Business Model Innovation in a global and digital Environment

Master Thesis
to obtain the academic degree of
Master of Science
in the Master’s Program
General Management
Statutory Declaration

I hereby declare that the thesis submitted is my own unaided work, that I have not used other than the sources indicated, and that all direct and indirect sources are acknowledged as references. This printed thesis is identical with the electronic version submitted.

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Philipp Frick, BSc. Date
Executive Summary

During the last approximately thirty years the concept of business models has seen a steep rise in its importance, especially since the year 2000. The attention is not only in academic research, but in practice as well. Because the phenomenon is comparably young, there is a lot of variation between what scholars have been adding to the literature. With seemingly small convergences regarding the definition, design, approaches and processes for business models and also the innovation of those, confusion is promoted instead of establishing clarity. In order to help create clarity this thesis, based on a literature review, gives an comprehensive overview on those previously mentioned topics.

The concept of business models has its foundation in the resource-based view, the market-based view and transaction cost economics (Amit & Zott, 2001, 497; Morris, Schindehutte, & Allen, 2005, 728; Osterwalder, Pigneur, & Tucci, 2005, 4; Steininger, Huntgeburth, & Veit, 2011a, 8; DaSilva & Trkman, 2014, 383). While there certainly is a lack of a common definition and also clarity in literature, the concept can commonly be described as follows. Firstly, the concept of a business model does represent the core logic and strategic decisions a firm has taken and is taking (Shafer, Smith, & Linder, 2005, 727). Furthermore, the concept displays how an organization actually functions, how it does create value for customers, and additionally how it captures value during the process (Magretta, 2002, 2; Afuah, 2004, 2; M. Johnson, Christensen, & Kagermann, 2008, 4 Osterwalder & Pigneur, 2010, 14; Wirtz, Schilke, & Ullrich, 2010, 275; Bieger & Reinhold, 2011, 32). The business model concept also can be seen as an blueprint on how a firm gains its competitive advantage or is planning to gain competitive advantage (Schallmo, 2013b, 23; Ranjith, 2016, 204). The concept includes customer oriented approaches. This is due to the importance of knowing who a firm’s customer is (Schallmo, 2013b, 126). Furthermore, it includes the relationship of a firm with its partners, suppliers and also customers Shafer et al., 2005, 202; Osterwalder & Pigneur, 2010, 28; Schallmo, 2013b, 126; Afuah, 2014, 25). And last but not least, the theory of the business model is also reflecting which strategy an organization has persecuted (Casadesus-Masanell & Ricart, 2010, 195).

There is no universally established design of a business model in the literature. An approach to find an area of agreement concerning the design came to the following conclusion. Almost every approach has a value proposition within its dimensions. This is due to the importance it has to the model. The proposition states how a firm intends to solve a problem for customers better than its competitors do. Furthermore, a version of a financial dimension was included in every approach as well. This dimension represents all financial aspects of a firm, such as revenue, cost structure or access to capital (Chesbrough & Rosenbloom, 2002, 533f; Shafer et al., 2005, 202f; M. Johnson et al., 2008, 3; Lindgardt, Reeves, Stalk, & Deimler, 2009, 1; Richardson, 2008, 138; Osterwalder & Pigneur, 2010, 22; Bieger & Krys, 2011, 32; Schallmo, 2013b, 129 Afuah, 2014, 25; Saebi, Lien, & Foss, 2016, 1). As a firm has to know who its customers are and what
they want, some form of market dimension should be included in the business model as well (Magretta, 2002, 87; Shafer et al., 2005, 202; Chesbrough, 2007, 13; Richardson, 2008, 139; Lindgardt et al., 2009, 1; Osterwalder & Pigneur, 2010, 20; Teece, 2010, 189f; Schallmo, 2013b, 126; Afuah, 2014, 25). Last but not least the firm has to have a process or dimension where it creates value, in form of a product or a service, which it proposed through the value proposition to the targeted customers it defined in the market dimension (Chesbrough & Rosenbloom, 2002, 533f; Afuah, 2004, 5; Morris et al., 2005, 730; Chesbrough, 2007, 13; Teece, 2010, 189f). To summarize this paragraph, the design of a business model can be described in four units. Those are a value proposition unit, a financial dimension, a market section and also a value creation dimension.

Innovation of business models is a growing field in research (Yang et al., 2016, 1795). Similar to the business model concept, there is a lack of a common definition. Scholar’s approaches differ quite a lot, but there is a general agreement on the importance of the concept (Foss & Saebi, 2015a, 7). The concept of business model innovation can be either incremental or radical (Schallmo, 2014, 13; Wirtz & Thomas, 2014; Waldner et al., 2015, 153; Philipson, 2016, 134). Furthermore, business model innovation is an approach for creating and/or capturing value, as well as increasing value for the customer through approaching things in a different manner (Aspara, Lamberg, Laukia, & Tikkanen, 2013, 460; Matzler, Bailom, Friedrich von den Eichen, & Kohler, 2013, 31; Afuah, 2014, 4). Depending on the firm it includes either changing one or multiple units of a business model (Frankenberger, Weiblen, Csik, & Gassmann, 2013, 6). The result of BMI can be a new value proposition (Souto, 2015, 145). The concept bares the potential to change a whole industry through introducing a new business model (M. Johnson et al., 2008, 2; Demil & Lecocq, 2010, 228) and allows a firm to offer different solutions than its competitors (Schallmo, 2014, 13; Souto, 2015, 145). It commonly generates a competitive advantage for the innovating firm (Mitchell & Coles, 2003, 15; Amit & Zott, 2012, 42; Schallmo, 2014, 13; Berends et al., 2016, 182). In comparison to the innovation of services or products, BMI does not inevitably lead to a new product or service (Yang et al., 2016, 1795).

There are several quite different approaches to business model innovation itself. Mostly, those only have a very small common ground. Hence, finding an approach within the area of agreement was simply not feasible, due to the results being too abstract and would not be helpful. Bucherer et al. (2012, 183) criticise exactly this problem of processes being too abstract and argue that despite the benefits business model innovation bares, there is no common framework, which is also applicable in practice. Wirtz and Thomas (2014, 47) agree by denouncing the lack of practical implementation of business model innovation concepts, as there is clearly a deficit in literature regrading this particular part of business model innovation.
Due to the environment, which an organization is active in, is not static but dynamic, business models cannot be static either. Technological innovation and globalization can be seen as major drivers for business model innovation. While globalization is not necessarily a threat, it can also bring a lot of opportunities for firms, if the business model is innovated correctly. Globalization is changing the business environment of a firm constantly, creating uncertainty and a complex situation for the firm. The business model concept, including the environment of a firm, combined with the approaches to innovation of it, can present a firm with ways to overcome disadvantages, break out of intense competition and create a competitive advantage for itself.

Globalization, internationalisation and different markets are not necessarily a part of the BMI concept. Reviewing the literature has led to the observation that only Rask (2014) and Onetti et al. (2012) include aspects regarding internationalisation or global business within their approaches. Rask (2014, 158) is using upstream and downstream activities to include globalized markets and production into the concept. The approach uses business model innovation in order to display potential ways for internationalisation. Onetti et al. (2012, 361) in comparison, include a geographical dimension into the concept, which has its focus on the location of an organization’s activities.

While the business model innovation concept is commonly explained to be driven by technological change, literature regarding the digital transformation of business model is scarce. The review of current literature indicates that only Schallmo and Rusnjak (2017, 18) and Schönhbohm and Egle (2017, 217) have published processes concerning the innovation of business models including digitalization. Schallmo and Rusnjak (2017, 18) established a detailed five step process for the digital transformation. While Schöhnbohm and Egle (2017, 217) came up with a process, which allows quite some interpretation.

Both trends, globalization and digitalization, can be seen as drivers and influencers of the business model innovation concept. As both trends most likely will only get stronger in the future, there might be more attention brought to them in combination with business model innovation, both in literature and practices.
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List of Abbreviations

ASEAN = Association of Southeast Asian Nations
BM = Business Model
BMI = Business Model Innovation
BRIC = Brazil, Russia, India, China
e.g. exempli gratia (latin) = as example
et al. et alii (Latin) = others
NASDAQ = National Association of Securities Dealers Automated Quotations

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1 Introduction

This introductory chapter is intended to give an overview of the problem and objectives this thesis will deal with. Furthermore, the methods and structure of the thesis will be presented.

1.1 Problem Statement

The rise of globalization and with it increasing popularity of the business model concept is no coincident. Globalization has given the consumer access to previously unseen amounts of options, which led to the consumer looking for the best deal possible whilst reviewing product and services more carefully (Scriven, 2014, 20). Business models are a necessary feature within markets where the consumer has a lot of different options, low transaction costs, an a certain heterogeneity between producers, consumers and competitors exists. This is due to companies trying to meet diverse consumer demands through being innovative and presenting new value propositions to the customer in order to seek for profits. Business models have the possibility to bring technological innovation to the market and offer the opportunity to satisfy previously unknown customer demand, which makes business models as necessity for technological innovation. Additionally business models themselves can be a form of innovation (Teece, 2010, 176).

Through the previously mentioned continuous globalization and the coherent increasingly dynamic competition, the significance of innovation has increased a lot over recent years (Bieger et al., 2011, 4). Innovation itself is much more complex than just being an invention, it commonly involves the conversion of knowledge into products (G. Johnson et al., 2011, 296). The term product might be misleading, because innovation does not necessarily rely on new scientific findings or technological inventions. Innovation can also involve re-organization of all elements of a business. This would be the innovation where a whole new business model is put together. The concept of business model innovation incorporates bringing key stakeholders such as customers, producers and suppliers together in new ways, and including or excluding new technologies (G. Johnson et al., 2011, 301).
A perfect example for a revolutionary business model innovation including new technology would be Apple’s famous iPod. Back in the day before the iPod was invented Sony had already all technical elements, which were needed to invent a product similar to idea of the iPod. Additionally, the Japanese corporation had access to a tremendous amount of music licenses through its record label. Even the vision to integrate devices and content was already existent before Apple launched its iPod. Despite having the better prerequisites Sony failed to invent the iPod and lost the market for MP3-Players to Apple. The Japanese conglomerate was simply unable to create a new business model, which could make the integration of content and device profitable. Apple on the other hand was able to reinvent the business model around music via its iTunes platform. This was a move way better than just wrapping good technology into a fashionable design. Apple took good technology and built a great business model to wrap around it (Gobble, 2014, 58).

As seen in the example of Sony, technology by itself has no objective value. Economic value of technology remains inherent until it gets commercialized through a business model. The same technology could be commercialized through two different business models and would return two different outcomes. According to Chesbrough (2010, 355), if a company does not find a suitable business model the discovered technology yields less value than otherwise and worst case a competitor might discover a fitting model, realizing far more value from it than the inventing company. The term business model has been established for more than a decade now and it is very commonly used in today’s business world. Yet there is no agreement on a common definition of a business model in science till now, and neither is there one in the practical world of business (Bieger & Krys, 2011, 2). Earlier literature shows that the term business model has been commonly discussed on a superficial level but without any understanding concerning where the term comes from, the role it has within an company and the potential it bears (Osterwalder et al., 2005, 2). According to Dos Santos et al.(2015, 44) there is still no clarity concerning the definition of the business model, despite the years of research and attention the subject has gotten. Neither is there any acknowledged base of structure of business models (Bieger & Krys, 2011, 2). Johnson et. al (2011, 301), for instance, describe a business model as how a company manages revenue streams and costs through the structural arrangement of its activities. Wirtz et. al (2010, 274) define a business model as a model which mirrors the way a firm operates and creates output through its system and through this the model also shows who value is created within a firm and the functionality within the organization. According to Teece (2010, 173) if a business model is simplified to its essential functions, it can be reduced to a structure which represents simply the embodiment of who a business is constructed on an organizational and financial level.
Today, corporations are facing more and more pressure by fundamental changes in their environment. Such alterations include new competitive structures in their markets, changes of both governmental and regulatory nature, as well as technological progress. Those changes often require companies, and therefore the management, to significantly change one or more aspects of their business models (Wirtz et al., 2010, 273). As time went by, markets have become more and more volatile influencing the companies and their need for change by higher amplitudes of volatility. To deal with this volatility corporations should monitor their models continuously in order to adapt it reactively to changes or even better to anticipate future environmental changes and alter it therefore proactively (Bieger et al., 2011, 4f). The choices, which are made concerning the business model, define the architecture of the company, and furthermore expansion paths develop from there on out. Yet enterprises can encounter immense difficulties when changing business models (Teece, 2010, 181).

By now, two very well known companies have been mentioned and associated with business model and innovation of those. Despite some initial information about business models and business model innovation, there are a lot of unanswered questions that should be taken into consideration in order to be able to build up a better understanding of the topic. Those relevant questions include what is business model innovation and how can it be used to deal with globalization and digitalization. Additionally, within this context the questions of what are main fault lines of the reviewed literature.

1.2 Objective

The intended objective of the thesis is to do a critical, comprehensive literature review in order to give an overview regarding business model innovation. Furthermore, on a more detailed level concepts of how business model innovation theories are adapted to help companies to get an idea on how to deal with globalization and digitalization will be analyzed. This intended objective of the thesis translates into a single main research questions:

- How can the business model innovation concept be adapted to a globalized and digital environment?

The aim of this thesis is to develop a comprehensive overview about business models, business model innovation and how the concepts can be adapted to deal with globalization and digitalization. This should help managers and students to get an throughout overview on the topic and develop further, more specific research or ideas for practice from that point on.
1.3 Method

This thesis is a detailed literature review of the topic business model innovation. Ever since the Post-World-War II era the pace in knowledge production in the discipline and profession of management has been accelerating. Hence, this has led to a body of knowledge which is increasingly fragmented. The literature review is an important tool which is used in management research and commonly used to manage the diversity of knowledge for a specific academic inquiry (Tranfield et al., 2003, 207f).

![Literature Review Model](Machi McEvoy, 2012, 5)

Research should be well founded and socially robust. Therefore, the focus of this thesis should be to produce a scientific base, which is both accurate in formulation and also relevant to practice (Tranfield et al., 2003, 210). For the method of this thesis the literature review model by Machi and McEvoy (2012, 5), which can be seen in figure 1, has been used. According to Machi and McEvoy (2012, 3) a literature review has the purpose to be an argument which promotes the position of a thesis, by building on previously researched literature, which is used as credible evidence to support the argument. Furthermore, a literature review should be presenting the current state of knowledge regarding a topic (Machi & McEvoy, 2012, 4).

The first phase of the literature review model is the task of selecting a topic. During this phase the chosen research topic, which might be a everyday problem, has to be translated into academic language. Hence it is the starting point of the writing process (Machi & McEvoy, 2012, 5). Machi and McEvoy (2012, 6) recommend starting taking notes or even writing a journal in order to clarify ideas, staying focused and to not lose track of initial plans.
Followed by the next phase, where *searching literature* is the focal point. As a literature review is built on data which is reviewed, there needs to be a point when the literature needs to be sorted out. During this phase the author should preview, select and organize the researched literature. In order to do so an author should possess the skills of skimming, scanning and mapping literary data. Furthermore, the found literature should be listed and documented (Machi & McEvoy, 2012, 6).

Thirdly, the *development of an argument* should be done. As a case needs to be formed first and then argued, this phase is used to organize the findings on the basis of a developed logic. The previously chosen data must be formed into a substance of evidence, to adequately present what the current state of art is in the particular field of research (Machi & McEvoy, 2012, 6).

The fourth step of the literature review model according to Machi and McEvoy[6], is *surveying the literature*. During this particular phase of the model, the author should organize, analyze and also assemble the research, which has been done on the chosen topic, until now. The result should be logically structured and present what is known about the topic in a manner which is defensible (Machi & McEvoy, 2012, 6).

The fifth step of the model is to *critique the literature*. In the previous phase, the so-called literature survey, evidence was found. In this phase of the model, this evidence, how current knowledge answers the given research question. The found evidence should be formed into an argument, which should be further used to justify the thesis objective (Machi & McEvoy, 2012, 6).

The last step of the model is to *write the review*, during which the results of a project are documented in writing. Through a process of composing and refining, the work becomes a paper which precisely presents the arguments made in a way the audience, which is targeted with this paper, can understand it. The targeted audience for this master thesis would be the scientific community with a research focus for strategic management and managers interested in the theoretical approach to the business model concept and the innovation of business models. During this phase all the writing, auditing and also editing to produce an polished academic paper, is done. All the written work should be based on the previous five steps. The discussion, which follows the publishing of the written work, is the last step to complete a literature review (Machi & McEvoy, 2012, 6f).

The literature research has been conducted following the previously described literature review model of Machi and McEnvoy (2012, 5). As a foundation for the master thesis only scientific journals, books and dissertations are considered as adequate sources. The time period in which the research was conducted started in September 2016 and ended in May 2017. The author is bilingual, hence the research was conducted primarily in English.
but also partly in German, to not limit the available amount of accessible data just due to language barriers. The research for feasible scientific material has been performed in the main library and the library for business and economic of the Johannes Kepler University. Additionally the digital library of this university was used, which also granted access to the data bases EBSCO, SpringerLink, ScienceDirect, Wiley, Wiso, Emerald and J-Stor, all of which used to gather sources. As key words for the research have been used various combinations, as well as plural and singular of German and English words and phrases, which are presented visually in table 1.

<table>
<thead>
<tr>
<th>Language</th>
<th>Key Words &amp; Phrases</th>
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<tbody>
<tr>
<td>German</td>
<td>“Geschäftsmodell”; “Innovation”; “Geschäftsmodellinnovation”; “Prozess”; “Globalisierung”; “Digitalisierung”; “Strategisches Management”; “Internationalisierung”; “Motive”; “Barrieren”</td>
</tr>
</tbody>
</table>

Table 1: Key words and phrases used in the research process concerning the topic of this master thesis - own table

To give an example a possible searching query in online library like EBSCO could like similar to this: "Business AND Model AND Innovation OR Change". Depending on what logic the query of the database can process. At this point it should be mentioned that all researched literature references have been chosen carefully, selected through doing thorough research, and last but not least those source critically investigated and questioned if the written work is providing evidence for arguments made by the author or authors.
1.4 Structure of the Thesis

This master thesis is structured into five major chapters. In the first chapter the problem statement, objectives of the thesis including the research question, the methods and structure are presented and explained in detail.

The focal point of the second chapter is the business model, as it is the fundamental basis for the topic of this thesis. The chapter starts with presenting an overview of the historical development of business models. Followed by the presentation of a comparison of different definition and elements of business models. This is due to the lack of consensus in management research about the definition and parts of a business model. Following the discussion of a definition for the term business model, the most important factors of it are analysed and presented. Furthermore, the appearance of business model in other parts of management research is inspected. The chapter is closed with a summary.

Chapter three is dealing with the concept of business model innovation. As chapter two has established what the business model could be defined as and how the concept of a business model design could look like, this chapter is investigating how innovation of a business model could be defined, what different types of business model innovation exist, what drives the innovation of business models and hence, what are barriers concerning business model innovation.

The fourth chapter is investigating how the business model innovation concept can be used to deal with changes in the environment of a firm. Firstly the environment of a business model is analyzed, followed by what are current and future trends in the business world. As two major factors of business model innovation are digitalization as well as internationalization due to globalization, those terms and drivers are investigated further. Followed by the analysis of how business model innovation can help a company to respond to those so-called mega trends, such as digitalization or globalization.

The final chapter is the conclusion of this master thesis. It is containing an complete summary of all the content examined in this paper. Furthermore, the research question, which was stated in the beginning, is answered in this chapter. Additionally, to the summary and answer to the research question, this chapter provides a critical review of the thesis and its topic.
2 Definitions and Conceptual Basics

The first chapter was about the introduction of the master thesis and the topic, now the second chapter is presenting and analyzing the focal point of the thesis, the business model. As it is the goal of this paper to provide a better understanding of business models, the purpose and elements of it are investigated. This chapter of the master thesis has its focus on the underlying business model concept, which is the foundation for business model innovation, and more precisely on the following points:

- What is the theoretical foundation for the business model concept?
- What is the definition of a business model?
- What are the different approaches to business model concept?

2.1 Historical Development of Business Models

The term business model is commonly discussed on a superficial level but without any understanding concerning where the term comes from, the role it has within an company and the potential it bears (Osterwalder et al., 2005, 2). This subchapter of chapter 2, which focuses on the definitions and conceptual basics, is concentrating on the historical roots and development of the business model concept as it should help to create a better understanding for the topic.

A study done by Osterwalder et al. (2005, 4) has come to the insight that the term business model is a comparably new concept. According to a more recent study by DaSilva and Trkman (2014, 380) the term itself has been used the first time in an article on an academic level in 1957. It was not until the quite drastic upswing of the NASDAQ\(^1\) stock market index and the entrant of the internet into the world of business in the early 2000’s, which also led to a rise in popularity of the term business model (Osterwalder et al., 2005, 4).

This matches with the findings of Nielsen and Morten (2013b, 22), according to whom the term business model was introduced with the emergence of the new economy. The concept has been strongly connected with e-business when it first came up in the late 1990’s. It was not until the early 2000’s when the concept of business model came up in the more general management literature.

While in the early years the terminology of business model was used to hide the lack of strategy, poor revenue models of companies who usually had fast growing stock prices with low or even no profits, the term itself survived the dot-com bubble. Furthermore, the trend continued and a change of focus happened. Papers stopped focusing purely on the business models of internet companies and started to analyse the business models across different industries. As today in

\(^{1}\) Abbreviation for National Association of Securities Dealers Automated Quotations, one of the major stock markets in the United States of America.
the 21st century the way a firm can operate has an unprecedented range of options this shift in research seemed to be necessary (DaSilva & Trkman, 2014, 381ff).

