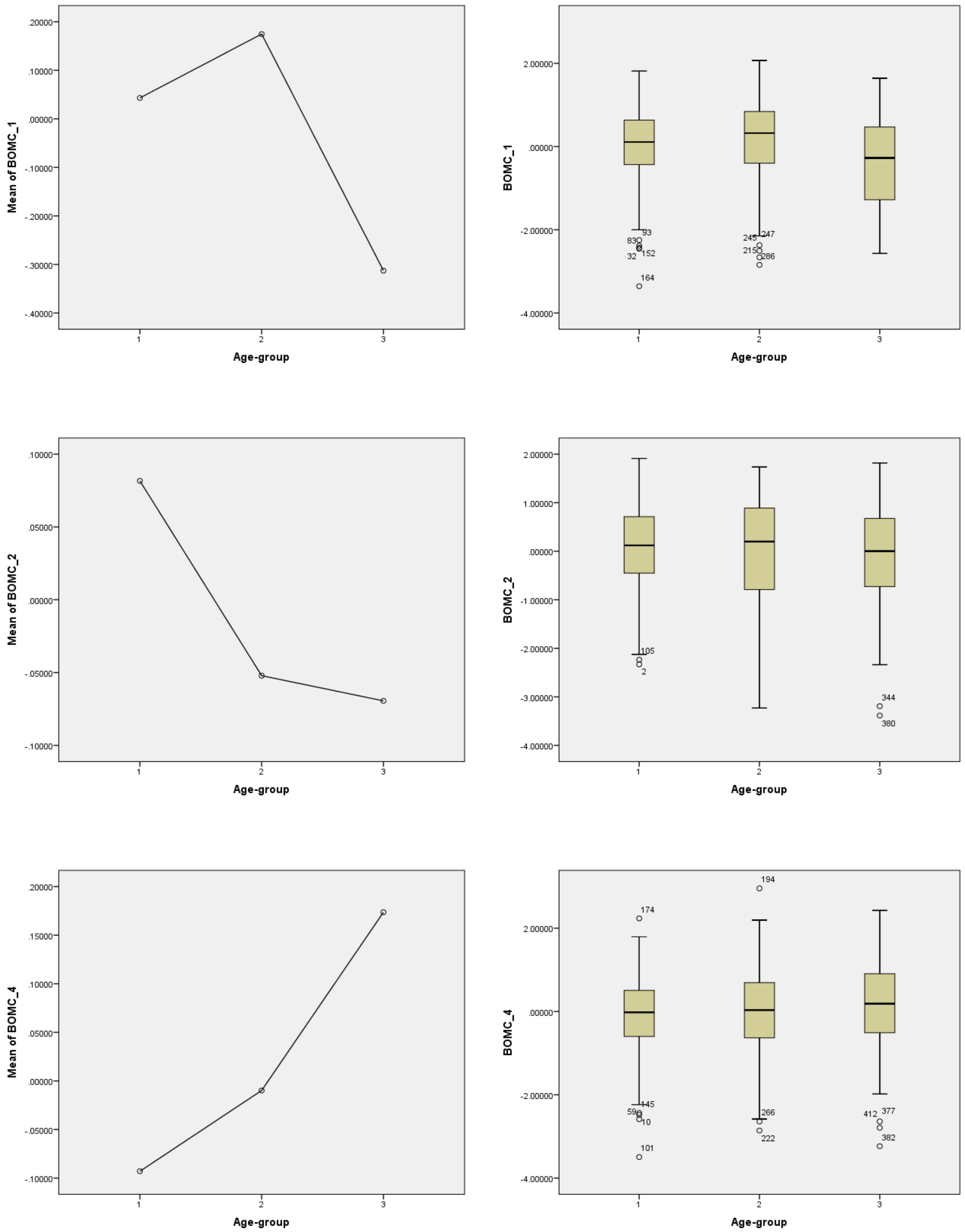
Source: creation by the author

Appendix 21: One way ANOVA Mean Plots and Stem and Leaf Plots COMC



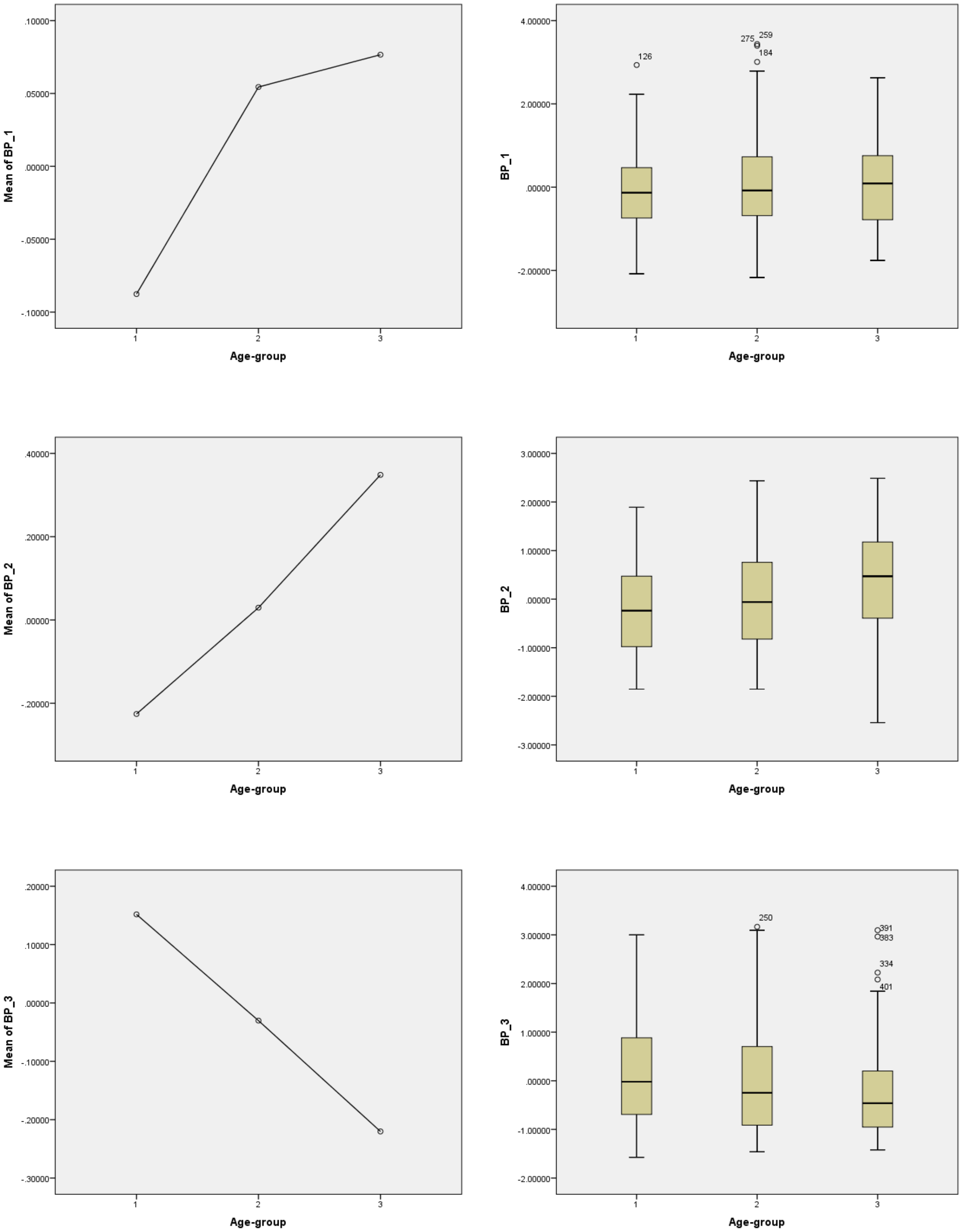
Source: creation by the author

Appendix 22: One way ANOVA Mean Plots and Stem and Leaf Plots BOMC



Source: creation by the author

Appendix 23: One way ANOVA Mean Plots and Stem and Leaf Plots BP



Source: creation by the author