However Nielsen and Morten (2013b, 24) point out that that business models have been used before, more precisely Henry Ford’s business model, enabling mass production of cars, transformed the car industry more than a hundred years ago. Also Sam Walton, the founder of the U.S. based retail giant Walmart, reformed the retail industry with introducing information technology focus and choice of demographics attributes for the location of stores, creating an tremendous cost structure focus. Sošna et al. (2010, 383) go one step further and argue that business models have always existed. This can be seen as true, an example would be Gutenberg, who has introduced the mechanical printing to the world, which is according to Osterwalder and Pigneur (2010, 5) a form of business model innovation.

2.2 Theoretical Foundation for Business Models

For more than twenty years, the business model term has been used incorrectly regularly by both academics and practitioners. This is partly due to the fact that the connection of the term to theories used in management seems to be somewhat unclear. Without clarity concerning the theories the role of business model in strategic management literature can only be hazily described or rather explained (DaSilva & Trkman, 2014, 379). According to Steininger et al. (2011b, 1) in strategic management research there are two theoretical perspectives which are commonly used to analyze and explain a company’s ability to stay competitive within their respective markets, the resource-based view and the market-based view. It seems as the business model concept would be linked to the market and resource-based view, hence to analyze this interrelation the focal point of this chapter is on the connection of the concept to both theoretical foundations.

2.2.1 Resource-Based View

The construct of the business model is built on central concept in strategic management and its correlated theoretical traditions. Besides building upon the value chain concept, the business model circumscribes competitive advantage theory and therefore draws on resource-based theory (Morris et al., 2005, 728). According to Amit and Zott (2001, 497) the resource based view draws off Schumpeter’s perspective on value creation, which sees the corporation as a bundle of resources and capabilities.

As the resource-based view is built on the competitive advantage theory (Morris et al., 2005, 728) this would mean that, a firm has a competitive advantage over its competitors if its business model is able to create and offer superior customer value and furthermore positions the firm accordingly to take a hold of the value. A firm needs resources in order to be able to perform activities which enable it to offer superior customer value and capture revenue in return. Resources or assets are not only tangible, rather they can also be intangible or human. Tangible
resources would be physical assets, such as plant, equipment or of financial nature. Usually those resources are clearly visible in financial statements. Intangible resources would be non-physical and also non-financial assets, e.g. patents, copyrights or brands. Commonly those resources are not visible in financial statements, but can be excellent sources of profit. Last but not least human resources are the employees of a company, including the knowledge and the skills that those possess. Despite the importance of resources an organization also needs to be able to convert those into value for customers. Commonly this ability, to turn resources into customer value, of a firm, is called capability or competences (Afuah, 2004, 110f).

This aligns with a similar argument made by Morris et al. (2005, 729), according to whom business models, as well as models of any kind in management research, implicitly or explicitly point out the internal competencies which underlie the competitive advantage of a firm. Which is consistent with the resource-based view, as this approach views the firm as a bundle of resources and capabilities. In conjunction with those arguments is Amit’s and Zott’s statement (2001, 497), which describes the resource-based view as assembling and uniquely combining interdependent resources and capabilities, which might lead to value creation.

### 2.2.2 Transaction Cost Economics

Several scholars agreed on the importance of resources, and therefore the resource-based view, regarding the business model concept, while furthermore acknowledging that resources are yet important but alone do not bring any value to the customer (Amit & Zott, 2001, 497; Afuah, 2004, 111; Morris et al., 2005, 729).

Hence, it can be argued that despite being highly relevant as a foundation for the topic, the resource-based view is not able to explain the complexity of business models by itself. As value is commonly generated through transactions made with resources, rather than by resources itself (DaSilva & Trkman, 2014, 382), which would indicate that that the resource-based view only partly is the theoretical basis for the business model concept.

Hence, since value is partly generated from the unique combination of resources and decision making concerning the firm boundaries, this links transaction cost economics to the business model. Moreover, it can be argued that transaction costs economics classifies efficiency and boundary decisions as a source of value (Morris et al., 2005, 728).

Basically transaction cost economics are concerned with explaining the choice of the most efficient governance form, given a transaction is embedded in a specific economic context. Due to increased efficiency, which is reducing costs, transaction cost economics determine transaction efficiency as a considerable source of value (Amit & Zott, 2001, 499). As argued by multiple scholars business model has its roots partly in transaction cost economics (Morris et al., 2005, 728; Osterwalder et al., 2005, 4; DaSilva & Trkman, 2014, 382), which furthermore explains the close relationship with technology (Osterwalder et al., 2005, 4). The rise of information technology due to reduced costs allowed companies to work in value networks, because coor-
dination and also transaction costs fell considerably (Osterwalder et al., 2005, 4).

In a nutshell, the historical ancestry of the business model term and the concept is building upon an combination the resource-based view and transaction cost economics. This can be seen due to foundation of a business model can be described to be a combination of resources which generate value through transactions for both involved parties, the customers and the firm (DaSilva & Trkman, 2014, 383).

### 2.2.3 Market-Based View

As the previous two topics elaborated the theoretical foundations of the business model concept grew out of an combinational approach which used both the resource-based view and transaction cost economics. Nevertheless, the resource-based view in combination with transaction cost economics is limited to a mostly internal look of the company, which leaves the theory with a shortcoming as the main idea is to explain superior performance within the resources of a company and not really paying attention to the position of the firm in an external market (Steininger et al., 2011b, 3).

The market-based view, or also position oriented perspective of strategic management, is a firm looking for a good position in its targeted market, in comparison with its competitors and its stakeholders. Compared to the resource-based view, where the focus is on the internal view, the position-oriented view is focusing on the external view (Reisinger et al., 2013, 36). According to Reisinger et al. (2013, 36-37), the market-based approach to strategic management is based on Porter’s research in the field.

The sequences concerning resource-based view and transaction cost economics can only partly describe the business model concept, as the approaches do not offer an explanation to describe a component commonly described as ‘Value Proposition’ (Steininger et al., 2011b, 8). Osterwalder et al. (2005, 10) as example would describe it as an overview of services and/or products a firm is offering to a market or several markets. Teece et al. (2010, 179) also argue similarly and describes business models partly as the benefit a firm delivers to the customer. Several other scholars such as Teece et al. (2010, 179), Casades and Masanell (2013, 464), Schallmo (2013b, 22f) and Saebi et al. (2016, 1), use the ‘Value Proposition’ or a similar ‘Customer-oriented’ component to describe interactions between firms and markets. Steininger et al. (2011b, 8) suggest that this can be associated with the market-based view as it is focusing on a firm, product or service’s competitive positioning within a market, segment or similar as well as other external factors. Overall one could argue that there are commonly components in a business model concept, such as 'Target Customer’ or 'Revenue Model’, which are closely linked to the market-based view, as well as components such as, 'Cost Structure’ or 'Value Creation’, which
are rather linked to the resource-based theory (Steininger et al., 2011b, 11).

Since the market-based view commonly ignores the company itself as well as the potential it has or has not, and assumes that necessary resources can be sourced at any given time (Reisinger et al., 2013, 37).

Hence, as both competing theoretical approaches are essential for the business model framework, the approach could be seen as a notion to integrate resource and market-based perspectives (Steininger et al., 2011b, 11).

2.3 Definitions of the Term Business Model

As seen in the previous subchapter, the term and topic of business model has led to a lot of publications in academia and other fields over the last years (e.g. Mitchell & Coles, 2003; Afuah, 2004; Rappa, 2004; Zott & Amit, 2008; Osterwalder & Pigneur, 2010; Itami & Nishino, 2010; Wirtz et al., 2010; Bieger & Reinhold, 2011; Zott et al., 2011; Arend, 2013; Baden-Fuller & Haefliger, 2013; Casadesus-Masanell & Zhu, 2013; Schallmo, 2013b; Saebi et al., 2016). It is connected and discussed with strategy, management, e-business and also information systems. Despite all the papers and written work, business models are still not very well understood, especially when it comes down to research (Osterwalder et al., 2005, 1).

Part of the shortage of understanding is due to current definitions overlapping only partially, enabling the rise to a plurality of interpretations (Zott et al., 2011, 4).

So far a common definition of the term “business model” has not emerged yet. Hence, as the widely spread amount of definitions available poses an immense challenge to research, as defining the components of a business model and specifying what constitutes a business model (Morris et al., 2005, 726). Furthermore, the absence of definitional clarity is posing a threat to research in form of a potential source of confusion. This current state rather promotes diffusion instead of merging of perspectives. Additionally, it obstructs cumulative progress on research concerning business models (Zott et al., 2011, 5).

If one takes into account that the concept of business model has only emerged approximately two decades ago, the lack of precision concerning a common definition, which is characterising literature currently, is not an immense surprise. When a new idea, which is generally seen as useful, emerges, one should expect that there is usually disagreement concerning the definition and the concept (Zott et al., 2011, 16).

Still it should be clearly visible that there is a need for a universally accepted business model concept, which on the one hand promotes but also simplifies description and discussion. Research is supposed to start from the same point and should talk about the same concept. The challenge lies in the simplicity, relevancy and understandability on an intuitive level, while not simplifying the complex functionality of firms in practice too much (Osterwalder & Pigneur, 2010, 15).

Due to the extensive amount of definitions available, only a limited number of carefully selected
definitions will be presented in this paragraph. As the basis for the selected definitions literature reviews published by Zott et al. (2011) and Osterwalder et al. (2005) will be used, as those scholars are well respected within their fields for their research regarding the business model concept and are cited frequently by well known authors in highly ranked academic journals (e.g. Magretta, 2002, 4 in *Harvard Business Review*, Zott & Amit, 2010, 216 or Wirtz et al., 2010, 274 in *Long Range Planning*). More precisely, a table of selected definitions by Zott et al. (2011, 6) will be used and developed further by adding definitions of other relevant and more recent scholars, which have been found after an extensive research, which has been described in chapter 1.3.

<table>
<thead>
<tr>
<th>Author(s), Year, Page</th>
<th>Definition</th>
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<tbody>
<tr>
<td>Timmers, 1998, 2</td>
<td>The business model is “an architecture of the product, service and information flows, including a description of the various business actors and their roles; a description of the potential benefits for the various business actors; a description of the sources of revenues”</td>
</tr>
<tr>
<td>Amit &amp; Zott, 2001, 511</td>
<td>The business model depicts “the content, structure, and governance of transactions designed so as to create value through the exploitation of business opportunities”</td>
</tr>
<tr>
<td>Chesbrough &amp; Rosenbloom, 2002, 529</td>
<td>The business model is “the heuristic logic that connects technical potential with the realization of economic value”</td>
</tr>
<tr>
<td>Magretta, 2002, 4</td>
<td>Business models are “stories that explain how enterprises work. A good business model answers Peter Drucker’s age old questions: Who is the customer? And what does the customer value? It also answers the fundamental questions every manager must ask: How do we make money in this business? What is the underlying economic logic that explains how we can deliver value to customers at an appropriate cost?”</td>
</tr>
<tr>
<td>Mitchell &amp; Coles 2003, 17</td>
<td>“A business model comprises the combined elements of “who”, “what”, “when”, “why”, “where”, “how” and “how much” involved in providing customers and end users with products and services.”</td>
</tr>
<tr>
<td>Afuah, 2004, 2</td>
<td>“A business model is a framework for making money. It is the set of activities which a firm performs, how it performs them and when it performs them so as to offer its customers benefits they want and to earn a profit”</td>
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<tr>
<td>Author(s), Year, Page No.</td>
<td>Definition</td>
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<tr>
<td>Rappa, 2004, 34</td>
<td>“A business model is a method of doing business. All business models specify what a company does to create value, how it is situated among upstream and downstream partners in the value chain, and the type of arrangement it has with its customers to generate revenue.”</td>
</tr>
<tr>
<td>Morris et al., 2005, 202</td>
<td>A business model is a “concise representation of how an interrelated set of decision variables in the areas of venture strategy, architecture, and economics are addressed to create sustainable competitive advantage in defined markets”. It has six fundamental components: Value proposition, customer, internal processes competencies, external positioning, economic.</td>
</tr>
<tr>
<td>Shafer et al., 2005, 727</td>
<td>“A business model as a representation of a firm’s underlying core logic and strategic choices for creating and capturing value within a value network”.</td>
</tr>
<tr>
<td>Johnson et al., 2008, 3-4</td>
<td>Business models “consist of four interlocking elements, that, taken together, create and deliver value. [...] The customer value proposition and the profit formula define value for the customer and the company, respectively; key resources and key processes describe how that value will be delivered to both the customer and the company.”</td>
</tr>
<tr>
<td>Zott &amp; Amit, 2008, 3</td>
<td>“The business model is a structural template of how a focal firm transacts with customers, partners and vendors [...]”</td>
</tr>
<tr>
<td>Zott &amp; Amit, 2010, 216</td>
<td>“Building on existing literature, we conceptualize a firm’s business model as a system of interdependent activities that transcends the focal firm and spans its boundaries”.</td>
</tr>
<tr>
<td>Casadesus-Masanell &amp; Ricart, 2010, 195</td>
<td>“A business model is ... a reflection of the firm’s realized strategy”.</td>
</tr>
<tr>
<td>Teece, 2010, 179</td>
<td>“A business model articulates the logic, the data and other evidence that support a value proposition for the customer, and a viable structure of revenues and costs for the enterprise delivering that value”</td>
</tr>
<tr>
<td>Osterwalder &amp; Pigneur, 2010, 14</td>
<td>“A business model describes the rationale of how an organization creates, delivers and captures value”</td>
</tr>
<tr>
<td>Itami &amp; Nishino, 2010, 264</td>
<td>“…a business model is composed of two elements, a business system and a profit model...”</td>
</tr>
<tr>
<td>Source</td>
<td>Definition</td>
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<tr>
<td>Wirtz et al., 2010, 274</td>
<td>“A business model reflects the operational and output system of a company, and as such captures the way the firm functions and creates value.”</td>
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<tr>
<td>Bieger &amp; Reinhold, 2011, 32</td>
<td>“Ein Geschäftsmodell beschreibt die Grundlogik, wie eine Organisation Werte schafft. Dabei bestimmt das Geschäftsmodell, (1) was ein Organisation anbietet, das von Wert für Kunden ist, (2) wie Werte in einem Organisationssystem geschaffen werden, (3) wie die geschaffenen Werte dem Kunden kommuniziert und übertragen werden, (4) wie die geschaffenen Werte in Form von Erträgen durch das Unternehmen „eingefangen” werden, (5) wie die Werte in der Organisation und an Anspruchsgruppen verteilt werden und (6) wie die Grundlogik der Schaffung von Wert weiterentwickelt wird, um die Nachhaltigkeit des Geschäftsmodells in der Zukunft sicherzustellen.”</td>
</tr>
<tr>
<td>Casadesus-Masanell &amp; Zhu, 2013, p. 464</td>
<td>“At root, business model innovation refers to the search for new logics of the firm, new ways to create and capture value for its stakeholders, and focuses primarily on finding new ways to generate revenues and define value propositions for customers, suppliers, and partners.”</td>
</tr>
<tr>
<td>Schallmo, 2013, 22f</td>
<td>“Ein Geschäftsmodell ist die Grundlogik eines Unternehmens, die beschreibt, welcher Nutzen auf welche Weise für Kunden und Partner gestiftet wird. Ein Geschäftsmodell beantwortet die Frage, wie der gestiftete Nutzen in Form von Umsätzen an das Unternehmen zurückfließt. Der gestiftete Nutzen ermöglicht eine Differenzierung gegenüber Wettbewerbern, die Festigung von Kundenbeziehungen und die Erzielung eines Wettbewerbsvorteils.”</td>
</tr>
<tr>
<td>Saebi et al., 2016, 1</td>
<td>“the firm’s value proposition and market segments, the structure of the value chain required for realizing the value proposition, the mechanisms of value capture that the firm deploys, and how these elements are linked together in an architecture.”</td>
</tr>
</tbody>
</table>

Table 2: Selected Business Model Definitions own table based on Mitchell & Coles (2003, 17); Afuah (2004, 2); Rappa (2004, 34); Zott & Amit (2008, 3); Osterwalder & Pigneur (2010, 14); Itami & Nishino (2010, 264); Wirtz et al. (2010, 274); Bieger & Reinhold (2011, 32); Zott et al. (2011, 6); Casadesus-Masanell & Zhu (2013, 464); Schallmo (2013b, 22f); Saebi et al. (2016, 1)
As one can see in table 2, one of the oldest and most relevant definitions would be Timmer’s
definition from 1998 as it is one of the most commonly found throughout the reviewed literature (e.g. Amit & Zott, 2001, 515; Osterwalder et al., 2005, 6; Mason & Spring, 2011, 1032; Zott et al., 2011, 4; Schallmo, 2013b, 112; Spieth, Schneckenberg, & Ricart, 2014, 239; ). Reaching up to a definition by Saebi et al. (2016, 1) in paper published in the same year research for this thesis started.

In order to establish what a business model is, the listed definitions in table 2 are categorized following an approach by Spieth et al. (2014, 238). Previously published papers on business models tried to categorize research in different ways in pursuance to bring order to the numerous perspectives. Zott et al. (2011, 5) used innovation and technology management, e-business and the use of IT in organisations and strategic issues as organizing principles to their review on the current state of research. In a literature published by Morris et al. (2005, 726), the scholars defined economic, operational and strategic categories to become a more comprehensive perspective.

All these attempts of categorisation do contribute to establish a increasingly comprehensive view, and therefore an improvement concerning the understanding of the business model concept. Yet it seems to be essential to pay attention on the roles and factions which are assigned to the concept. To identify relevant categories, the scholars’ interest in the concept, which is the driving force behind the research in business models, can be used to distinguish a pattern. Thereby three major roles for the business model can be found, explaining the business, running the business and developing the business (Spieth et al., 2014, 238).

As the categorization by Spieth et al. (2014, 238) is the most convincing among the ones presented it is chosen as the basis for this paper to classify the listed definitions. Firstly the three categories must be defined to ensure an appropriate assignment of the reviewed papers and books.

Starting with explaining the business. This is a form where the research summarizes the approach as a way of being able to explain how a currently existing company or a future firm is generating respectively going to generate profit. This category pays special attention to external stakeholders. Secondly, there would be the approach of running the business where the business model is understood to show aspects of operational nature, such as processes, linkages or structures within the company. This classification can be linked to activity system, architecture, framework or template approaches. The third category would be developing the business and addresses the business model as a strategic function. In this category the business model is seen as a tool to support top management in making strategic decisions, for instance defining or developing the company’s strategy. This last category could also considered to be strongly correlated with a design, plan, logic or a model approach (Spieth et al., 2014, 238ff).
According to this categorization by Spieth et al. (2014, 238f), the approaches by Amit & Zott (2001), Margretta (2002), Morries et al. (2005), Shafer et al. (2005), Baden-Fuller & Morgan (2010), Wirtz et al. (2010), Casadesus-Masanell & Ricart (2010) and Cavalcante et al. (2011) are focusing on the *explaining the business* category, whilst Afuah (2004), Zott & Amit (2008), (2010), Baden-Fuller & Haefliger (2013) are focusing on explaining how business models are *running the business*. In comparison the focus of the approaches by Chesbrough & Rosenbloom (2002), Osterwalder et al. (2005), Casadesus-Masanell & Zhu (2013), Markides & Sosa (2013) is on *developing the business* (Spieth et al., 2014, 238f). The additionally listed sources of table 2 have not been categorized by the scholar. Following the logic of Spieth et al. (2014, 238), one could link the work of Timmers (1998), Rappa (2004), Lindgardt et al. (2009), Itami & Nishino (2010), Teece et al. (2010), Bieger et al. (2011), and DaSilva & Trkman (2014) to the first category, which would be *explaining the business*. Whilst Johnson et al. (2008), Richardson (2008), Schallmo (2013b), Afuah (2014), as well as Saebi et al. (2016) focus on *developing the business* with their approaches to the business model concept.

Subsequently after working through all above mentioned definitions one could try to summarize a business model as a concept which:

- represents the core logic and strategic choices of a company (Shafer et al., 2005, 727)
- shows the way a firm functions, creates value, and furthermore how the firm is able to capture value (Magretta, 2002, 4; M. Johnson et al., 2008, 4; Afuah, 2004, 2; Osterwalder & Pigneur, 2010, 14; Wirtz et al., 2010, 275; Bieger & Reinhold, 2011, 32)
- is aiming to gain a competitive advantage for the firm (Schallmo, 2013b, 23) or in the words of Ranjith (2016, 204) “*Business models are a firm’s theory of competitive advantage*”
- is customer oriented, as a firm should know for whom it creates value (Schallmo, 2013b, 126) and pay attention to building relationships with its customers (Shafer et al., 2005, 202; Osterwalder & Pigneur, 2010, 28; Schallmo, 2013b, 126; Afuah, 2014, 25), since it is a necessity for a firm to create superior value for its customers (Richardson, 2008, 138)
- integrates the resource- and market-based perspective into one concept (Steininger et al., 2011b, 11)
- is reflecting the strategy a firm has realized (Casadesus-Masanell & Ricart, 2010, 195)
2.4 Design of a Business Model

Now that the definitions, current research has to offer regarding the business model concept have been presented, the next step would be to determine the design of a business model. The design of a business model determines which dimensions of a business are covered within its business model. Similar to the definition of the business model term, there is no clarity or agreement within science or practice which dimensions or factors a business model should contain (Frankenberger et al., 2013). In order to gain an overview of what different components are usually part of a business model several approaches by scholars such as, Shafer et al. (2005), Richardson et al. (2008), Lindgardt et al. (2009), Osterwalder & Pigneur (2005), Mason & Spring (2011), Schallmo (2013b) and Afuah (2014), are presented. Afterwards there should be clarity which core components all scholars have in common within their models and therefore a certain minimum of dimensions a business model concept can be established.

2.4.1 Approach by Shafer et al.

A literature review done by Shafer et al. (2005, 200) has discovered that business model components could be classified into four major categories, as figure 2 shows. Those categories would be strategic choice, value network, create value and capturing value.

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<table>
<thead>
<tr>
<th>Strategic Choice</th>
<th>Value Network</th>
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<tbody>
<tr>
<td>Create Value</td>
<td>Capture Value</td>
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Figure 2: Components of a Business model - Own figure based on Shafer et al. (2005, 200)
Starting with the dimension named strategic choices. The dimension represents choices about how a business is conceptualized. Furthermore, a business model does, within limits, visualize these choices and how they impact the operations. This dimension of the business model concept can or should include the consumer, value proposition, competitors, mission and many more. Through the business model a certain set of choices can be tested and analyzed, in order to ensure they have the necessary impact and that these choices are mutually supportive (Shafer et al., 2005, 202-204).

The create value dimension is used to represent how a company creates value. According to Shafer et al. (2005, 202) all organizations must create and secure value, those are fundamental functions which must be performed to stay in business over a prolonged time period. Companies with successful business models will do so in a way which differentiates them from their competitors. In order to differentiate themselves, firms might develop certain core competencies, capabilities and advantages in form of market positioning. In order to create value the company can use those advantages in combination with its resources, assets, processes and activities (Shafer et al., 2005, 202).

The next dimension of Shafer et al. (Shafer et al., 2005, 202) would be the capture value dimension. As in the end all comes down to being profitable, thus a firm’s survival is tied to not only it’s capability to create value but also the competence to capture value. The value capturing dimension is used to display costs, profits and other financial aspects, which are necessary to create value and resultanty capture value (Shafer et al., 2005, 202).

As neither value creation nor value capturing is done in a vacuum there has to be a dimension to describe the relationships of a company. Shafer et al. (2005, 202) call the dimension a value network, which is used to display the relationships with suppliers, partners, coalitions, as well as distribution channels. A firm might be able to create special relationships with any of those previously mentioned parties, or might even with its customers. Depending on which relationships are created, the firm will take a certain role within its value network, which is an important factor concerning its business model concept (Shafer et al., 2005, 202).

2.4.2 Approach by Richardson

Richardson (2008, 138) approach the concept of business models as simplified as possible. As commonly seen throughout table 2, where different definitions of the business model term are listed, a recurring topic is value. Richardson (2008, 138) has used the value idea, which would argue that essentially strategy is creating superior value and capturing a higher amount then the competitors, to a approach the business model concept and came up with three central dimensions (Richardson, 2008, 138). As figure 3 shows those dimensions are the value proposition, value capturing and a system focusing on value creation and value delivery.
Similar to other scholars (e.g. Osterwalder & Pigneur, 2010, 22; Afuah, 2014, 25) Richardson (2008, 139) assigns the *value proposition* as a reason customers should pick the company’s product or service over the solution competitors offer. In this particular case of the business model concept value proposition is defined a bit broader than usual. While it still includes the offering of the firm, additionally the targeted market, market segment or customers are also included, as it is necessary to talk about whom the value is proposed to. By asking why the targeted market is not already served by other companies and what the firm is going to do better than the competitors, how the firm will compete and if it will be able to attract customers. This are essential questions as the value proposition has its foundation in the strategic position of a firm. In summary the value proposition is stating how a firm will compete and will try to offer superior value than its competitors (Richardson, 2008, 139).

After the company has outlined its plan on how to compete in the value proposition dimension, the *value creation and delivery system* describes how this plan is supposedly put into action. The organization and also functional architecture of the company begin to play a role in the concept. Additionally, the value creation and value delivery system describes and specifies the company’s competitive advantage, therefore bares light onto its resources and capabilities. The dimension includes all the activities necessary for a company to create, produce, sell and distribute its service or product to the customer. This contains the value chain and network. Depending on the underlying strategy of the company, the design of this dimension should show both, the company’s theory of how to compete and its intended competitive advantage (Richardson, 2008, 140).

The third and last dimension of Richardson’s (2008, 140) approach to the business model concept is the *value capturing dimension*. By now it is clear what the company is selling to whom, and how it successfully creates and delivers value to the customer. Nevertheless, this does not automatically mean that the firm is earning superior profits or profits at all. Therefore a firm
needs a revenue model which hatches revenues and provides profit margins over the costs in order to make the company earn returns. Simplified one could say that the revenue model is describing in which different ways a company gets revenue in exchange for its products or services. Additionally the company needs an economic model which includes costs, margins, and other financial aspects into the calculation. Those two models, the revenue and the economic one, combined explain how a company is making either profit or losses. It is essential for a firm to have a thoughtful and well planned value capturing dimension in order to have a successful business model (Richardson, 2008, 140f).

2.4.3 Approach by Lindgardt et al.

Lindgardt et al. (2009, 1) have chosen a more compact approach to the design a business model. Their approach consists of two essential elements, which are named value proposition and operating model, each having three sub-dimensions, as visible in figure 4.

Figure 4 shows the value proposition includes target segments, product and/or service offering and also a revenue model (Lindgardt et al., 2009, 1). The key question the value proposition is trying to figure out what is the firm offering to whom, including more specific criteria in each of the included components. Target segments are a way to determine which customers a company is trying to serve and what the problems, demands, needs and wishes those customers have. Product and/or service offerings represent what solution to the customers problems or wishes the company is proposing. And the revenue model is concerning how the value is captured in the process (Lindgardt et al., 2009, 1).
Whilst the first dimension was focused on how a firm approaches capturing and proposing value with its business model, the *operating model* is about focused on how the value is created. More specifically it is trying to answer how a company can deliver the offering profitable. The operating model can be separated into three components, the value chain, cost model and the organization. The value chain is displaying how a company is structured in order to deliver value and satisfy customer demand. It includes decisions regarding which steps of a process will be done by the company and which parts might be outsourced. The cost model is all about the configuration of assets and costs in order to ensure a profitable delivery of the value proposition. Last but not least the organization is concerning the development and deployment of human resources in order to sustain and also enhance the competitive advantage of a company (Lindgardt et al., 2009, 2).

### 2.4.4 Approach by Osterwalder & Pigneur

Osterwalder and Pigneur (2010, 16f) propose that a business model involves nine interacting individual blocks in their well-known *Business Model Canvas*, which can be seen in figure 5.

![Figure 5: Components of a Business Model](own figure based on Osterwalder & Pigneur (2010, 18f))

In order to get a better understanding of how Osterwalder and Pigneur’s business model approach is supposed to work, and how it differs to the previously shown approaches, each block is explained in more detail in the following paragraph.

The *customer segments* block is considered to be the quintessence of a business model, this is due to without customers firms obviously cannot survive in the long run. As customer satisfaction plays an important role, a firm might group customers into several segments according to...
common needs, behaviours or other common attributes. Hence, it is possible for one or more, large or small segments to exists. The firm must choose which segments shall be served and which ones will be ignored, once this has been decided a business model should be designed around the specific wishes of the addressed customer group (Osterwalder & Pigneur, 2010, 20).

The value proposition unit illustrates the assortment of products and services which forge value for the chosen customer segment or segments. Commonly, this unit solves a problem or satisfies a requisite customers have. Hence, this section of the business model has the potential be an innovative or even a disruptive offer. Independent of its innovativeness or disruptiveness, the value proposition it is commonly the reason why consumers select the offering of a firm over the one its competitors propose (Osterwalder & Pigneur, 2010, 22).

Channels is the element of the business model, which describes how the value proposition gets delivered to the customer, how communication is done, and generally how a firm is approaching its customer segments (Osterwalder & Pigneur, 2010, 26). Next up would be the customer relationship block, which displays the variations of relationship a firm establishes with customers in its chosen segment. (Osterwalder & Pigneur, 2010, 28). Revenue streams are the fifth unit in Osterwalder and Pigneur’s design (2010, 30), and it displays how the firm actually generates revenue from the segments, yet it does not display profit as the costs would have to be subtracted to display earnings.

Key resources are the essential assets a firm needs in the process of creating value. These resources are found in every business model as they enable an organization to create and offer a value proposition, earn revenues, reach markets, and create or maintain relationships with customers in the chosen market segments (Osterwalder & Pigneur, 2010, 34). The block key activities refers to the most important actions, which a company must perform to operate successfully. Similar to key resources, key activities are required to create and offer the value proposition, reach their segments and so on (Osterwalder & Pigneur, 2010, 36). Key partnerships is the block which illustrates the network consisting of suppliers and partners, which makes the business model work. They can appear in several different forms, such as joint ventures, strategic alliances or simple buyer-supplier relationships (Osterwalder & Pigneur, 2010, 38). Last but not least would be the cost structure block. This unit is describing all costs arising during the processes of the firm, which are necessary to operate the business model (Osterwalder & Pigneur, 2010, 40).
2.4.5 **Approach by Mason & Spring**

According to a study, done by Mason and Spring (2011, 1033), commonly three key elements are found on a consistent basis in papers and therefore can be considered as the cornerstones of business models. Those can be summed up and illustrated as figure 6 shows. Interestingly Mason and Spring (2011, 1034) only use three components, rather than most other scholars who’s concepts were reviewed in this chapter (Osterwalder & Pigneur, 2010, 18f; Schallmo, 2013b, 23; Shafer et al., 2005, 200; Lindgardt et al., 2009, 1, Afuah, 2014, 24). Those three components are network architecture, technology and market offering (Mason & Spring, 2011, 1033).

![Components of a Business Model](image)

**Figure 6: Components of a Business Model - own figure based on Mason & Spring (2011, 1033)**

Starting with the *technology* component of this business model approach. Technology in this dimension is seen as techniques, systems, methods of firms or material products. This dimension can be seen separated further into product, core technologies, processes and the infrastructure. Process technologies are commonly used for creating the product or the service a firm is offering. Core technologies are commonly those technologies, which underlie certain product or service technologies. Especially for management those technologies have significant influence. Lastly infrastructural technologies allow connections to markets, partners and customers for the business model (Mason & Spring, 2011, 1034).

Secondly, *market offering* illustrates what is actually offered to the consumer and also how it is offered. Additionally, it should represent the open-mindedness companies should keep about the roles of product and/or services in the business model concept. The market offering can be characterized as an opportunity for value-creation which arises of combinations of artefacts, activities performed by suppliers, accessible capabilities as well as capacities of suppliers. Cus-
Customer value is of high importance to an organization. This is due to the importance of price for a customers’ perception and understanding of value (Mason & Spring, 2011, 1035).

Thirdly, network architecture demonstrates how the configuration of buyers and suppliers is structured. Those parties combined create the possibility of a market offering. Capabilities play a big part in this dimension of the model, because they represent the know-how which is retained, maintained as well as developed over time by a company. As well part of this network architecture are transactions. As chapter 2.2. has shown transactions are an essential part of creating value, hence Mason et al (2011, 1035) argue that business models must have transactions. Furthermore, technological innovation can change transaction-making and therefore the development of a business model. Despite transactions can help establishing a network between parties, interaction and non-financial exchange are necessary to create and sustain network architectures for firms (Mason & Spring, 2011, 1035f).

2.4.6 Approach by Schallmo

According to Schallmo (2013b, 23) a business model consists of five dimensions, visible in figure 7, the partner dimensions, the value creation dimension, value proposition dimension, customer dimension and financial dimension.

The partner dimension defines a firm’s partners, partner channels and partner relationships in the business model concept. Schallmo (2013b, 132f) defines partners as members of a partner network who’s members replenish the business model by providing resources as well as abilities, which are not within the model, but also are not essential for it. Additionally, the partners are handling processes which are again not done within the model itself, and therefore according to Schallmo (2013b, 133) could be considered as not essential for its success. The so-called partner channels are separated into communication and procurement channels. Procurement channels
are ways to transfer resources to the company itself, whilst communication channels stay in contact with partners, communicate with them as well as inform them. The partner relationships are elaborating on how a partner is gained, and how the relationship is established. All in all it could be summarized that the focal point of interest of this dimension is to declare with whom the company is cooperating (Schallmo, 2013b, 133f).

Followed by the value creation dimension, which defines resources, abilities, processes that can be seen as an essential part of the business model. Resources are, as mentioned in chapter 2.2.1, material or immaterial assets within the company. These are used directly or indirectly to create products or services within the company, and are commonly used to reach customer segments, create customer relationships or maintaining those. Abilities are structures, processes and systems which put resources to use. In order to create services or products certain abilities are necessary for a company. Additionally, abilities are also necessary to reach customers, create relationships as well as maintain these (Schallmo, 2013b, 130f).

The value proposition dimension consists of outputs and the value which gets proposed through it. The focus is mainly on what is offered to the customer. As outputs can be appear in form of services and/or products, which are offered to the customer. Those outputs are used to satisfy a customer need and therefore create value for the customer. The output is created through the combination of resources, capabilities and processes. Furthermore, outputs have a price and therefore create the possibilities to create profits. Value is promised to the customer in articulation of the value proposition, a version of pledging a certain value to the customer. Next to the value which is offered to the customer, also the value offered to partners is of importance (Schallmo, 2013b, 129).

A firm has to know for whom it creates value. The customer unit, consisting of customer segments, customer channels and relationships regarding customers. This is the section in the model, which is looking at the customers and markets of a company. The customer segments elaborates which customers are targeted and served by the business model. This segmentation is supported by the customer channel, which is differentiated into a communication and a distribution channel. The distribution channel is a way of transferring products and/or services to the customer with the goal in mind to generate value for them. Whilst the communication channel, similar to the partner channel, is a tool for the company to communicate with their customers, to inform them. Customers are entering a relationship with the company when buying a product or a service. Through the value created for the customer, this relationship gets establishes and strengthened, creating a loyalty. Each segment can have its own form of relationship (Schallmo, 2013b, 126).

A firms revenues and costs are defined in the financial dimension of the business model. The centre of interest is what creates costs and with what are revenues made in the business model.
Revenues are generated in form of selling products or providing services. The value generated for customers and partners returns to the firm in form of revenues. The revenue structure describes of which customer or partner and which services or products revenue is generated. Revenue mechanics can come in different forms and variations. Costs on the other hand are created through the running the business model and are displayed in a certain cost structure. Costs can be incurred through relationships with partners, the use of resources, building abilities or competencies and also by executing processes. The structure of costs allows transparency as well as making cost cutting potentials visible (Schallmo, 2013b, 135).

2.4.7 Approach by Afuah

According to Afuah (2014, 24) it is the most important responsibility of a firm to satisfy its customers, as only satisfying the needs of its customers will generate profits. The units, which according to Afuah (2014, 24), belong to a business model are the customer value proposition, the market segment, the growth model, the revenue model and capabilities. How those units are put together can be seen in figure 8. The following paragraph will elaborate on what the scholar understands and subsumptions under those dimensions (Afuah, 2014, 24).

Figure 8: Components of a Business Model - own figure based on Afuah (2014, 24)

The core of generating profit is making a customer spend money on the company’s product or service. The value proposition of a firm presents how its products and or services can solve a customer’s problem or alternatively satisfy his or her needs better than a competitor can. If the value proposition is done correctly it should most likely present a better solution for the given problem and/or a better fit for his or her needs and therefore give the customer an incentive to chose the firm’s product or service rather than any competitors (Afuah, 2014, 25).
Despite its importance the proposition cannot generate profit on its own. As an example if a good value proposition is presented to the wrong customer it will not generate profit for the company. Hence, a firm is required to know what a customer wants, the price range those customers are willing to spend on a certain product or service, how big the market is and how much profit a certain market can deliver. The market segment component of Afuah’s approach (2014, 25) is about groups of those customers sorted by their attractiveness to the company. Furthermore, the component also includes every institution a company encounters in a certain market, including suppliers, competitors, customers. It could be summed up as every organization a company has to cooperate or compete with in order enable its process of capturing value (Afuah, 2014, 25).

The revenue model is the component of the concept where a firm decides how much customers has to pay for what services or products at which point of time and how the payment will be processed. Firm’s should focus on getting as many customers as close as possible to their reservation price, without driving them away, in order to maximize revenue. There are a lot of different models concerning the revenue, which are commonly mistaken as whole business models, e.g. advertising, freemium, usage fee, licensing and many more. It is important to keep in mind that a revenue model does not simply rely on pricing, instead the revenue model heavily relies on the customer value proposition, segments of the market, capabilities of the company and also on the growth component of the business model (Afuah, 2014, 26).

Following with the next dimension which would be the growth model. Companies want to grow, but growing without a strategy or without profitability is bound to fail. Growth models display a firm’s plan to increase its pool of customers, increase prices while at the same time increase willingness to pay, in other words keep prices as close as possible to reservation prices. With growth not only revenue will grow but also costs, and it is of utmost importance that companies keep an close eye on their costs whilst growing. Depending if a business model is cost-driven or value-driven the importance can vary (Afuah, 2014, 27).

Growth depends highly on the underlying capabilities which is the fifth and last dimension of Afuah’s (2014, 28) approach to the design of a business model. Those capabilities are commonly very hard to imitate or substitute and therefore central for business models and its success. According to Afuah (2014, 28) capabilities consist of activities and resources. Assets, also called resources, are what is accessible for a company, while activities are what a company does to transform those resources into value. Capabilities enable a company to perform in all the other units of the business model (Afuah, 2014, 28).
2.4.8 Essential Components of a Business Model

As announced in the introduction to this particular subchapter of chapter 2, after working through several definitions and designs of business models, it is time to find common ground between the different scholars and establish an approach which could potentially represent the acceptable minimum of dimensions a business model concept should have.

As the previous overview of a selected collection of business model approaches has shown the number of dimensions or components can be anywhere between two (e.g. Lindgardt et al., 2009, 1) up to nine (e.g. Osterwalder & Pigneur, 2010, 16f). Some scholars such as Schallmo (2013b) have more detailed components within their dimensions, therefore one could argue that there are business model concept with up to fifteen dimensions. After carefully studying all previously listed approaches to the definition and design of a business model, the common dimension could be summed up as:

- Value Proposition Dimension
- Financial Dimension
- Market Dimension
- Value Creation Dimension

Starting with the dimension all scholars, who’s research has been reviewed for this literature review, seem to agree on, the value proposition. It is essential for a company’s success and survival to create superior value for a customer in comparison to its competitors (Richardson, 2008, 138). Therefore it is essential for this summarizing approach to have a value proposition dimension. The value proposition is how the products and/or services of a firm offer to solve a customer’s problem and/or satisfy his or her need better than any competitor (Chesbrough & Rosenbloom, 2002, 533f; Shafer et al., 2005, 202f; M. Johnson et al., 2008, 3; Lindgardt et al., 2009, 1; Richardson, 2008, 138; Osterwalder & Pigneur, 2010, 22; Bieger & Krys, 2011, 32; Schallmo, 2013b, 129 Afuah, 2014, 25; Saebi et al., 2016, 1).

A financial dimension, which includes a cost and a revenue model, is also an essential item for a business model, as all scholars whom’s research has been reviewed so far have a dimension dedicated to finance. In theory authors mostly agree to a certain point that a business model needs to display its revenue structure as well as its cost structure (Chesbrough & Rosenbloom, 2002, 533f; Shafer et al., 2005, 202; Richardson, 2008, 140f; M. Johnson et al., 2008, 4; Lindgardt et al., 2009, 1; Osterwalder & Pigneur, 2010, 22; Teece, 2010, 189f; Wirtz et al., 2010, 274; Bieger & Krys, 2011, 32; Schallmo, 2013b, 135; Afuah, 2014, 28; DaSilva & Trkman, 2014, 383; Saebi et al., 2016, 1), however their approaches vary vastly. Osterwalder and Pigneur (2010, 30) as example separate in a cost structure and revenue streams, as do Lindgardt et al. (Lindgardt et al., 2009, 1f). Schallmo (2013b, 135) combines both in a so-called financial dimension. As
the focal point is to keep the approach compact and reduced to essential components, the cost structure and revenue model will be combined in a financial dimension as proposed by Schallmo (2013b, 135).

As chapter 2.2. has shown, the business model concept is based on a combination of resource and market-based view, paired with transaction cost economics, as the concept is playing a supportive role (Amit & Zott, 2001, 497; Morris et al., 2005, 728; Osterwalder et al., 2005, 4; DaSilva & Trkman, 2014, 382). The previous components had only a limited market-based view, therefore it is necessary to implement the external environment the firm has to deal with into the concept. In order to be able to communicate with customers, know what they or rather the market wants, and for whom the value is forged. But also what the willingness to pay for value is and to gather all further relevant information from a market-based perspective (Magretta, 2002, 87; Shafer et al., 2005, 202; Chesbrough, 2007, 13; Richardson, 2008, 139; Lindgardt et al., 2009, 1; Osterwalder & Pigneur, 2010, 20; Teece, 2010, 189f; Schallmo, 2013b, 126; Afuah, 2014, 25). Hence, a market dimension, which includes customers, customer segments, channels for communication, targeted market and a value network, which includes partners and suppliers, seems to be the common ground, between the quite different approaches scholars found, to this particular segment of the business model concept.

By now the approach has a value proposition, a financial dimension and a market dimension. It is declared what is sold to whom at which price with what cost structure, also who is supporting and cooperating with the company is clear, but the creation of value is missing and linked to it the competitive advantage. Hence, a value creation dimension, where resources and core capabilities are merged into a competitive advantage has to be adjoined to the design of our business model (Schallmo, 2013b, 130). Whilst most scholars have different names for the dimension, or even multiple dimension, the importance of creating a competitive advantage and the creation of value is undoubted (Chesbrough & Rosenbloom, 2002, 533f; Afuah, 2004, 5; Morris et al., 2005, 730; Chesbrough, 2007, 13; Teece, 2010, 189f).

In conclusion it can be stated that, several scholars approach the topic with differences concerning the elements or dimensions a business model is supposed to have, there is still a common ground which seems to connect all the different perspectives and opinions regarding the business model concept. As this subchapter has shown there are options on how to approach a summary of the common ground within the field of business model research. There is potential to find a common design, which is also in line with the listed characteristics of a business model (see chapter 2.3). The essence of business model design could be covered through the previously explained market, value proposition, value creation and financial dimension. For the further progress of this thesis the subsumption explained in this subchapter is be used.
2.5 Chapter Summary

At this point the first major chapter of this thesis comes to an end and it seems like a good point to summarize the lessons learned about the business model concept. Also this small summary should help refreshing and memorizing the most important findings of business models for the upcoming part of this work. The importance arises as the following chapters are building on the business model concept.

So far it has been found out that the concept of business model is a relatively new concept, with rising popularity since the early 2000’s (Osterwalder et al., 2005, 4, Nielsen & Lund, 2013b, 22). The construct of the business model is based on the resource-based view (Amit & Zott, 2001, 497), in combination with transaction cost economics, as resources are important but do not bring value to the customer by themselves (Amit & Zott, 2001, 497; Morris et al., 2005, 729; Afuah, 2004, 111). Hence, as the core of the business model concept is to generate value for customers, and value is generated through transactions and a combination resources (DaSilva & Trkman, 2014, 383). However, this approach is limited to a mostly internal view of the company. Business model concepts frequently have market or customer dimensions, which are closely linked to the market-based view. Therefore, both competing theoretical approaches are parts of the foundation of the business model concept (Steininger et al., 2011b, 11).

Unfortunately, there is no unquestioned definition of the term business model. Neither is there a generally recognized concept of what components a model must have. However, scholars have some common ground within their different approaches and can be categorized into approaches which try to explain the business, run the business or develop the business (Spieth et al., 2014, 238). After going through several different approaches by different scholars of what components a business model could have the result is that essentially authors seem to have four dimensions in common. Although those dimension might have different names within the paper they represent the same basic logic. Hence, the result of this part of the literature review are four dimensions which potentially could be the acceptable minimum of components a business model concept should have. Those dimensions would be the value proposition dimension, the financial dimension, the market dimension and the value creation dimension.
3 Business Model Innovation

So far the literature reviewed has shown that a business model is able to provide considerable value to a customer, while collecting a part of this value as revenue for the developer or implementor of it. Nevertheless, only developing a business model - no matter how good it might be - is simply not enough to ensure a sustainable competitive advantage. This is due to the following problem: once a business model is implemented, the bigger parts are usually quite visible and therefore run danger to be imitated rather fast. Commonly this is only a matter of years, but also could be within months, before an evidently successful business model attracts competitors to start efforts trying to imitate the business model (Teece, 2010, 179). Zollenkop and Lässig (2017, 73f) agree and argue that business models and the value they generate for customers are only in rare cases of a sustainable nature, due to the dynamic of the environment of a firm, but also because of the possibility for competitors to imitate a business model. Another approach has been suggested by Lindgardt et al. (2009, 2), who argue that the concept of business model innovation is of importance to organizations. Reason being it bares the potential of breaking out of intense competition for the firm. The concept enables companies to address various different problematic scenarios, ranging from competition where processes or products are easily imitated, up to dealing with external disruptions, such as regulatory or technological shifts (Lindgardt et al., 2009, 2).

Foss and Saebi (2015b, 7) argue that despite scholars agreeing on the strategic importance of the concept, especially as a source of competitive advantage, it is yet a term where definitions vary greatly across studies and scholars. Laudien and Daxböck (2015, 615) argue that throughout literature scholars refer to the change happening to a business model with different terms, most of them used inconsistently and interchangeably, examples therefore would be the business model term in combination with synonyms for innovation, e.g. evolution, experimentation or transformation. This contrary usage of the term leads to problem, as a wide range of available definitions for the term can lead to a confusion, which would create a diffusion instead of a unification of perspectives. Hence, the progress of research could be weakened instead of strengthened (Zott et al., 2011, 5). It appears as there could be some ground to cover between the business model innovation across the different approaches of different scholars. This chapter of the master thesis has its focal point on business model innovation, and more precisely on the following points:

- What is the definition of the term business model innovation?
- What are the different approaches of business model innovation?
- What are relevant drivers/barriers concerning business model innovation?
3.1 Definition of Innovation

According to Volker et al. (2007, 15) corporations who are unable to generate new products or processes continuously, will not survive within a market either in the short or in the long run. This argument is supported by Chesbrough (2010, 362), who argues that business model innovation is vital for corporations, yet it is difficult to achieve. This is due to the many barriers for changing a business model, which will be discussed later on.

As the importance of innovation and also business model innovation is now stated both terms should be defined. Hence, to define business model innovation, the terms business model and innovation have to be defined first. The business model concept has been analyzed in depth during the previous chapter, and has been defined as a concept which:

• represents the core logic and strategic choices of a company (Shafer et al., 2005, 727)

• shows the way a firm functions, creates value, and furthermore how the firm is able to capture value (Magretta, 2002, 4; M. Johnson et al., 2008, 4; Afuah, 2004, 2; Osterwalder & Pigneur, 2010, 14; Wirtz et al., 2010, 275; Bieger & Reinhold, 2011, 32)

• is aiming to gain a competitive advantage for the firm (Schallmo, 2013b, 23) or in other words Business models are a firm’s theory of competitive advantage (Ranjith, 2016, 204)

• is customer oriented, as a firm should know for whom it creates value (Schallmo, 2013b, 126) and additionally should create a relationship with its customers (Shafer et al., 2005, 202; Osterwalder & Pigneur, 2010, 28; Schallmo, 2013b, 126; Afuah, 2014, 25), since it is a necessity for a firm to create superior value for its customers (Richardson, 2008, 138)

• integrates the resource- and market-based perspective into one concept (Steininger et al., 2011b, 11)

• is reflecting the strategy a firm has realized (Casadesus-Masanell & Ricart, 2010, 195)

According to Johnson et al. (2011, 296) innovation “involves the conversion of new knowledge into a new product, process or service and the putting of this new product, process or service into actual use”. In comparison Afuah (2014, 5) defines the term innovation as doing something differently than the norm would anticipate. Souto (2015, 144) approaches the concept of innovation by defining it as the commercialization of an invention, or respectively as creative approaches which are brought to market through the implementation of those approaches into a company’s products, processes or organizational methods.
Kaschny et al. (2015, 20) define innovation as an intentional and directed process to towards something new. Something new in this case could be for example a discovery, an invention, or something what seems like new because it is seen in a different context. Furthermore, innovation can be socially, economically and ecologically relevant or irrelevant. Also innovations can be planned and developed or happen spontaneous. In other words, innovation can be of relevant or irrelevant nature and either be inadvertently or deliberately (Kaschny et al., 2015, 20).

Simplified, innovation can be described as putting something successfully onto a market. Hence, innovations can be new products, processes or concepts. Since this approach is including concepts into the definition of innovation, also business model innovation and new forms of organizations, so-called structural innovations, are included (Kaschny et al., 2015, 20).

Arguably this definition leaves room for interpretation of what something new as each corporation is different and therefore the situation has its own context. It could be that an innovation is something completely new or a noticeable improvement for a company, while it does not mean that it is an actual innovation for the market as it is nothing new there (Kaschny et al., 2015, 20).

### 3.2 Types of Innovation

Innovation today is a topic which is a research field for itself, with a large amount of papers written about, companies being highly interested in it and universities offering lectures about it. As business model innovation can be analyzed from different points of view, there are scholars with quite different starting points. As exemplification some scholars see the concept based on other innovation processes or concepts, for instance Frankenberger et al. (2013, 15) and authors who approach it as a concept as new form of innovation which overlaps with other types of innovation, for example Schallmo (2014, 7). Hence, a short overview of the different types of innovation, which are connected with business model innovation is given in this subchapter.

#### 3.2.1 Disruptive Innovation

The term “disruptive innovation” is often used in connection with business model innovation. Precedent therefore are when Markides (2006, 20) compares technological and business model innovation, Johnson et al. (2008, 7) whilst discussing drivers for business model innovation, Chesbrough (2010, 358) is discussing the conflict between an existing and a new business model and the requirements of both or Saebi (2015, 153) when analyzing environmental changes on a more detailed level. Hence, the term disruptive innovation is used commonly, and its creators Christensen et al. (2015, 4) wonder if people who are using the term have actually read the literature regarding the topic. In their perception the term is used too often for describing more or less any situation in which an industry is turned upside down and the industry’s giants flounder. Furthermore if the theory is used to broadly, insights from subsequent research could be falsely integrated into the research, leading managers towards wrong tools for the situation they are in and extending their change of failure. In the long run the theory and its usefulness would be questioned (Christensen et al., 2015, 4). Therefore, an explanation of Christensens’
Christensens’ et al. (2015, 4) approach to *disruptive innovation*, as displayed in figure 9, is the process of a small firm, which has less resources than its competitors, successfully challenging the already established players of an industry. This is possible because industry occupants have their focus set on improving their products and/or services for the customers who they profit of the most, which are usually the ones who have the highest demands. Hence, established companies exceed the needs of those segments, but might ignore the needs of other segments. This gives disruptive entrants the opportunity to being with targeting the segments not served by the industry, establishing them as a player that commonly delivers lower priced but more suitable functionality (Christensen et al., 2015, 4). According to Christensen et al. (2015, 4) the established players favour to not respond eagerly as they focus on other segments anyway. Following this step, the new entrants attack the upmarket by delivering the performance that the customers of the established players demand, while still having the advantages which were the reason for them to successfully enter the market. At the point when the so-called mainstream customers start to increase the volume of the entrants product or service, disruptive innovation has occurred (Christensen et al., 2015, 4).

![Figure 9: The Disruptive Innovation Model](image)

It is important to get disruptive innovation precisely, as it is essential for the results to apply the theory in a correct manner. According to Christensen et al. (2015, 6) there are four major facts about the concept which are commonly misunderstood. Firstly, it should be clear that disruption is a process. It is wrong to use disruptive innovation in order to describe a product or a service at a certain point of time. Disruptive innovation is refering to the evolution of a product or service over time, as figure 9 shows. Secondly, it is common that the so-called disrupters in-
vent drastically different business models than those the industry’s incumbents. Thirdly, not all disruptive innovations necessarily succeed. As success is not part of the definition Christensen et al. (2015, 4) made for disruptive innovation, it is wrong to argue that a company is disruptive because of its success. Christensen et al. (2015, 8) claim that “[...] not every disruptive path leads to a triumph, and not every triumphant newcomer follows a disruptive path”. Last but not least is the fear of being disrupted. While companies should definitely respond adequately to disruption, if it even is a disruption. Hence, firms should not act too fast and changing or even disband a functional and profitable business model. The firm should rather strengthen the relationship with its core customer segment and maybe found a department which has its focal point on looking for growth opportunities (Christensen et al., 2015, 6-9).

3.2.2 Process- and Result-Oriented Innovation

According to Schallmo (2014, 23) the term innovation can be characterized by a result-oriented or a process-oriented perspective. From a result-oriented perspective commonly products or processes are the objective of innovation, which results in four different types of innovation within this perspective (Schallmo, 2014, 23):

- Service-Innovation
- Process-Innovation
- Market-Innovation
- Social-Innovation

The innovation of services is understood as the renewal and improvement of products and/or services in order to meet customer demands again. Process innovation is seen as a more efficient way of creating a product or a service. Market innovations in comparison, is the identification of new trends and developments within existing markets. Social innovation is including innovation within the area of legal concerns, of human resources or of the organizational dimension. As those four types of innovation do not include business model innovation it makes sense to extend the types by adding a fifth. There is an imbrication between the types of innovation and business model innovation. Figure 10 (Schallmo, 2014, 7) is showing this overlap.
According to Schallmo (2014, 7) also the degree of innovation is of importance to the innovation of business models. Commonly there is a separation within literature between incremental and radical innovation. Incremental innovation are insignificant changes, which allow a firm to continue acting in established product-market areas and additionally incremental innovation only offers small chances and risks for the firm. Contrarily radical innovation is a fundamental change in a quantitative or qualitative way. In this case quantitative would mean the reshaping of multiple product or process steps, whilst qualitative would relate to including new insights in products or processes. Radical innovation brings increased technological and economical chances, but additionally those chances bare a higher risk compared to incremental innovation (Schallmo, 2014, 7).

### 3.2.3 Closed and Open Innovation

According to Chesbrough (2003, 35) in the past it was a valuable strategic asset, in some industries even a market entry barrier, to have internal research and development. Competitors had to invest considerable amounts in order to create research facilities by themselves, only to have a shot at competing. This has changed during the time Chesbrough (2003) has conducted his research. There is a different process how new entrants to industries, who handle little to non research themselves, get innovation to market (Chesbrough, 2003, 35). As this approach separates from what is commonly regarded as innovation, one has to differentiate between closed and open innovation concerning the explanation of the previously mentioned different process. This section of the chapter business model innovation is dedicated to the divergences between closed and open innovation (Chesbrough, 2003, 36).
Closed innovation is based on the idea that if a company wants to be successful at innovating it needs to be in control. In Chesbrough’s (2003, 36) words, “successful innovation requires control”. In order to follow this approach of closed innovation, companies had to invest sizeable amounts into their internal research and development departments, preferably more than their competition, and hire the best talent the market has to offer in terms of employees. Ideally this would result in yielding certain returns for the investing firm. Mostly in form of discovering the more and better ideas than its competitors. This would allow a firm to get ideas to market first, and to control the intellectual property, which would protect their ideas against competitors. Profits this cycle would reap then could be reinvested into more research and development, which ideally generate more innovations and a cycle of innovation would be established (Chesbrough, 2003, 36).

In comparison open innovation is the case when firms not only commercialize internal ideas, but also outward ones through using in-house or external ways to the market. Moreover, this enables companies to generate value with innovations which go through channels that are outside of their current model. This could be in form of licensing agreements or startups, which get supported through sending employees or financial assets. The key idea is that ideas can be developed outside of the company, but brought into the organization in order to commercialize the idea. Through a pervious border between a firm and its environment the innovation can be moved between those rather easily (Chesbrough, 2003, 36f).

One of the major differences of all the different principles between open and closed innovation, which can be seen in table 3, according to Chesbrough (2003, 37), is in the process on how companies do screen their innovations. While in both research and development processes the company is trying to sort out bad ideas which might have looked promising initially, the open innovation model bares the ability to save ideas which seemed like a failure but actually are quite valuable. The closed innovation model is locked in on the internal focus and most likely will miss a certain amount of such opportunities, as those might require a different business or other technologies in order to unleash its full capability for success. As mentioned earlier, companies with a closed approach invest heavily into their research process, therefore it would be even worse if they realized that a project which was abandoned had actual value (Chesbrough, 2003, 37).
<table>
<thead>
<tr>
<th>Closed Innovation Principles</th>
<th>Open Innovation Principles</th>
</tr>
</thead>
<tbody>
<tr>
<td>The firm employs the smartest people</td>
<td>Not all smart people are employed by the firm, hence a different way must be found to gain access to their knowledge and expertise</td>
</tr>
<tr>
<td>Profit of research is generated through discovering, developing and launching internally</td>
<td>External R&amp;D has substantial value, internal R&amp;D is necessary to capture a part of this value</td>
</tr>
<tr>
<td>The firm who discovers it first, gets the innovation to market first</td>
<td>It is not necessary to introduce the innovation in order to profit of it</td>
</tr>
<tr>
<td>Being a first mover with an innovation is important</td>
<td>Having a better business model is more important than being first mover</td>
</tr>
<tr>
<td>Creating the best and the most ideas within an industry will ensure leadership within an industry</td>
<td>A firm who makes use of internal and external ideas will be an industry leader</td>
</tr>
<tr>
<td>Intellectual property is used to establish barriers versus competitors</td>
<td>Selling a firms intellectual property as well as buying intellectual property if it fits the business model</td>
</tr>
</tbody>
</table>

Table 3: Open versus Closed Innovation - own table based on Chesbrough (2003, 38)

Chesbrough’s (2003, 38) visually presented differences between the open and closed innovation model, as presented in table 3, show a rather one-sided appearance of the term business model. This partly underlines the importance a business model can have as a company can gain a competitive advantage through the business model itself and is not necessarily limited to its own research and development department to gain a competitive advantage. It is quite clear that not all industries have shifted or will be shifting towards the open innovation model, as example it is questionable if the nuclear reactor industry will ever move towards a more open approach concerning innovation. In comparison the media industry in Hollywood has been using a rather open approach of innovation through networks of alliances and partnerships more than a decade (Chesbrough, 2003, 37).
3.3 Definition of Business Model Innovation

According to Wirtz and Thomas (2014, 31) business model innovation has become progressively important during the last couple of years. Especially in dynamic industries business model innovation becomes a relevant success factor. Yang et al. (2016, 1795) also consider business model innovation growing scientific field. Osterwalder and Pigneur (2010, 248) argue that one should make the assumption that even prosperous business models will have a rather short lifespan. As it is an investment a corporation makes into its business model, it only makes sense to think about management of the it’s evolution until it needs to be completely renewed or innovated. The shortfall of a generally accepted definition is a potential source of disorientation that benefits diffusion instead of merging of perspectives, which furthermore obstructs progress on research (Zott et al., 2011, 5). The situation is similar to one regarding the concept business models, where a common definition of the term “business model” has not emerged so far, which presents a challenge to research (Morris et al., 2005, 726). According to Foss and Saebi (2015b, 7) the debate about the definition of the business model concept also impedes the conceptualizing of its innovation. While scholars seem to agree on how important the business model innovation concept is from a strategic point of view, especially concerning the potential regarding competitive advantage, scholars’ opinions differ quite vast across research and studies when it comes to defining business model innovation (Foss & Saebi, 2015b, 7). This subchapter is dedicated to reviewing and analyzing the different approaches scholars have published over time.

Markides (2006, 20) defines business model innovation as a different form of innovation. The argument is that only if a model is new and fundamentally different within an existing business model, it should be considered innovation of a business model. The concept of business model innovation certainly is something vastly different if compared to technological innovation, although both are disruptive innovation types. The phenomena arise in different ways, influence the competition of a firm differently and also responses to the innovation have different requirements. Hence, it is of utmost importance to clearly distinct between the different types of innovation, especially when it comes to research and studying innovation (Markides, 2006, 19). In comparison, Lindgardt et al. (2009, 2) refer to business model innovation only if at least two components of the business model are renewed so they bear value in a different way. Furthermore, Lindgardt et al. (2009, 2) point out that business model innovation is a multidimensional set of activities, which makes the concept challenging for the firm to execute, but also challenging for competitors to imitate.
<table>
<thead>
<tr>
<th>Author(s), Year, Page</th>
<th>Definition</th>
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</thead>
<tbody>
<tr>
<td>Markides, 2006, 20</td>
<td>&quot;Business-model innovation is the discovery of a fundamentally different business model in an existing business&quot;</td>
</tr>
<tr>
<td>Lindgardt et al., 2009, 2</td>
<td>“Innovation becomes BMI when two or more elements of a business model are reinvented to deliver value in a new way. [...]BMI can provide companies a way to break out of intense competition, under which product or process innovations are easily imitated”</td>
</tr>
<tr>
<td>Demil &amp; Lecocq, 2010, 228</td>
<td>“[...] the concept represents a transformational approach, where the BM is considered as a concept or a tool to address change and focus on innovation, either in the organization, or in the BM itself.”</td>
</tr>
<tr>
<td>Gambardella &amp; McGahan, 2010, 263</td>
<td>“In this conceptualization, business-model innovation occurs when a firm adopts a novel approach to commercializing its underlying assets. One area in which many firms with important knowledge assets are currently innovating is in the rising ‘markets for technology’, where firms sell rights to their intellectual property rather than themselves directly commercializing products and services based on their knowledge capital.”</td>
</tr>
<tr>
<td>Osterwalder &amp; Pigneur, 2010, 136</td>
<td>“Business model innovation is not about looking back, because the past indicates little about what is possible in terms of future business models. Business model innovation is not about looking to competitors, since business model innovation is not about copying or benchmarking, but about creating new mechanisms to create value and derive revenues. Rather, business model innovation is about challenging orthodoxies to design original models that meet unsatisfied, new, or hidden customer needs”</td>
</tr>
<tr>
<td>Casadesus-Masanell &amp; Zhu, 2013, 1</td>
<td>“[...] business model innovation refers to the search for new logics of the firm, new ways to create and capture value for its stakeholders, and focuses primarily on finding new ways to generate revenues and define value propositions for customers, suppliers and partners”</td>
</tr>
<tr>
<td>Frankenberger et al., 2013, 6</td>
<td>“At root, a business model innovation can be defined as a novel way of how to create and capture value, which is achieved through a change of one or multiple components in the business model”</td>
</tr>
<tr>
<td>Author(s)</td>
<td>Reference</td>
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<tr>
<td>Schallmo, 2013b, 29</td>
<td>“Die Innovationsobjekte im Rahmen der Geschäftsmodell-Innovation sind einzelne Geschäftsmodell-Elemente (z.B. Kundensegmente, Leistungen). Der Innovationsgrad betrifft sowohl die inkrementelle (geringfügige) als auch die radikale (fundamentale) (Weiter-)Entwicklung des Geschäftsmodells.”</td>
</tr>
<tr>
<td>Afuah, 2014, 4</td>
<td>“Therefore, a business model innovation is a framework or recipe for creating and capturing value by doing things differently.”</td>
</tr>
<tr>
<td>Girotra &amp; Netessine, 2014, 1</td>
<td>“Business model innovation is a wonderful thing. At its simplest, it demands neither new technologies nor the creation of brand-new markets: It’s about delivering existing products that are produced by existing technologies to existing markets. And because it often involves changes invisible to the outside world, it can bring advantages that are hard to copy.”</td>
</tr>
<tr>
<td>Foss &amp; Saebi, 2015a, 8</td>
<td>“Business model innovation may be defined as a realignment of activities, relations, routines, and contracts which results in a new configuration of how the firm creates and captures value that is the[sic] new to the product/service market in which the firm competes.”</td>
</tr>
<tr>
<td>Souto, 2015, 145</td>
<td>“[…] business model innovation could be defined as a new configuration of what is done in the company nad how it is done, in order to provide a new value proposition to customers. In other words, it is the new or significantly improved system of activities required for the generation of a new value proposition”</td>
</tr>
</tbody>
</table>

Table 4: Selected Business Model Innovation Definitions based on Markides (2006, 20); Lindgardt et al. (2009, 2); Demil & Lecocq (2010, 228); Gambardella & McGahan (2010, 263); Osterwalder & Pigneur (2010, 136), Casadesus-Masanell & Zhu (2013, 1), Frankenberger et al. (2013, 6); Schallmo (2013b, 29); Afuah (2014, 4); Girotra & Netessine (2014, 1); Wirtz & Thomas (2014, 36); Foss & Saebi (2015a, 8); Souto (2015, 145)
Schallmo (2013b, 29) approaches the concept of business model innovation even broader as his peers. The scholar introduces the concept of incremental as well as radical change to business model innovation. Objects for innovation are the individual units of the business model, like customer segments or the value proposition, which are changed incrementally, that means small steps, or radically, in this case a would mean a fundamental change (Schallmo, 2013b, 29). Furthermore, Schallmo (2013b, 29) does not limit the business model innovation concept to the idea of developing a model further. Additionally, the scholar acknowledges forging a new model as a form of business model innovation.

Girotra and Netessine (2014, 1), indicate a similar stance as they argue that the focus is about delivering existing products, to already existing markets with existing technology. This occurs to be a rather simplistic approach to business model innovation. Furthermore, it stands in conflict with other approaches made by different scholars. For instance Osterwalder and Pigneur (2010, 5) strongly argue against the case by considering the introduction of the credit card by Diners Club, the introduction of the photo-copier leasing of Xerox and Gutenberg’s mechanical printing as a form of business model innovation, which are clearly products that did not endure before their invention.

Wirtz and Thomas (2014, 36) argue that an critical element of business model innovation is the modification of the value proposition. Furthermore, changing the value constellation of a model is another aspect which is changing commonly throughout business model innovation. As a change of the value constellation is considered a modification during which a step of the value chain is either added or removed (Wirtz & Thomas, 2014, 36). Hence, based on this insights Wirtz and Thomas (2014, 36) define a business model as a process of establishing a mostly new business model, which includes the adjustment of the value proposition and/or the value constellation, in order to ensure or generate a sustainable competitive advantage.

Hence, to find a common ground, and the paramount definition, between those strongly diverging definitions of business model innovation, it is essential to analyse the given definitions after subject of the definitions, functional and teleological aspects (Wirtz & Thomas, 2014, 35). According to Wirtz and Thomas (2014, 35) it is clear that innovation is seen as the change of a business model throughout literature. Nevertheless, there is disagreement about which degree of innovation is necessary to consider innovation to be a business model innovation. Some scholars consider changing components as enough to be considered as a business model innovation (Wirtz & Thomas, 2014, 36). For instance the definition of Frankenberger et al. (2013, 6) is acknowledge business model innovation to be “achieved through a change of one or multiple components in the business model”. Also Lindgardt et al. (2009, 2) argue that “innovation becomes BMI when two or more elements of a business model are reinvented to deliver value in a new way”. In comparison other scholars only consider changes to essential parts of the business model or the invention of a new business model as business model innovation (Wirtz.
Examples here would be Wirtz and Thomas (2014, 36), who define business model innovation as a process which results in a mostly new or totally new business model, or Markides (2006, 20), who defines business model innovation as “[…] the discovery of a fundamentally different business model in an existing business”.

As table 4 shows, there is a clear heterogeneity in the definitions of business model innovation. Despite heterogeneity throughout literature there is an agreement that the function of business model innovation is the renewal or creation of a, possibly new, business model (Wirtz & Thomas, 2014, 36). Furthermore, literature is agreeing that business model innovation commonly results in providing a new value proposition for customers (Souto, 2015, 145).

Subsequently after analyzing the different approaches of different scholars to define the concept of business model innovation, one could argue that a possible definition should describe business model innovation as a concept which:

- includes incremental or radical innovations (Schallmo, 2014, 13; Wirtz & Thomas, 2014; Waldner et al., 2015, 153; Philipson, 2016, 134)

- is a framework for creating and/or capturing value, as well as increasing value for the customer through approaching things in a different manner (Aspara et al., 2013, 460; Matzler et al., 2013, 31; Afuah, 2014, 4)

- is changing one or multiple components of a business model (Frankenberger et al., 2013, 6)

- has the potential to change a whole industry through introducing a new business model (M. Johnson et al., 2008, 2; Demil & Lecocq, 2010, 228)

- allows a firm to offer different solutions than its competitors (Schallmo, 2014, 13; Souto, 2015, 145)


- unlike the innovation of services or products, does not inevitably lead to a new product or service (Yang et al., 2016, 1795)
3.4 Approaches to Business Model Innovation

After determining what a business model is, what it contains, what innovation is and further what the innovation of a model is, the next step would be to ask how is the innovation of a business model approached. Are there any processes which can describe the change and what is necessary to change in order to be declared as a business model innovation. Hence, there are different approaches to answer this questions by different scholars. Therefore, this chapter of the thesis is covering the different existing approaches the reviewed literature offers regarding business model innovation. Among vast amount scholars Giesen et al. (2007), Osterwalder and Pigneur (2010), Cavalcante et al. (2011), Frankenberger et al. (2013), Schallmo (2013a), Afuah (2014) and Dos Santos et al. (2015) are displayed, analyzed, in order to make the approaches comparable and give an overview of the wide variety of different access to the topic of business model innovation.

3.4.1 Approach by Giesen et al.

An approach has been defined by Giesen et al. (2007, 27). In this process the core of driver of business model innovation is the difficulty to imitate business models in their opinion. Therefore, Giesen et al. (2007, 27) developed a framework that consists of three different types of business model innovation, which can be seen in figure 11.

![Figure 11: Types of Business Model Innovation](own figure based on Giesen et al. (2007, 27))
The *industry model* is focusing on the innovation of the value chain within an industry. This particular method to business model innovation can be accomplished in three different ways. Firstly, there is the option of move horizontally into completely new industries by simply leveraging superior skills, which are useful in both branches. As an example Giesen et al. (2007, 27) name among others Virgin, which started as a music and retail company. Today the firm operates in the airline, beverage and financial industry. All brought together by transferring its excellent consumer management capabilities. Hence, if horizontal moves within an industry are an option the counterpart to it would be a vertical move in the value chain. This can be done by redefining existing industries through eliminating intermediary steps of the value chain. According to Giesen et al (2007, 27) Apple would be an example. When the company started selling and delivering music directly via its iTunes software, the firm eliminated the retailers out of the value chain. The third option of the industry model innovation, which would be to develop a completely new industry segment or a whole industry. Using Google and other search engines as example for creating a new industry out of nothing within the last decade. The essence of this approach to business model innovation would be to leverage empty spaces within an industry as well as using unique assets to a firm’s advantage within an competitive environment (Giesen et al., 2007, 27).

Next up would be the *revenue model*, which is focusing on innovation regarding how a company is generating revenue. The firm could do so by rethinking its offerings and/or pricing model. Alternatively it could also introduce new pricing models. In this approach the firm is trying to leverage the customer experience, and also consumer preferences. Nevertheless, a firm could also leverage new technologies within this dimension (Giesen et al., 2007, 28). Giesen et al. (2007, 28), use Netflix’s approach to the movie rental industry as an example for innovation in the revenue model. By offering the consumer monthly subscriptions rather than the pay-per-rental product based structure the industry had before. Similar changes in pricing models can be found in the music markets, where digitalization has enabled companies to offer subscription models (Giesen et al., 2007, 28).

The *enterprise approach* is focusing on the innovation regarding redefining organizational boundaries, in other words to innovate the structure of an enterprise as well as redefining the role a firm plays within value chains, disassociated of new or existing value chains. This could potentially be achieved by integrating the supply chain into a single company or a conglomerate. Alternatively this type of innovation can also be accomplished through specialization of a company. In this case a firm would focus more on its core competencies or activities which generate a high margin and outsource steps which are not essential. An example for taking control over the whole value chain would be the fashion giant Zara, which manages everything from design, over production till sales itself (Giesen et al., 2007, 28f).
3.4.2 Approach by Osterwalder & Pigneur

Osterwalder and Pigneur (2010, 244) propose their so-called *business model design process* in order to describe the innovation of a business model. According to the scholars (2010, 244) this generic process can be adapted specifically to an organization’s needs. The proposed process has five phases, which are mobilising, understanding, designing, implementing and managing. It should be mentioned that the process is rarely linear. Especially understanding and designing have tendency to happen at the same time. Figure 12 illustrates the proposed process.

![Figure 12: Business Model Design Process](own figure based on Osterwalder & Pigneur (2010, 249))

As figure 12 shows, the first stage of the design process, is the *mobilizing* phase. During this phase the major activities would be creating objectives for the project, testing first ideas, creating a plan and assembling a team for the project. Creating objectives highly depends on the projects, nevertheless commonly it involves a project scope and main objectives. Needless to say both should be realistic. Furthermore, an initial plan should be developed. This plan should cover the first three phases of the process, mobilising, understanding and designing. As the following phases of the process, implementing and managing, are depending tremendously on the result of those phases, the planning should be done carefully and focused only on the first three, due to the later ones can only be planned with having results. Among those important activities, which will determine the success of this project, there is also the assembling of a project team. Diversity should be the topic when building a team, next to a deep commitment to business model innovation, additionally a mixture of industry experience, out-of-the-box thinking and management expertise should be added to the team’s skill set (Osterwalder & Pigneur, 2010, 250). Attention should be paid to the overestimation of ideas regarding new business models. This it could lead to a rather closed mindset regarding other ideas and limit the possibilities brought up during this phase (Osterwalder & Pigneur, 2010, 251).
The next step is the phase about generating a good *understanding* of the environment of the organization, which will be the context for the business model. Examine the environment of a business involves among other activities market research, doing further research on customers, investigating competitors and their business logics. During this phase of researching the firm runs risk of doing too much research, which could lead to losing the connection between the initial objectives of the project and research which is currently performed (Osterwalder & Pigneur, 2010, 252). Osterwalder and Pigneur (2010, 252) point out that is very important to develop deep knowledge about the customers the model is supposed to serve. It happens quite a lot that the customer segmentation is not clearly set from the beginning. A major challenge during this phase is to not take the assumptions of the industry or established business logic and models for granted. It should be kept in mind during the research that business model innovation can be found almost anywhere (Osterwalder & Pigneur, 2010, 251).

The third phase of the business model design process developed by Osterwalder and Pigneur (2010, 254) is the *design* phase. During this phase the focal point should be to establish a bold new business model and stick with it. Time should be taken to explore the multitude of ideas. When a lot of different paths are examined as this holds the highest chance of finding the best alternatives. Ideas should be critically investigated as it is easy to fall in love with an idea too early. Hence, in order to be critical potential ideas have to be tested, ideally through or with outside experts or clients. Feedback can enable a company to successfully refine its business model (Osterwalder & Pigneur, 2010, 254). Especially in established companies bold ideas could be tamed and watered down, which of course prevents an overwhelming amount of obstacles in the scenario of implementation but also limits the idea pool (Osterwalder & Pigneur, 2010, 255).

As the fourth phase Osterwalder and Pigneur (2010, 256) declared the process of *implementing* the idea of the prototype model in the field. Translating the idea into an actually model which will be implemented needs all projects which are related to the new model to be brought up to speed for implementation. This includes setting milestones, organizing legal structures, planning a budget and creating a roadmap. One approach to this phase would be to create a business plan in order to outline the implementation phase. During this very important phase, uncertainties need special attention. By special attentions is meant monitoring the risk-reward ratio and expectations versus results. In order to deal with this feedback, mechanisms to adapt the new model as quickly as possible to reactions from the market should be developed (Osterwalder & Pigneur, 2010, 256). It is important, especially in established companies, to clearly communicate the changes and therefore counteract the fear of the new within the organization. The logic of and also reasons for the newly developed model should be communicated clearly and understandably (Osterwalder & Pigneur, 2010, 257).
The last phase of the business model design process, proposed by Osterwalder and Pigneur (2010, 258), is the phase of managing the business model. When a business model is implemented the operation is not done. In the interest of staying successful the business model should be continuously assessed. This includes among other activities scanning the environment, which helps to grasp how external factors might affect it in the long run. Additionally, the model should be evaluated against the outcomes of the environmental scans. This will give an idea if the model needs adjustments or worst case to be completely re-done. In an ideal world every employee is trying to improve and rethink a firm’s business model instead of only the senior management. As mentioned before ideas for new business models can emerge from places one would not predict to find them (Osterwalder & Pigneur, 2010, 258). According to Osterwalder and Pigneur (2010, 258f) the life-cycle of business models is shrinking rapidly, which leads to the challenge of having another business model ready when the old one is done. Ideally the process starts with thinking about replacing the cash-generating model with a growth model for the market place of the future. Developing a variation of business models is a successful approach where cash-generating models finance the experiments, which should help prepare for the future (Osterwalder & Pigneur, 2010, 259).

3.4.3 Approach by Cavalcante et al.

Cavalcante et al. (2011, 1330) approach the business model innovation through arguing that only changes, which are affecting the standardized core mechanisms of a business model, are able to change the model itself. Hence, according to the scholars (2011, 1330), change, which is not fundamental, has no influence on the business model. Therefore it is not part of the four different types of change. The four different types of change are:

- Business model creation
- Business model extension
- Business model revision
- Business model termination

Furthermore, the framework, which is presented in table 5, establishes a link between the previously explained degree of innovation and the BMI concept (Cavalcante et al., 2011, 1330).

Business model creation is when the business idea is transitioned into a new venture. In other words the creation process is getting a newly designed business model up and running. The idea comes from entrepreneurship and is based on the assumption that there are no standardized processes or working practices which can influence the implementation of the new business model. At this stage the processes, which concern the future customers, suppliers, competitors or partners, are mostly ideas or hypotheses. Additionally, the model has to be created under
<table>
<thead>
<tr>
<th>Type of Change</th>
<th>Characterization</th>
<th>Key Challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Business model creation</strong></td>
<td>Creation of new processes</td>
<td>Uncertainty and ambiguity (failure and inefficiency)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lack of knowledge and skills</td>
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<tr>
<td></td>
<td></td>
<td>Lack of resources</td>
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<tr>
<td><strong>Business model extension</strong></td>
<td>Adding new processes</td>
<td>Controlled risk</td>
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<td></td>
<td></td>
<td>Some shortage of resources</td>
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<tr>
<td><strong>Business model revision</strong></td>
<td>Changing existing processes</td>
<td>Uncertainty and ambiguity</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lack of knowledge and skills</td>
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<td></td>
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<td>Path dependence, inertia</td>
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<td>Blinders, cognitive manifestations</td>
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<td>Resistance</td>
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<tr>
<td><strong>Business model termination</strong></td>
<td>Terminating existing processes</td>
<td>Resistance</td>
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</tbody>
</table>

Table 5: Business model change - own table based on Cavalcante et al. (2011, 1334)

High uncertainty and ambiguity as there is a lack of knowledge about challenges in all kinds of different areas, e.g. law, technology, marketing, as well as finance. Further challenges during this stage of a newly developed business model would be the creation of acceptance by customers, to succeed in a profitable market which allows survival, the improvement of technologies and competences, to create an organizational structure in order to coordinate a firm’s activities (Cavalcante et al., 2011, 1332f). The major innovation for this type of change is when the vision is coming into practices, hence when the implementation of initial processes, which are necessary to run the business, is finished (Cavalcante et al., 2011, 1332).

*Business model extension* happens at a stage when core repeated standardized processes of a firm are already defined. Furthermore, new activities are added and/or existing core processes are expanded to an existing business model. The extension is commonly driven through exploration of opportunities in order to enlarge the current business and furthermore to find and use associated chances. Difficulties for a firm in this stage of change could be attracting additional financial capital, uncertainty regarding the size of demand or if there actually will be any demand at all, challenges when increasing human resources, and problems with coordination between existing and expanded activities of the firm. Experience gathered in the usual frame can help dealing with those changes which commonly involve changes in the working practices of a business model (Cavalcante et al., 2011, 1332f).
The third type of change according to Cavalcante et al. (2011, 1333) is the revision of a business model. This type is the case when a firm removes a part of an existing business model and replaces it with a new process. As the revision process implies intervention in existing procedures this suggests finding new directions or alternative ways for doing business as a firm. Reasons for revision of existing business model concepts are among others, new opportunities for a firm which require the organization to do business in a new way, or the inefficiency of the current business model, which could be due to the lack of fit of the product or service for customers’ needs. Other reasons would be the development of new processes by competitors, which are threatening to poach the firm’s market share, or new business models introduced by new entrants to the industry, which offer completely new solution to meet existing demand. The previously introduced types are focusing on the conceptualization and the implementation of a new model or the expansion of existing models. All of those are not affecting existing processes. In comparison during the revision of a business model, existing working practices are a subject of change. This can involve significant challenges as fundamental changes are required. The constraint of a company’s ability to create structural changes in order to respond to shift in the environment are a major challenge. Additionally path-dependency, which refers to lock-in mechanisms, keeps a firm on its existing track, but makes change more difficult and is another major challenge when it comes down to the revision of business models. Last but not least would be the resistance of change through employees, also making the change of existing work processes harder than it might necessary (Cavalcante et al., 2011, 1333).

The fourth and last type of business model innovation according to Cavalcante et al. (2011, 1334) would be business model termination. The termination term is referring to the removal or abandonment of a process or several processes of the business model. The termination can be either closing down an area of a business or even the closing of an entire firm. In the case of the abandonment of a part of the business the activities which remain within the model will be further developed. Difficulties in this type of innovation are rather foreseeable barriers and hurdles, among such reasons would be the resistance or indecision of the owner of the company (Cavalcante et al., 2011, 1334).
3.4.4 Approach by Frankenberger et al.

A thoroughly detailed study of Frankenberger et al. (2013, 15) found out that the process of business model innovation is a rather structured process overall, despite some divergences in the phases. Hence, Frankenberger et al. (2013, 15) based their approach, which is called the four i process, to the concept of business model innovation along the four phases of the innovation processes:

- initiation
- ideation
- integration
- implementation

In the beginning there is the initiation phase, where the focal point lies on the studying of the ecosystem. Followed by the ideation phase, during which innovative ideas are supposed to be generated. Thirdly there is the integration phase which has the task to build the new business model. Last but not least there is the implementation phase, which could be also referred to as the realisation phase, where the firm is implementing the newly developed business model. The first three steps of the process could be summarized as a design phase, where the major focus is lying on the development of content, while the realisation has its focal point on the commercialization of the developed content. (Frankenberger et al., 2013, 15). The following section is explaining the four steps, which can be seen in figure 13 on a more detailed level. Furthermore, it takes a close look at the challenges those steps of the business model innovation framework.

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**Figure 13: Types of Business Model Innovation - own figure based on Frankenberger et al. (2013, 16)**
According to Frankenberger et al. (2013, 11) the process of business model innovation starts with the *initiation phase*. During this phase the focal point lies on the ecosystem of the innovating company, especially on understanding and monitoring the environment. The environment of the company consists of customers, suppliers, competitors, governments or other regulatory bodies, as well as schools and universities. Summarized all players which can influence the firm are seen as the ecosystem. Frankenberger et al. (2013, 11) point out two major challenges during the initiation phase of the process, understanding the needs of the players and identifying drivers of change.

Starting with understanding the needs of players. Needs and moves of players, who are relevant to the firm, can start the change of a business model. Hence, it is important to keep an eye on the players and monitor them closely. Commonly, contact with customers, suppliers or moves of competitors, such as pricing changes or business model changes, can be starting points of a business model change (Frankenberger et al., 2013, 11).

The second challenge, which Frankenberger et al. (2013, 11) point out, is the classification of change drivers. Changes in technology, as example digitalization, or regulatory changes, which can bring new and unexpected rivalry into the market, are common drivers, which can trigger the innovative process of re-thinking a firm’s business model. As those changes can happen quite rapidly, it can be difficult for firms to keep up with their changing environment. Nevertheless, it is a precondition for successful innovations of business models.

To summarize the first step of the process developed by Frankenberger et al. (2013, 12), one could say the initiation phase is where a company identifies changes within its environment, which furthermore enables the company to respond with innovations.

The second step of the four i process is the *ideation phase*. This phase of the generic innovation process is focused on generating ideas for new potential business models. As this phase follows directly after the initiation phase, the opportunities, which were identified before should, now be put into concrete ideas (Frankenberger et al., 2013, 12). Similar to the previous phase this one has challenges, which have to be considered, as well. The three driving challenges during the phase of ideation are, firstly the difficulty to prevail the current business logic, secondly the difficulties to think in business models and thirdly the lack of systematic tools for developing new ideas concerning business models (Frankenberger et al., 2013, 12).

Starting with the first challenge, thinking outside the box. Firms are often locked in a logic which is defined by the current business model and the industry. This happens due to the problem that managers are commonly working within an industry and sometimes at the same company for years. It can be challenging to break out of the lock the current business logic forces onto the mindset after getting it taught and using it for a longer period of time. A major source of inspiration, during the phase of ideation, are competitors, due to the fact that industry business logics are rarely challenged (Frankenberger et al., 2013, 12).

Next up would be the challenge “to think in business models”. It can happen that management is thinking in product or service developments when trying to solve a problem. This could be...
due to a missing attitude of thinking in business models (Frankenberger et al., 2013, 12).

Last but not least Frankenberger et al. (2013, 12) argue that systematic tools to develop ideas for innovative business models are nowhere to be found. Hence, according to Frankenberger et al. (2013, 12), managers have no support for idea generation when it comes to BMI, due to most of the tools for innovation management are designed for product or services. Commonly used tools for business model innovations is value chain analysis and market research. Furthermore, bringing on external experts and ideas into the process of ideation, can help overcoming those challenges (2013, 12).

Thirdly the phase of integration, is all about turning the promising ideas, which were previously generated in the ideation phase, into a viable and fully developed business model. Similar to the previous phase, Frankenberger et al. (2013, 13) identified two major challenges, integrating all pieces of the new model and managing a firm’s partners. Frankenberger et al. (2013, 13) argue that the difficulty lies not in changing a piece of a business model, but rather aligning the other parts of it. In case a model’s units lack integration it could cause difficulties or worst case even a failure of the implementation of a new business model (Frankenberger et al., 2013, 13).

Secondly, the management of partners plays an almost critical role in the integration phase. In order to integrate a new business model it needs to be aligned with the models of the firms’ partners. This is a complex task that obliges a lot of resources and energy. Hence, it can result in complex agreements with the partners. There might be a similarity to a challenge mentioned previously in the initiation phase, yet it is a different phase. While during the initiation phase it was all focused on identifying and monitoring needs, opportunities in the ecosystem in order to find a point where to start with the new business model, in this phase the challenge is dealing with the integration of partners directly into the design of the new model (Frankenberger et al., 2013, 13). Frankenberger et al. (2013, 13) argue that a fresh model can work only if support of all involved parties is given and their respective business models are adapted correspondingly. This means a firm should manage their partners permanently and actively.

The fourth and final phase of the BMI process according to Frankenberger et al. (2013, 14) is the implementation phase. When a business model is designed and integrated, it can be implemented. Implementation commonly requires big investments as well as risks which have to be taken by the organization. In comparison to the innovation of a product, when innovating a business model prototypes cannot be shared and tested with customers during the development. Instead they have to be fully implemented in order to be tested appropriately (Frankenberger et al., 2013, 14).

Frankenberger et al. (2013, 14), refer to the implementation as the hardest step of the process, and a crucial point of business model innovation. Challenges within this phase is firstly to overcome internal resistance and to manage the chosen approach of implementation. Overcoming internal resistance is the first and obvious challenge. Frankenberger et al. (2013,
argue that employees are resisting to change due to the problem that people are commonly afraid of a newly developing situation as well as the lack of reason for change from their perspective as the old business model is still working. Hence, it is of great importance to have a plan and communicate clearly and openly about the influence and the necessity of the new business model. The process of organizational change itself is not an easy one. Yet in the event of a business model innovation the scope of change is bigger, hence the required changes are in many different areas of the firm making the process harder (Frankenberger et al., 2013, 14). The second challenge of this last phase is the management of the implementation. Usually approaches like pilot projects, trial-and-error or experimentation are used in order to diminish the risk of the process. An implementation where the model is fully implemented at once is a rather rare phenomenon, Frankenberger et al. (2013, 14) call this a big bang. Commonly firms use a step-by-step approach towards a full realisation of the new business model. Ensuring that lessons learned from the approaches are saved and applied for the fine tuning of the business model is the critical threat. According to Frankenberger et al. (2013, 14) the trial and error approach usually prompts in success, as the subsequent adjustments contribute to a new business model. Business models commonly get rolled out country by country or market by market, this allows specific adjustments and therefore is the most dominant approach according to Frankenberger et al. (2013, 14).
### 3.4.5 Approach by Schallmo

Schallmo (2013a, 86) created a procedure for business model innovation. According to the scholar (2013a, 86), it is based on a process developed through taking into consideration all relevant existing approaches in literature and forming a process out of those. As figure 14 shows, the approach of Schallmo has six phases. The starting point is generating ideas for a business model. Followed by developing a vision. Afterwards the development of a prototype. The next step would be the development of a business model, followed by the implementation of a business model. At the end of the process is the extension of the business model (Schallmo, 2013a, 86-88).

![Figure 14: Process of Business Model Innovation - own figure based on Schallmo (2013a, 89)](image)

Figure 14 furthermore shows three delineation of the business model innovation concept according to Schallmo (2013a, 90), which have to be explained:

- **Business model innovation in the strictest sense** is only concerning the phase where a developed model becomes realized and therefore commercialised.

- **Business model innovation in a wider sense** includes next to the implementation phase also all upstream phases of the process, which means all phases from the idea generation of a business model until the implementation of the model.

- **Business model innovation in the widest sense** includes all phases from the idea generation to the implementation as well as the phase the business model extension.

Starting with the *idea creation* of a business model as it is the first step of the process. During this phase new and innovative business models are created through using different creativity techniques, without orienting ideas on existing business models or business logics. This enables the generating of radical business model innovations. Ideas generated through this phase will be noted in form of a profile and evaluated. This allows comparability between the different ideas (Schallmo, 2013a, 86).
The second phase of the BMI process is the development of a vision for the model. Based on the ideas generated in the previous phase of the process, and the integration of customer needs, technological trends, environmental trends (macro and micro-environment of the firm), a vision for the business model can be developed. This vision defines the cornerstones which characterizes the ideal business model within an industry for the next years. Furthermore, it enables the integration of customers and the consideration of future technological advances (Schallmo, 2013a, 86).

As the third phase the development of a prototype for the model is now due. The previously developed vision for the business model is now used as a starting point to describe the prototype of the model. It is important that all relevant aspects of the industry, e.g. the value chain and stakeholders, are included in the prototype. All prototype ideas should be evaluated and the most promising prototype should be selected (Schallmo, 2013a, 86). Different prototypes should be generated in the same style, all should have those dimensions and elements Schallmo (2013a, 52) defines in his approach to the business model concept. Figure 7 gives a visual of the scholars’ approach to the business model concept, as a reminder according to Schallmo (2013a, 23) a business model consists of a partner dimension, a value creation dimension, a value proposition dimension, a customer dimension and a financial dimension.

The fourth step of the process, according to Schallmo (2013a, 88), would be the development of the business model. During this phase the earlier developed prototype becomes substantiated. In order to do so the dimensions of the business model are developed on a more detailed level and a form of directory for the components is established. At the same time an area of effect is designed, which includes all critical factors of the business models and their dependency. Those critical success factors will be measured through key performance indicators (Schallmo, 2013a, 88).

Up fifth is the implementation of the business model. During this phase a target-performance comparison of the existing and the essential dimensions of the business model should be done. This enables the implementation of the business model with a structured plan. With the newly implemented business model experiences can be collected, which can be used for the next step of the process, the extension of the business model (Schallmo, 2013a, 88).

The last phase of the process would be the model extension. Based on the previously gained experiences an extension of the business model should happen. The adaption of the newly implemented model should be the goal of this step. Additionally, the business model should be adapted to the requirements of geographical regions, countries. This enables the range of the business model on both the geographical as well as on the content dimension (Schallmo, 2013a, 88). Figure 15, gives visual support in order to display a summary of the process of business
3.4.6 Approach by Afuah

According to Afuah (2014, 11) one should understand the degree to which the boundaries have changed or should change due to business model innovation. In order to do so there are two factors to be taken into account. Firstly, it is relevant to know the degree to which currently existing products or services are regarded as noncompetitive as a result to the innovation of the business model. Secondly, it is important to understand if existing capabilities are obsolete through the new business model or to which degree they are affected. Both factors can either result in a high or low degree, leading to four different types of business model innovation as figure 16 shows.

As reported by Afuah (Afuah, 2014, 13) the regular type of business model innovation is the case when a corporation is using its existing capabilities to develop a new business model. In this type of change neither the existing products are rendered as non-competitive, nor can existing capabilities be seen as obsolete. The products, which already exist, remain competitive in the market. In this case the products may take some market share off the competitors who use the old business model, but in this scenario the old model stays competitive enough to be a force in the industry.
The second type would be capabilities-building. In this type of business model innovation capabilities, which are needed in order to form as well as capture value with the new model, are fundamentally different in comparison to the outdated model. Nevertheless, products of the old business model still remain competitive. This approach is described as capabilities-building as capabilities, which are needed to go after the model, need to either be acquired or built up from nothing (Afuah, 2014, 13).

Thirdly, the position-building pattern of business model innovation. In this type the opposite to capabilities building is the case, as products and/or services of the new business model put the ones the old business model produces in a state where they are not competitive anymore. Despite that, the underlying capabilities of the business model are basically the same in the old business model. This type of business model innovation is described as position-building as it depicts other products or services as not competitive anymore (Afuah, 2014, 13).

**Revolutionary** is the last type of business model innovation, in which case the new model renders existing products as non-competitive and additionally renders existing capabilities as obsolete. If this scenario appears the new revolutionary business model is redefining a market, more specifically what creating and capturing value within the market looks like. The value chain activities are performed in a completely different way. This is the most tremendous variant of

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**Figure 16: Types of Business Model Innovation - own figure based on Afuah (2014, 12)**

<table>
<thead>
<tr>
<th>High</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>Position Building</td>
<td>Revolutionary</td>
</tr>
<tr>
<td>Capabilities-Building</td>
<td>Regular</td>
</tr>
</tbody>
</table>

Degree to which business model innovation renders existing products non-competitive

Degree to which business model innovation renders existing capabilities obsolete
business model innovation as the organization is completely changed (Afuah, 2014, 14).

3.4.7 Approach by Dos Santos et al.

Dos Santos et al. (2015, 47) propose an approach which requires an already existent business model with in the company. The approach for business model change, as these scholars named their process, is divided into four different categories of change, each with two more subtypes, as it can be seen in table 6.

<table>
<thead>
<tr>
<th>Classification</th>
<th>Type</th>
<th>Type of Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reactivating</td>
<td>Adding</td>
<td>Adding a new activity to the firm</td>
</tr>
<tr>
<td></td>
<td>Removing</td>
<td>Removing an activity from the firm</td>
</tr>
<tr>
<td>Relinking</td>
<td>Regoverning</td>
<td>Governance of transactions between market, hierarchy, and hybrid</td>
</tr>
<tr>
<td></td>
<td>Resequencing</td>
<td>Change the order how companies perform activities or interdependence among units between pooled, sequential and reciprocal</td>
</tr>
<tr>
<td>Repartitioning</td>
<td>In/Outsourcing</td>
<td>An organizational unit of the firm gets moved from outside to inside or inside to outside the company</td>
</tr>
<tr>
<td></td>
<td>Reassigning</td>
<td>An organizational unit gets moved from one unit to another unit within the company</td>
</tr>
<tr>
<td>Relocating</td>
<td>Off-shoring</td>
<td>Moving activities from the home country of the firm into a foreign country</td>
</tr>
<tr>
<td></td>
<td>On-shoring</td>
<td>Moving activities from an foreign country into the home country of the firm</td>
</tr>
</tbody>
</table>

Table 6: Typology of business model change - own table based on Dos Santos et al. (2015, 47)

Reactivating is the first classification for business model change in table 6 and probably the simplest form of business model change. According to Dos Santos et al. (2015, 47), reactivating describes the type of change where either an activity is added or removed from the company’s activities. Reactivating can be linked to repartitioning. In the case of adding an activity the company could be insourcing an activity, or in comparison it could be removing an activity and therefore outsource this organizational unit.

According to Dos Santos et al. (2015, 48), relinking is a type of change where either the transaction governance for activities or the interdependence between units of the organization is changed. Relinking can be distinguished into regoverning and resequencing. Relinking in form of regoverning can take several different appearances, such as moving a transaction between market, hierarchy or a hybrid. In comparison resequencing would be the case when the interdependence between different units of the organization is changed. This can happen in form of a
rearrangement of the input output sequence, or alternatively when the nature of interdependence is changed. The nature of interdependence can be adjustment as example between pooled, sequential and reciprocal (Dos Santos et al., 2015, 48).

Repartitioning is a type of business model change where the organizational unit, which performs an activity set, gets moved. Repartitioning either appear as in- or outsourcing. In this case an organizational unit, and with it the activity set this unit is performing, gets moved from outside the focal company to inside, which would be insourcing, or vice versa from inside the focal company to outside, which would be outsourcing. Nevertheless, repartitioning might also be simply moving an organizational unit within the focal company from one business unit to another one. In this particular case the activities which the unit performs remain unchanged whilst the organizational boundaries change (Dos Santos et al., 2015, 48).

Relocating is the last type of business model change Dos Santos et al. (2015, 48) propose. Relocating can be defined as a form of change where the existing activity set of the incumbent business model is moved to another country. Relocating can be separated into off- and on-shoring. Off-shoring would be moving the activities within the organization from the home country to a foreign country, whilst on-shoring is the opposite, where a activity set gets moved from a foreign country to the organizations’ home country (Dos Santos et al., 2015, 48).
3.4.8 Approach by Buschmann

As the underlying model for the procedure to business model innovation, Buschmann (2016, 152f) uses the business model canvas established by Osterwalder and Pigneur (2010, 18f). Buschmann (2016, 153) approaches the subject of business model innovation with six different strategies:

- Split Up
- Substitution
- Extension
- Inversion
- Exclusion
- Transfer

Starting with the first strategy, the split up approach. This strategy is commonly used when a unit of the business model, as example a market dimension, gets split into two or more segments. For instance, a retail chain, which only had retail stores so far, decides to launch an online shop. From a business model point of view this would mean that the market dimension and all directly connected dimensions would get split into two approaches. It is important for companies to pay attention to all the interactions within the business models. With reference to the given example of opening a new online store, a firm has to consider the changes in logistical processes as well as a different cost and revenue structure (Buschmann, 2016, 153).

The second point in Buschmann’s (2016, 153) method to business model innovation would be the strategy of substitution. In the case of substitution an already existing unit of the business model gets replaced by another dimension. This unit fulfils the same role or respectively has the same benefit for the organisation. Especially advancements in technology are often found to be implemented via a substitution strategy. To return to the previously made example of the retail chain, which opened an online store in addition to its retail stores, in the case of a substitution strategy the chain would simply replace the retail store with the new online shop. Hence, substitution is a more radical approach to the change of a business model compared to the previously explained split-up approach (Buschmann, 2016, 153).

Up next would be the third strategic approach, the extension of the business model. This strategy is used when an established business model gets extended by adding another dimension. Examples here fore would be the addition of cameras and GPS navigation to the mobile phones. This led to an extension of the market for phones into the market for digital cameras, which showed the potential for change the extension of the business model bares (Buschmann, 2016, 154).
The fourth approach, according to Buschmann (2016, 154) would be the inversion. In this approach to business model change an existing function of a product or service gets moved out of the process. The idea is that it becomes established as an stand-alone product or service, hence it becomes its own business model. This strategic approach can be seen as the counterpart to the extension of a model. This might not be as intuitive as the previous strategic changes, but there are great examples and according to Buschmann (2016, 154) this approach has been used a lot in practice during recent developments. For instance when producers started to offer CD-drives as an individual product in order to save space inside a laptop (Buschmann, 2016, 154).

As the fifth approach Buschmann (2016, 154) discusses, the exclusion. While the previous inversion approach moves a part of a business model into a stand-alone model, this approach is about how a business model can be innovated by wilfully removing an unnecessary component or several components from it. Partly, the business model innovation concept can transfer approaches here from the product innovation. As example a sports car, which gets delivered without any additional extras in the car, is called a no-frills approach. Transferring this to the business model concept is of great effect, if a firm is only focusing on the fundamental value creation. This approach is especially useful if the structure of an industry is supposed to be changed. An example would be the airline company Ryanair, who simply focused on the essential idea of air traffic, which is to bring people from one place to another. While the Ryanair’s competitors were busy adding new special services, in order to create a competitive advantage through differentiate themselves from the available choices on the market, the company established a business model, which is focused on offering basic flight tickets as cheap as possible (Buschmann, 2016, 154f).

Last but not least is the approach of transferring. In this particular choice the change of a business model is executed by moving a component from an old business model into a newly established one. By transferring an existing strategy from one industry into a new one, completely new opportunities open for a firm in form of new markets. There is either the option to only move a dimension or several dimensions of the model into the new industry or if the whole model should be applied to the new industry. While this type of business model innovation bares the highest potential, it also needs a firm to be able to think abstract. The chances for this type of innovation would be that competitors do not take the new entrant in the industry serious and therefore underestimate the firm (Buschmann, 2016, 155).
3.5 Drivers of Business Model Innovation

Saebi (2015, 152) argues that literature concerning business models and business model innovation has paid comparably little awareness to what drives the change of those models. This is only partly true, as the competitive advantage a business model can generate is used again and again throughout literature. As example Amit and Zott (2012, 42) argue that business model innovation is such a potent tool to generate an advantage versus competitors, that senior management has to be prepared for the possibility of competitors trying to use BMI for their advantage. The competitive advantage is generated through the challenge for competitors to imitate a business model, as it is far more difficult for competitors to imitate a whole model instead of copying a process or a product. Additionally, business model innovation commonly embodies a future source of value for a firm, which is currently not seen as one (Amit & Zott, 2012, 42).

Berends et al. (2016, 182) agree with the previously made argument, that business model innovation bares the potential to be a significant source to enhance a company’s performance and create competitive advantage. Further references made to the competitive advantage which can be gained through business model innovation were made for example by Ranjith (2016, 206), DaSilva and Trkman (2014, 387) and Schallmo (2014, 13).

As example, Mitchell and Coles (2003, 15) argue that a reason to continuously innovate a company’s business model is thus it provides the firm with a way to not only to gain a competitive advantage, but also with a way to hide it for a certain time. Similar to a fake in sports, when a company changes its focus through changing its business model, competitors might get stuck in the wrong direction, until the company reveals its new model. Other competitors might be overwhelmed with the changes and unable to react in time. Either option could give a firm a competitive advantage as it possibly leaves competition out of position and therefore unable to responded adequately (Mitchell & Coles, 2003, 15).

According to Osterwalder and Pigneur (2010, 244), the starting point, the context and objectives, challenges and success factors, all of those are unique for every company and therefore for every business model. It might be that firms are reacting to a crisis, looking to grow further, bring a product or service to market or still be a start up (Osterwalder & Pigneur, 2010, 244). Nevertheless, Osterwalder and Pigneur (2010, 244) argue that a firm’s innovation of its business model is usually motivated through one of following objectives:

- satisfying market needs which already exist but are unanswered
- to disrupt, transform or advance and already existing market
- establish a completely new market
- to offer new technologies, products or services to already existing markets
- the existing model is in a crisis or might even has a near death experience
• the current model needs to be adjusted, defended or improved due to a changing environment

• exploring and testing radically new models which could help to prepare for the future

Lindgardt et al. (2009, 3) argue that business model innovation is in some cases motivated by the desire to protect an existing model. Commonly companies determine to innovate their business model for the sake of protecting a dying core business, or defend it versus attacks of competitors, both are defensive drivers. Furthermore, BMI can be seen as a possible solution for firms who need to break out of excessive competition. This is the case as BMI is harder to imitate than product or process innovations. Additionally, business model innovation can be a way for companies to deal with changing regulations or technological transitions (Lindgardt et al., 2009, 2f).

Zott and Amit (2007, 184) make an interesting argument that the shortage of resource can be a challenge, but also a driver for business model innovation, as the abundance of important resources is forcing companies to create and establish innovative business model designs, which are able to work despite the lack of resources.

Johnson et al. (2008, 7f) have identified five strategic situations, which commonly require respectively drive a change of the business model. Starting with disruptive innovation, the previously explained concept of Christensen et al. (2015, 4). This can be seen as an opportunity to change an existing business model. The idea to supply a large group of potential customers, who’s needs are currently not met by existing offerings, as those are either to expensive or to complicated. Secondly, technological innovation, which can be commercialised through a brand new business model or through bringing an already tested technology into a completely new market. The third opportunity, would be to bring a job-to-be-done focus where it is currently missing. Such a focus can lead to increasing profitability, as companies commonly focus in some industries on refining existing products more and more. An example here fore would be FedEx, who instead of trying to compete through pricing or marketing. Instead the organization created a competitive advantage by focusing on delivering faster and more reliably than its competitors, which at time was a job undone. The fourth situation would be business model innovation in order to defend versus competitors, who try to attack a market on the low-end of pricing. Last but not least, business model innovation is driven by shifts in competition. Acceptable offers within a market will change over a certain time period and leading products will become standardized products, hence business models need to be changed for firms to respond adequately (M. Johnson et al., 2008, 7f).
While a lot of scholars mention the influence the environment has onto a business model and the change respectively innovation it requires of a firm (Osterwalder & Pigneur, 2010, 200; Teece, 2010, 172; Wirtz et al., 2010, 273; zu Knyphausen-Aufseß & Zollenkop, 2011, 112; Christensen et al., 2015, 7f). Saebi (2015, 152f) argues that environmental change is a powerful driver which can appear in three different versions, regular environmental change, environmental shifts and environmental competitiveness. Those types differ in the dimensions of frequency, amplitude, predictability and velocity. Starting with regular environmental change, which is the case when the environment of a firm is rather stable and change happens with low intensity at a gradual pace. Which makes the pattern of change very predictable and alternations to conditions are small. Nevertheless, firms will need to incrementally change their model for the sake of staying competitive. Firms most likely will only adjust or change their model in this environmental condition if it is simplistic and iterative (Saebi, 2015, 153).

Next up are environmental shifts, which are disruptive and sudden changes to the environment of an organization. Those kind of shifts in an environment commonly are brought by radically changes in technology, new entrants or major changes within politics or regulations. Environmental shifts do not happen frequently and usually do not repeat themselves. Still the amplitude bares the potential to destroy competences of companies, as they can make products as well as services simply obsolete. Therefore environmental shifts are said to be able to deal severe damage. What is making the situation even worse for firms is the problem that commonly those shifts are not very predictable and the environment tends to be quite unstable once it has been confronted with such a alteration. This type of change within an environment requires an tremendous amount of change from a firm, and business model innovation is an enabler to stay ahead of such shifts (Saebi, 2015, 153f).

The third type of environmental change would be environmental competitiveness. This can be considered as rather a barrier to business model innovation than a driver. In so-called hyper-competitive markets, which are markets whom are changing constantly at a very high pace while having intense competition. Those kinds of markets are usually described by very intensive pressure to strive for higher efficiency for the sake of competitiveness under the stress to lower the prices often. Additionally, firms in product-related industries need to keep up with rapid innovations (Saebi, 2015, 154). According to Saebi (2015, 154) answering this sort of constant change in an environment, especially when there is a steady improvement of the competitive advantage at a fast pace, BMI would be ineffective and also could be harmful. Firms within those markets have scarce resources and results of innovations do not necessarily have a long lifespan. Hence, firms most likely cannot afford to go through the process of business model innovation over and over again. Potentially only non-core dimensions might be innovated as this allows a quicker response to the volatile market (Saebi, 2015, 154).
3.6 Barriers of Business Model Innovation

The innovation of business models, as it has been stated before, has become a necessary reaction to strategic disruptions, a varying base of competition and due to the rising importance which is rested on innovation and knowledge as key factors in value creating. Furthermore, the competition which is brought to markets by new entrants with new business models also requires business model innovation in order to be able to respond adequately. Despite those urging arguments little is known about the barriers of business model innovation (Foss & Saebi, 2015b, 19; Laudien & Daxböck, 2015, 612).

The innovation of a business model is not as simple as a product innovation, but much rather complex, as it is a simultaneous innovation across several elemental parts of a business. Hence, plenty could go wrong when innovating a business model (Lindgardt et al., 2009, 4f). Waldner et al. (2015, 153) argue that, once implemented, a business model innovation can either lead to a sustainable operation or alternatively fail. According to Lindgardt et al. (2009, 4) there are several challenges which might go wrong in this process, starting with portfolio bloat. In the case of portfolio bloat a firm usually has more bottom-up innovations, which are uncoordinated, than it can handle. As a result the portfolio of a firm is oversized with too many experiments at the same time. Through a shortage of resources and support, none of the ideas can win over senior management. Next up is the failure to scale up, which can be a challenge due to a shortage of resources and decreasing attention after the initial hype a project had. This can have a result in form of failing to scale up. Sometimes this happens because during prototyping the wrong criteria were set. Every industry has them, pet ideas. This challenge are possible ideas and projects which just will not die, because management is unable to give it up. These projects then block the path for more promising ideas. Isolated efforts can be a problem when teams, which work autonomous, are too distant from the business and therefore lack resources. The fixation on ideation is a further barrier to business model innovation. When there is a sheer endless amount of ideas but none of them are moved into the prototype phase or scaled up they are not useful. Sometimes this is due to the assumption that creativity is the bottleneck of business model innovation, which is simply wrong and underestimating the task. Internal focus is a rather common problem for organizations. Instead of paying attention to changing needs of the customer, the firm pays more attention to the internal needs and therefore changes too little too late, which might lead to failure in capturing opportunities. Last but not least is the historical bias firms might have. It can be easy to praise and overvalue old business models, as a result future oriented models might be overlooked. Top management should be courageous to overcome this natural tendency (Lindgardt et al., 2009, 4f).
According to Chesbrough (2010, 358) barriers to the innovation of business model can also include conflicts with already existing assets and existing models. In the case of disruptive innovation there can be a conflict between the established business model of a firm, which is using the currently existing technology, whereas the disruptive technology would require a new business model and/or exploitation of the newly emerging technology. Furthermore, Chesbrough (2010, 358) argues that the success an established business model has could influence the decision process of a corporation quite substantially. In the case of successful business models information, which stands in conflict with what is the firm’s logic of how it creates and captures value, is filtered out of the decision process, because only information that fits with this logic will progress. While this approach helps a firm to operate in markets with high uncertainty concerning the potential of the technology and the market potential, if the logic is followed to closely and never questioned, it can lead to the corporation missing out on what might be potentially value creating uses of its technology, in the case this does not fit in the currently used business model (Chesbrough, 2010, 358f).

Osterwalder and Pigneur (2010, 246) argue that BMI should be considered to be a project, which is chaotic and rather unstable, even if the established processes are used. Furthermore, business model innovation bares uncertainty and vagueness. This is where design attitude comes into play and changes the game (Osterwalder & Pigneur, 2010, 246). Design attitude, compared to the widespread decision attitude, is the assumption that it is negligible which alternative to chose. The difficulty is to come up with an outstanding alternative, where decision attitude considers it is easy to create options but difficult to chose one. Applied to business model innovation this becomes very important. Analysis can be worthless if a company fails to come up with a new business model. As the environment of a business is full of uncertainty and ambiguity the design attitude should lead to a good business model, furthermore the business model innovation approach embraces the explorative openness as it loves to prototype as many possibilities as possible. Hence, exploring a multitude of options is a rather messy process, which includes a lot of steps forward and backward between doing market research, analysing results, testing prototypes and generating ideas. The approach of design attitude, again in comparison to decision attitude, is much more flexible and able to deal with uncertainty, while decision attitude is mainly focused on analysis, decision making and the process of optimising (Osterwalder & Pigneur, 2010, 248).

Von der Eichen et al. (2015, 29) argues that among others, commonly awareness, search, system, logic and culture are barriers to business model innovation project. Beginning with awareness. According to von der Eichen et al. (2015, 30) despite the rise in priority for CEOs business model innovation is still underrepresented in management discussions. Innovation is usually connected with products or services, mostly because it becomes a more tangible asset to the company than a business model. Furthermore, management is locked into their business logic, which makes it hard to break out of a thinking pattern and leads to narrow focused analysis (von den Eichen et al., 2015, 30).
Next up would be *search-related* barriers. Von der Eichen et al. (2015, 31) argue that business model innovation requires a company to look for solutions where those are commonly not to be found or where nobody is looking for them. In other words, firms should try to identify hollowness within the industry, which might have been created through over-sized solutions of competitors or industry leaders. Analysing the needs of potential customers respectively people who are not customers yet as they might find products and/or services too expensive or too complicated. Over and over again companies have found a way into a niche through business model innovation (von den Eichen et al., 2015, 31).

*System-related* barriers are the next boundary according to von der Eichen et al. (2015, 33). Next to the idea and the execution, a business model innovation needs also an appropriate logic of how the innovation is brought to the customer in the interest to be successful as a firm. Firms tend to struggle with BMI as they do not have starting points for it. This leads to the problem that organisations eradicate any form of business model innovation or are unable to realise the quality of the concept and therefore do not go after it (von den Eichen et al., 2015, 33).

Last but not least are *culture-related* barriers, which are a buzz word that can be found all over literature. In this particular association to business model only a small part of the general issue is addressed. Something new is not always seen as an enrichment, and therefore can lead to mobilisation of defensive actions, which could paralyse the whole innovation project. Problematic is the late timing of the culture-related barrier, as it takes place when the business model innovation is already established, has reached or established a market and customers. Out of nowhere the heterogeneity reveals itself and becomes a harsh test for the firm (von den Eichen et al., 2015, 36).

Mezger and Bader (2014, 245) argue that depending on how dynamic an industry is a company should develop certain capabilities in order to enable a quick development and a successful implementation of new business models. Among those capabilities is generating a *willingness to take risks*, as targeting future markets with radical and disruptive innovations requires a certain amount of risk. Previously it has been stated that business model innovation is a complex activity (Lindgardt et al., 2009, 4, Osterwalder & Pigneur, 2010, 246, Mezger & Bader, 2014, 250) and therefore includes a high risk for a company (Mezger & Bader, 2014, 250).

As the development of a new business model requires a certain degree of experimenting, as well as the ability to design and plan, companies should be willing to take a high risk, especially when creating a radically new business model. Companies, who have a more entrepreneurial approach within their innovation culture, are more likely to take a higher risk than others, due to the entrepreneurial spirit. Furthermore, those companies spur their employees on to try something new in research and development, and take a higher risk. Due to the willingness to take the risk of failure, those companies can bring so-called “new-to-the-world” business models onto the market. Those innovative models commonly break with the dominant logic of a industry on how to do business and bare the potential to change the boundaries within this particular industry (Mezger & Bader, 2014, 245).
A further barrier would be path-dependency, which refers to lock-in mechanisms which keeps a firm on its existing track, and therefore can be a boundary to the change of a business model (Cavalcante et al., 2011, 1333). A firm’s environment is not static, hence the firm itself and also its business model are neither. Since the business model must change, there is a certain degree of organizational change required (Laudien & Daxböck, 2015, 615). Mason and Spring (2011, 1039) argue that change projects are susceptible to path dependence, hence business model change can be influenced by path dependence.

Path dependency, as explained previously are a lock-in mechanism (Cavalcante et al., 2011, 1333), this lock-in mechanism works through the influence previous decisions and their related outcomes have on current decisions a firm and its management face, despite those earlier decision might not be relevant anymore as circumstances could have changed over time (DaSilva & Trkman, 2014, 387).

Laudien and Daxböck (2015, 616) go one step further and define path dependency as a three step process, consisting of the preformation, formation and the lock-in phase. Starting with the preformation phase, during which the management is rather objective and able to make choices on a broad scope. As consequences of decisions are hard to predict management during events with high uncertainty path dependency can be triggered. Through a self-reinforcing pattern management narrows its business logic concerning future decisions. During the formation phase, choices, which would differ from the dominant logic, start to be less attractive for management. Hence, consideration becomes increasingly narrow and a path develops. This effect becomes increasingly stronger until the third phase is reached. In the third phase, the lock-in phase, the dependency on the previously created path is so high that management has a strongly limited scope and therefore the organization is locked in the situation. The dominant logic is imprinted onto the organizations business. Commonly radical external changes are necessary to enable a company to leave this lock-in phase (Laudien & Daxböck, 2015, 616). According to Laudien and Daxböck (2015, 616), path dependency is not immediately harmful for a firm, but over time a company could not be able to react to a changing environment with different market conditions or might chose inferior options.

Hence, path dependency can be a barrier to change, as the innovation of a business model does partly include the overthinking of decisions respectively outcomes of decisions management has made in the past (Laudien & Daxböck, 2015, 631). Since a business model according to Casadesus-Masanell and Ricart (2010, 198) is made of managerial choices and their consequences.
3.7 Chapter Summary

The focus of this chapter was to analyze the different definitions of business model innovation, as well as the different approaches to the concept of BMI. Similar to the problem with the definition of business model, literature regarding business model innovation also lacks a commonly accepted definition. While scholars do agree that the innovation of a business model involves the change of either the whole model, a dimension or several dimensions (Markides, 2006, 20; Lindgardt et al., 2009, 2; Demil & Lecocq, 2010, 228; Gambardella & McGahan, 2010, 263; Osterwalder & Pigneur, 2010, 136; Casadesus-Masanell & Zhu, 2013, 1; Frankenberger et al., 2013, 6; Schallmo, 2013b, 29; Afuah, 2014, 4; Girotra & Netessine, 2014, 1; Wirtz & Thomas, 2014, 36; Foss & Saebi, 2015a, 8; Souto, 2015, 145; Buschmann, 2016, 153), the scope, speed and degree of change is widely spread between approaches. For instance Frankenberger et al. (2013, 6) consider the change of one or multiple dimensions enough to refer to it as business model innovation. Souto (2015, 145) in comparison, considers only changes where the model has been improved significantly or is completely new as business model innovation. Nevertheless there is an agreement on the idea of generating a competitive advantage through business model innovation among scholars (Mitchell & Coles, 2003, 15; Amit & Zott, 2012, 42; Schallmo, 2014, 13; Berends et al., 2016, 182).

The approaches spread similar to the definitions, emphasising a wide range of different processes and what is important in each process respectively step of the process. Scholars do agree that the innovation of a business model is a process which needs creative approaches to overcome the current business logic and an implementation, which could be challenging for the corporation.

Nevertheless, there is still an absence of recommend framework and/or methods, which support business model innovation on a scientific basis. Hence, there is a lack of a common approach to the business model innovation concept in practice (Bucherer et al., 2012, 183).

Regarding the drivers and barriers to business model innovation, again there is common ground, paired with widely spread ideas. Authors do agree on the strive to gain an advantage which is hard to imitate for competitors (Mitchell & Coles, 2003, 15; Lindgardt et al., 2009, 3; Amit & Zott, 2012, 42; Schallmo, 2014, 13, Berends et al., 2016, 182) and the influence environmental changes do have on the firm and its business model (M. Johnson et al., 2008, 7; Osterwalder & Pigneur, 2010, 200; Teece, 2010, 172; Wirtz et al., 2010, 273; zu Knyphausen-Aufseß & Zollenkop, 2011, 112; Mezger & Bader, 2014, 245; Christensen et al., 2015, 7f; Saebi, 2015, 152).
4 Business Model Innovation in a Global and Digital Environment

The previous chapters have dealt with the business model concept and its innovation. Nevertheless, firms are constantly confronted with fundamental changes in their environment, such as regulatory changes, structural changes within their industries, or technological progress. Those changes require adequate responses like the strategic change of a business model (Wirtz et al., 2010, 273). The strategy of a company outlines the room for manoeuvre within a business model, as it outlines rules, resources and so on. Strategy on the other hand is commonly influenced through changes in the technological, political and economical environment of a corporation. A business model furthermore is representing the realized strategy of a company (Krys, 2011a, 370). Hence, according to Krys (2011a, 370) there cannot be any doubt that changing environmental conditions influence the innovation of business models decisively.

Lambert and Davidson (2013, 676) argue that technological and market-related forces can be the major drivers for business model changes. Casadesus-Masanell and Ricart (2011, 3) argue that external forces of companies, such as changes in regulations, advances in technology, sustainability and globalization, have made the concept of the business model a highly interesting topic for companies again. During the past decades it has been strategy which was the basis for a firm’s competitive advantage over other industry players, this might change as the business model concept is an adequate competitor when it comes to the search for a sustainable advantage.

As the environment of a firm becomes more and more complex, business model innovation can be a deciding success factor. It could ensure the success of a firm’s interaction with its environment and therefore ensure its competitiveness (Wirtz & Thomas, 2014, 32). Casadesus-Masanell and Ricart (2011, 4) make a very good point for the importance of the environment a business model is influenced by. According to the scholars a business model could probably look like it could have the potential to surpass its competitors, due to the model being analyzed in isolation. While when adding environment, including the connections and interaction the business model has with it, to the analysis, it might create less value than its competitors (Casadesus-Masanell & Ricart, 2011, 4). Casadesus-Masanell and Ricart (2011, 5) argue quite frank by stating that, creating and evaluating business models in isolation is simply doomed to fail. Reason being the lack of consideration about implications of rivals’ actions and business models onto a firms’ business model is too narrow minded.
4.1 The Business Model Environment

Osterwalder and Pigneur (2010, 210) argue that a business model, which is successful today, could be outdated or antiquated in tomorrow’s environment, due to neither the business model nor the environment being static. Furthermore, both scholars argue that literature needs to improve its understanding of a model’s environment. Johnson et al. (2008, 2), Demil and Lecocq (2010, 220), Bucherer et al. (2012), De Reuver et al. (2013, 2), Laudien and Daxböck (2015, 15), Wagner et al. (2015, 1307) and Buschmann (2016, 153) all agree on the interrelation between a firm’s environment and its business models, as well as on the potential a business model has to change the firm’s industry.

According to Knyphausen-Aufseß and Zollenknopp (2011, 112), numerous crises in corporations and also industries can be attributed to an outdated business model, inadequate adaption for the changing environment of a business or new superseding models. More innovative business models are frequently better at meeting customer demands, creating competitive advantages and realizing a certain growth potential. Hence, business models should be examined on a regular basis. Furthermore, a lack of sustainable competitive advantages over time, which is forcing business models to be innovative, can be attributed to two factors. Firstly, the imitability of business models and secondly the dynamic of the business environment (zu Knyphausen-Aufseß & Zollenkop, 2011, 112f).

Wirtz et al. (2010, 273) support this argument by claiming that firms have to constantly deal with fundamental, or in other words radical, changes within their environment, which have to be met in form of adequate changes of the firm’s model. Hence, despite the versatility business models can offer, they are usually designed and also executed within specific environments. Due to those previously mentioned reasons it is of utmost importance to know the environment of a company for the sake of adapting business models to shifting external forces, and to develop stronger and move competitive versions of the business model (Osterwalder & Pigneur, 2010, 200). To get a better understanding of the environment of a business model and how this complex topic can be approached, concepts of the business model environment are presented and compared.
According to Osterwalder and Pigneur (2010, 200), the environment of an organization can be mapped into four different areas:

- Market Forces
- Industry Forces
- Key Trends
- Macroeconomic Forces

Knyphausen-Aufseß and Zollenkopp (2011, 113) on the other hand map the business environment into five dimensions:

- Technological Dimension
- Political-legal Dimension
- Socio-cultural Dimension
- Ecological Dimension
- Macro-economic Dimension

Those five dimensions influence the market entry barriers, the behaviour of suppliers, competitors and customers, as well as the development of substitutes. Combined they determine the inducement of a business model (zu Knyphausen-Aufseß & Zollenkop, 2011, 113).

Schallmo (2014, 18) approaches the business model environment by separating it into a macro-economic and micro-economic environment. Hence, for describing the macro-economic environment of a business, Schallmo (2014, 18) uses an adaptation of the PESTEL-model, while for the micro-economic environment the scholar uses an adoption of Porter’s five forces to describe the industry.

Bertels et al. (2015, 24) also urges to pay attention to the environment of a business model as it can be crucial to its success or failure. Hence, in order to be able to pay attention to the business model’s environment and the changes happening within it, Bertels et al. (2015, 24f) added the PESTEL framework to the business model canvas of Osterwalder and Pigneur (2010, 18).

Since all four scholars have environmental dimensions on either a macro-economic level, or on a micro-economic level or even on both levels, this chapter of the thesis is also separating the business model environment into a macro-economic and a micro-economic level in order to display how changes within either of those environments can influence a business model and therefore enable the innovation of a firm’s business model. Figure 17 shows how a combined visualisation of all the approaches could look like (Osterwalder & Pigneur, 2010, 200; zu Knyphausen-Aufseß & Zollenkop, 2011, 113; Schallmo, 2014, 35; Bertels et al., 2015, 24).
4.1.1 The Macro-Economic Environment

Schallmo (2014, 18) argues that for the macro-economic environment of a firm the six dimensions of the PESTEL framework are generally applicable. The framework has a political, economical, social, technological, ecological and legal dimensions, which results in a total number of six dimensions (Schallmo, 2014, 18). In comparison, Knyphausen-Aufseß and Zollenkop (2011, 113) argue that the corporate environment consists of five dimensions, which would be the technological, political-legal, social, ecological and macro-economical.

Osterwalder and Pigneur (2010, 208) on the other hand define the macro economic environment rather differently, by including commodities, economic infrastructure, capital markets and also global market conditions, hence the PESTEL approach can be seen as a solid foundation to the macro-economic environment of a business model.

PESTEL is a framework commonly used in management, especially strategic management, to get an idea which opportunities and risks a country bares, from a macro-economic point of view. Plain simple, PESTEL can be used to see and understand the big picture of a company, hence it is an analysis of the business environment. Seeing the bigger picture allows management to proactively tackle threats which a corporation could encounter, or alternatively recognise and use opportunities (Issa et al., 2010, 3).

Starting with the political dimension of the framework, which is mainly focused on the regulations, political situations and legal issues of a country. While a firm is commonly aware of regulations and laws of its home country, it is important to gather knowledge about each coun-
try it operates in or planning to. Especially for information technology companies, as example cloud computing, it is important to differ between countries and their regulations, as the business moves across borders quickly. Next up in the PESTEL framework would be the economic dimension, which has its focal point on economic factors of a country, such as inflation, taxes, income, interest rates, unemployment rates, commodity costs, labor costs or growth rates. Basically everything which has influence on the costs a corporation has in certain country due to the economic situation and perspective. This is of major importance as firm’s costs are a major part of how profitable the business is. Depending on the industry these costs can be quite low for example in the information technology sector. Thirdly, the social dimension is mainly concerned with the cultural differences between countries, which can present challenges for companies, as those differences can be seen in education, customer awareness, attitudes and practices towards products and services. Furthermore certain ethics and principles can differ between countries. Also the culture and its difference within an organization need to be considered, as those might endanger future profits through the influence it can have on employee and their performance. Fourth is the technological dimension, which is centered around product innovation, new materials and the speed of technology transfer of a country. The fifth dimension is the ecological dimension. This dimension is covering the environmental conditions of the environment a business is affected by. Corporate social responsibility is an increasingly important subject for firms as they are commonly expected to create a sustainable future. Hence, the laws and regulations regarding the environment are an important issue for companies, as well as energy sources and energy consumption. Last but not least would be the legal dimension of the PESTEL framework. This last dimension of the framework has its attention of consumer protection laws, regulation of competitions, labour laws and regulations. Essentially every legal aspect a certain country or market can have, which could be influencing a firm and its business model (Issa et al., 2010, 4f; Osterwalder & Pigneur, 2010, 208; zu Knyphausen-Aufseß & Zollenkop, 2011, 114; Schallmo, 2014, 19).

4.1.2 The Micro-Economic Environment

The micro-economic environment is reduced to the market where a firm is active in. Knyphausen-Aufseß and Zollenkop (2011, 114) approach the environment by simply applying Porter’s five force to the business model concept, hence the environment of a business is simply seen from the firm’s point of view. Schallmo (2014, 19) argues that while it is important to see the environment from a business perspective, it also should be seen from a customer point of view, as this view is important to derive customer needs of it. Revisiting Osterwalder and Pigneur’s (2010, 200) approach to the business model environment, the major focus lies on the microeconomic environment of a firm. More precisely three of four areas of influence can be considered to be on a micro-level environment. This would include the market forces, key trends, as well as industry forces. The industry forces are displaying Porter’s market forces, which are also
used by Knyphausen-Aufseß and Zollenkop (2011, 114) and Schallmo (2014, 19). While the market forces represent the customer point of view. Last but not least key trends represent a form of foresight of topics which might have an major influence on a firm’s business model (Osterwalder & Pigneur, 2010, 200f).

Before explaining the micro-economic environment on a more detailed level, a limitation of the approach of Osterwalder and Pigneur (2010, 200) should be pointed out, because it is a difference to the approaches of Knyphausen-Aufseß and Zollenkop (2011, 114) and Schallmo (2014, 19). Osterwalder and Pigneur (2010, 201) put the macro-economic forces on the same level as the other influence factors, such as industry forces, market forces and key trends. Schallmo (2014, 19) argues that the micro-environment gets influenced by the macro-environment, hence it should be considered to revisit Osterwalder and Pigneur’s (2010, 201) in order to rethink the influence of macro-economic forces.

Starting with the industry forces, which differ a bit between the scholars. While Knyphausen-Aufseß and Zollenkop (2011, 114) and Schallmo (2014, 19) argue that market forces according to Porter are all what matters, Osterwalder and Pigneur (2010, 204) also add stakeholders as an industry force. Hence, industry forces consist of competitors, new entrants, value chain actors, substitutes and stakeholders. For a firm it is important to keep an eye on all of them. Knowing who your competition is, what their competitive advantage or disadvantage is, what segment of the market are they targeting, are important informations for a firm and its business model. Furthermore, it is of interest to know if there are new entrants with different value propositions, who those entrants are targeting and what barriers they have to overcome. The value chain actors do represent the power suppliers or customers have in a value chain. Commonly those are also the key players within a market and the company should identify them. The influence of stakeholders onto the business model, as well as the threat through substitutes, are also important information for a firm, especially during designing or innovating a business model, because they could influence the firm noticeably (Osterwalder & Pigneur, 2010, 204; Schallmo, 2014, 20).

Next up would market forces, as this dimension represents the customer, which are consisting of market issues, needs and demands, market segments, switching costs and revenue attractiveness. Market issues are key issues from the customer’s point of view, which are driving and also transforming an organisation’s market. In a business environment, which is dynamic, there are always customer segments which are growing and worth analysing for a firm. Furthermore, it is important for a firm to know its most important customer segment, because it will have influence on its business model. Next up are needs and demands, which can show a firm if there are opportunities in form of unmet needs in a market. Also a lot of information regarding the needs consumers develop and where demand is increasing can be found in this part of the market analysis. Switching costs describe the lock-in effect of a company. Essentially what makes the customers avoid switching to a competitor, how easy would be switching to a competitor for a
customer and the importance of the brand can be found here. Last but not least the attractiveness of the revenue is in the market forces dimension. This basically gives information about how much customers are ready to pay for a product or a service and the pricing power of the firm (Osterwalder & Pigneur, 2010, 204).

4.2 Trends in the Global Economical Environment

In the next decade there are several major trends which are expected to change global economics and even the world. While such projections are commonly full of uncertainties and assumptions, those trends still give a possible outlook for the future. Those projected trends are not supposed to give a precise projection of what is going to happen but rather should give an indication of what is most likely going to happen (Eckert, 2014, 3). Although it seems as major trends in the world might be to big to affect the firm on a individual level, often it is very important for companies to keep an eye on trends within their environment, as trends have substantial influence on the development and the innovation of a business model. To underline the importance of this a short example is necessary: The world famous film and picture corporation Eastman Kodak was dominating the market for cameras and pictures. There were times when Kodak reached a global market share of up to 90 percent. Whilst this dominant market position was reduced through Japanese companies during the 1980, it was the introduction of digital cameras which demolished the once dominant corporation. Kodak did not pay attention to the technological innovation within its industry and never made the change from classic cameras to digital cameras. Kodak is the perfect example of what can happen even to dominant players within a market if they to do not pay attention to trends (Krys, 2011a, 370).

Osterwalder and Pigneur (2010, 200) do also agree on the importance of mega trends as they present key trends to be one out of the four identified influence factors. Furthermore, Eckert (2014, 3) recommends to see such mega trends as warning indicators of what the future might bring in form of challenges for a company, which might enforce a change or innovation of the business model.

4.2.1 Demographic Change

Starting with the first trend, which would be demographic change (Krys, 2011a, 373; Eckert, 2014, 4). Krys (2011a, 373) argues that research has shown that until 2030 roughly twenty percent more people will live on earth than today. This is mostly due to a higher life expectancy which will make the world population older on average. Furthermore, most of the population will be living in cities or urban areas close to cities. Eckert (2014, 4) agrees and anticipates a tremendous growth in about the same size as Krys (2011a, 373), which would be roughly twenty percent. Furthermore, Eckert (2014, 4) agrees on the higher life expectancy by arguing that the average age of the human population will rise to forty-four in 2030 and up to almost sixty percent of all people are expected to live in cities or urban areas surrounding cities. Hence,
Eckert (2014, 4) argues that firm’s need to focus on those areas where an increasing density of population is expected. Also products and services need to be adapted to the changing customer demands, due to the expected ageing customers. An example would be phones with bigger buttons (Eckert, 2014, 4).

4.2.2 Globalization

A further trend which is commonly mentioned throughout literature is globalization (Casadesus-Masanell & Ricart, 2010, 195; Osterwalder & Pigneur, 2010, 208; Schneider & Spieth, 2013, 5 Krys, 2011a, 373; Manyika et al., 2016, 2), hence this section of the trends chapter will discuss globalization. In order to do so a definition of globalization is necessary. According to Keohane and Nye (2000, 105), globalization is the increase of globalism, whereas deglobalization refers to the decline of globalism. Globalism is defined as a state of the world, which involves networks of interdependence at multi-continental distances. The connection shows through influence and flows of capital, goods, information, ideas and people as well as forces and environmentally or biologically relevant substances. Schneider and Spieth (2013, 5) argue that globalization of a firm’s business environment plays an essential role in enabling business model innovation within a firm. Casadesus-Masanell and Ricart (2010, 195) argue that among other factors, globalization is a driver, which leads to a change in the competitive environment of a firm and therefore influences the business models of firms, because those who follow changes with an innovational business model, grow comparably faster than competitors. While Osterwalder and Pigneur (2010, 208) do not directly list globalization as an environmental factor of importance to business models and the innovation of such, the scholars do mention global market conditions, which they define as general conditions from a macro-economic point of view, a rather strong resemblance to the definition of globalization can be seen in this definition. Furthermore, Krys (2011a, 373) argues that globalization will sculpture the world economy within the next ten years even more. Exports will almost double up and the BRIC states will double their share in the global economy. Eckert (2014, 5) argues similarly to Krys (2011a, 373), and expects an increasing importance of the BRIC states, as well as a growing middle class in those countries. Hence, Eckert (2014, 5) recommends firms to keep a close eye on the developing nations and their market potential, as consumer demand most likely will develop from basic needs to luxury goods. Therefore corporations will need to have business models in place to enter these markets at the right time, which can balance the risk and uncertainty within those countries while serving those customer demands (Eckert, 2014, 5f).

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2BRIC is the abbreviation for Brazil, Russia, India and China
4.2.3 Shortage of Resources

The third mega trend would be the shortage of resources (Zott & Amit, 2007, 183f; Eckert, 2014, 6; Gorevaya & Khayrullina, 2015, 349). The global requirement of energy is constantly growing, as it is directly linked to the growth of the earth’s population and the industrialisation of the third world countries. Furthermore, caused by the population growth and the climate change, water will be a scarce resource as well (Krys, 2011a, 374). Eckert (2014, 6) sees scarce resources also as a potential trend which will have major influence on firms and their business models, especially water and energy levels concern the scholar. Based on this assumptions firms should try to find a balance and reduce their dependence on such resources as much as possible, furthermore businesses should adapt their business model to offer consumers products which are resource-friendly (Eckert, 2014, 6). Zott and Amit (2007, 183f) argue that with the importance of resources, but argue on a general basis that environmental conditions are of utmost importance to a business model. Generosity, in regards to the availability of resources, complexity and initiative all have a certain influence on the firm. Nevertheless, availability of resources, or in a worse scenario the shortage of resources, can influence the growth and also the ability of existing companies to survive. Furthermore, the ability of new firms to enter an industry is closely linked towards its access to resources. Availability of resources is an uncertainty in the environment of a firm and therefore for the business model, a concept which has its basis in the resource-based approach. In this particular case all companies compete for resources, which is especially important for start ups, as those highly depend on external resources, such as for example external capital (Zott & Amit, 2007, 184).

Furthermore, Gorevaya and Khyrullina (2015, 349) also agree and argue that the deficiency of natural resources, among other factors, will have a big impact on corporation’s business models.

4.2.4 Climate Change

According to Krys (2011a, 376), the climate change will have tremendous impact on the world, as it will reduce biodiversity. It is expected that roughly a third of all species would not survive a global warming scenario as it is predicted to come. Eckert (2014, 7) also sees climate change and global warming as a mega trend which is going to influence corporations. Due to climate change the scholar expects a rising sea level, changes in weather, loss of land, dehydration of rural areas. Hence, businesses should adapt production processes and products or services accordingly to reduce CO2 emissions. Furthermore, climate change bares risks and should be considered when making managerial decisions. Also there could be opportunities for new business models in the changing climate and global warming challenges. Gorevaya and Khyrullina (2015, 349) also agree on the impact climate change is most likely going to have on businesses as the scholars discuss similarly by mentioning environmental safety as a relevant factors.
4.2.5 Technological Innovation

A study of IBM (2006, 13) lists the technological innovation of global connectivity as an enabler of new business models. Thus, through the innovation of telecommunications, information technologies infrastructure and open standards, companies gained possibilities to access new skills, find new partners, and also find entirely new ways of collaborating throughout the world, which furthermore enables the innovation of new business models (IBM, 2006, 13).

Schneider and Spieth (2013, 5) argue that advancements in the technological sector, especially in web-based technologies, have created the need for firms to innovate their business models. According to Krys (2011a, 376), the time of innovation cycles will decrease even further and the diffusion of technology will increase. This will lead to a positive influence on productivity and most likely will have major impact on businesses. Knyphausen-Aufseß and Zollenkop (2011, 114) support the previously mentioned arguments by stating that business models are heavily influenced by technological advancements and innovations. Osterwalder and Pigneur (2010, 206) list the identification of trends in technology as a trend which certainly can influence a firm’s business model, by establishing it, developing it further or improving it. Gorevaya and Khyrullina (2015, 349) agree, as in their recent paper the two scholars argue that in modern times technological innovations, especially trends in the sector if information technology will have tremendous impact on the business models of corporations. The unseen potential of the informations technology field allows new networks of business models, new markets for services (Gorevaya & Khayrullina, 2015, 350). According to Kreutzer (2017, 45) technological advances are as much a risk as an opportunity for firms. Eckert (2014, 8) see the urge for companies, who are heavily depending on research and development, to increase their competencies within those fields. Companies should look outside of their industries and watch technological trends not only within their markets. This is not only true for technological innovation, but for all trends concerning the business and its industries. Furthermore, companies should prepare to engage in cooperations, networks and partnerships not only across industries but also with universities or other research facilities (Eckert, 2014, 8).
4.3 Business Models in a Global Environment

According to Teece et al. (2010, 172) changes in the global markets have produced a shift for corporations. The traditional balance of power between customers and suppliers has changed, due to the advancements in technology. As trade has become more global, customers got more choices, alternatives became more visible and therefore the customer’s needs became more diverse (Teece, 2010, 172). Among those alterations might be new competitive structures in their markets, changes of both governmental and regulatory nature, as well as technological progress. Changes in the environment of a firm need to be met with an adequate response in form of strategic renewal of the business model, as those shifts could have a considerable influence on the long-term future of the organization (Wirtz et al., 2010, 273). It could be said that innovation is vital for a company’s success in a globalized environment with harsh competition. Business model innovation can be seen as way to reinvent the business itself. Furthermore, business model innovation can appear in form of an internationalization process. When a firm decides to internationalize its activities this leads to a more global competition. Not only in terms of competitors, but also in terms of resources, allocation and sourcing of those, as well as activities, becoming more global (Rask, 2014, 146-147).

4.3.1 The Internationalization Process

Growth is one of the most, if not the most important indicator of a company’s business performance. Additionally, in order for a firm’s value to increase, growth is a prerequisite for increasing the evaluation of a company. Furthermore, growth is closely linked to the business model of a firm, as the dimensions of a business model are not only drivers of growth but also need growth to function properly, one could say growth and business models are two sides of the same coin (Krys, 2011b, 185-187).

Cross-border transactions, such as investments in markets abroad or foreign trade, also called foreign direct investment, commonly grow faster than domestic markets of single nations (Krys, 2011b, 188).

Therefore, going international is becoming increasingly important for companies in today’s globalized business environment. This is commonly seen due to increased rivalry, a harsher competition and a constant pressure to cut costs are some of the challenges which pushes companies to go abroad to find a way out of the competition (Harbach et al., 2011, 134). One could go further and say it is almost impossible for most companies to withdraw of the grip of globalization. This might not even be necessary, as the internationalization of a company can be used as a growth strategy, if the process is managed actively. Growth via internationalization can take different paths and happen gradually (Krys, 2011b, 196). This step by step approach can be explained through the imperfect information a company has about local conditions concerning supply and demand in a foreign market before they start operating in it. As there is a need to acquire specific knowledge about the targeted market, firms commonly follow a gradual
internationalization process (Conconi et al., 2010, 31), which will be explained throughout this subchapter. Rask (2014, 158) argues that the process internationalisation of a firm is an important process for internationalisation through business model innovation, as the innovation of a firm’s business model uses variations of the internationalisation path.

Starting with the weakest form of internationalization, which would be if a company is a supplier for an already internationally active company. This indirect version of internationalization offers the opportunity for companies to carefully approach international markets step by step. As the internationally active company, who’s supplied by the firm, is demanding specifications of the product or service coordinated with market demands. Whilst specifications and requirements could be on an international level, the company does not have to deal with intercultural business relationships yet. Therefore challenges of different cultures and languages are not on the table (Krys, 2011b, 196).

Exporting would be the next step in the internationalization process. As unsaturated markets in fast growing countries, such as the ASEAN3 or BRIC countries, offer great opportunities for growth, but also developed industrial nations offer markets and opportunities for new entrants (Krys, 2011b, 197). As mentioned previously due to the lack of information companies are uncertain regarding their abilities to earn profits within a foreign market. This lack of information and the coherent uncertainty can only be overcome if a company starts serving the market. Companies commonly outsource part of their value chain to external independent companies which is regulated via a contractual relationship. As mentioned and discussed in the chapters 2.2., 2.2.1 and 2.2.2 transaction costs are important when value is generated. Due to technological advances in information and communication technologies, transaction costs have sunk considerably, and with lower transaction costs the coordination necessary for creating a product or a service sunk too, which led to making it easier to outsource tasks to a third party (Krys, 2011b, 197). According to Krys (2011b, 197), among the most important motives for outsourcing tasks into another country are:

- cutting costs
- being closer to lucrative markets
- reduced transportation expenses
- benefiting of the knowledge of third party companies
- increased flexibility concerning capacity

Outsourcing can be found across several different industries such as the fashion, consumer electronics, automobile, computer and software industry (Krys, 2011b, 197).

3ASEAN stands for Association of Southeast Asian Nations
The by far most difficult and challenging option to go international is a foreign direct investment in a subsidiary or joint venture abroad. Of all different options to go international this one is clearest declaration of believe in a country as it bears the highest risk. Through investing abroad a part of several parts of the value chain can be covered, e.g. production and sales. Krys (2011b, 197f) argues that motives for doing a foreign direct investment are:

- tapping into new markets
- using different levels of labour cost
- special know-how
- follow the customer

Whilst foreign direct investments have the advantage that a subsidiary is easier to control than a contractual partner which is used for licensing, there is also a higher risk involved. If the operation fails it can be seen as sunk costs. Furthermore, such investments have a high period of redemption. Adding to this are limiting regulations for international corporations in developing countries, such as limits regarding stakes in a business, as well as high bureaucratic burdens (Krys, 2011b, 197f).

4.3.2 Internationalisation through Business Model Innovation an Approach by Rask

A recent study done by Rask (2014, 158) focuses on the task to find dimension and elements in business model innovation which can be used for internationalisation. As a result the scholar has come up with a concept which shows how firms could use four types of business model innovation in order to handle differences between different locations and market entry modes by using specific allocation of resources (Rask, 2014, 158). Rask (2014, 150) differentiates between domestic and globalized markets, as well as upstream or downstream activities. Roughly saying are upstream activities concerning the globalization of production, while downstream activities are concerning the globalization of markets. Figure 18 shows which activities of the business model are affected by upstream or downstream activities. Furthermore there can be distinguished between four different types of business models for the different market and production activities (Rask, 2014, 151) Starting with domestic based business models. Those are commonly used by firms operating on a domestic level. Despite the company operating on a domestic level, the products or services can potentially be sold abroad through exporting companies and similar sales channels of indirect nature. Similarly with local production, as some supplies are bought from international suppliers. Companies which are using this model will deal with differences in relating with either a demand or a supply market. Hence, when the process of internationalization is gaining momentum the company commonly
follows the market or production on the path of globalization (Rask, 2014, 157). It could be summarized that by using this model firms are trying to solve differences through a standardization approach, demand on a local level is supplied by domestic sales and domestic production, while there is an indirect export for foreign markets (Rask, 2014, 158).

From the starting point of domestic-based business model the company can either chose the path of an import-based or an export-based business model (Rask, 2014, 157).

*Import based* business model comes to use when there are no differences in the market area found. Nevertheless smaller adoptions, which are still important, are made. For instance, adapting customer relationships, channels, segments and also adaption of revenue streams, assisted by international entry modes which resolve challenges concerning the exchange of assets, information, capital or services. Among those entry modes are direct international sales, direct export or sales subsidiaries abroad (Rask, 2014, 157).

*Export based* business models would represent the alternative path to import based ones. Similar is the standardization in areas where no difference is. Nevertheless, through specialization the firm is trying to achieve a cost reduction, by utilizing differences which occur among key activities of partners and collaboration regarding resources. The partners of the firm can appear in form of importing, outsourcing through contract manufacturing or offshoring production by building a production subsidiary abroad. The focal point of this model is efficiency, through outsourcing or offshoring certain activities the firm can specialize in core activities and increase

The final destination would be the *semi-global* business model, which draws on the previously gained experience of the importing and/or exporting activities, that allowed the firm to learn ensuring a flow of finances, products, information across borders. These cross-border activities come in form of different international entry modes, such as licensing, joint ventures, wholly owned subsidiaries. In this model the focus is on coordinating the previous learned skills, as success will depend on the combination of standardization, adaptation and/or specialization (Rask, 2014, 157).

4.3.3 Business Model Approach for Internationalisation by Onetti et al.

Onetti et al. (2012, 357) came to the conclusion to propose an approach for international business models after conducting a thorough research of existing internationalization, entrepreneurship and business model literature. Among other recommendations the scholars argue that a business model should definitely include a location decision. This is due to the important role location plays in the competitiveness of a firm. Furthermore, business models should be as simple as possible and on a generalised level in order to be usable for management of all kinds of firms (Onetti et al., 2012, 357).

Onetti et al. (2012, 359) base their approach to the internationalisation business model concept on the main elements their review of the business model, internationalisation and entrepreneurship literature has brought up. Hence, the units of the business model in the approach of Onetti et al. (2012, 360) are “focus”, “modus” and “locus”. Focus is representing all activities regarding the firm’s value proposition. Modus is the operational part of the business model, it includes the organisation and the network. Locus is the location or in case several locations a firm is operating and sourcing from.

The **focus dimension** has the task to make the decision where the resources of the firm go and which activities are supported. By doing so the business model is setting priorities to the different activities and therefore defines the range of the value chain. Essentially every business model does need to determine a value chain, which is the core process of activities which add value over all. On this process the competitive advantage of a firm is based on (Onetti et al., 2012, 360). According to Onetti et al. (2012, 360f), it is important to point out that this catalog of activities, which must add value, is different from industry to industry and also from firm to firm. Hence, each firm must identify it case by case. In this relation value chain is meant to be complex adaptive systems of activities, including internal-external relations, which can vary concerning the degree of control and power (Onetti et al., 2012, 361).
The next dimension of the business model proposed by Onetti et al. (2012, 361) would be the *locus dimension*. This dimension is focused on the location of the company’s activities. A firm must decide at a certain point in which geographical area it wants to locate. This location could for example be an industrial cluster. Alternatively a firm could also choose an approach with multiple locations, where different activities or the same activities are performed. The approach highly depends on the industry and if the company is a service or product based company. Through the locus component the value chain gets defined on a geographical level (Onetti et al., 2012, 361).

Last but not least is the *modus dimension* of the business model. This dimension has the task assigned to determine the best management method for each activity and furthermore to draw out how a firm operates. In this unit a firm is deciding specifically which activities should be outsourced and which ones a firm will perform itself. Additionally, if the corporation is operating on an international level, this dimension is where the firm decides the business mode. The business mode is the blueprint of how a firm operates abroad, it could be cross-border mode or alternatively a foreign market entry. Concerning the activities, which are kept inside the firm, the details should be outlined. Hence, it should be determined how intensive in form of capital, technology and labor an activity is pursued. Regarding the outsourced activities, a firm should decided to whom it outsources and how involved it wants to be in the relationship with the chosen partner (Onetti et al., 2012, 361).

The combination of the decisions made in the three dimensions, determines how integrated a company is, if it either makes or buys certain parts of its product, how the production is set up, concerning the structure of labour, capital, technology, and its approach to, respectively role in, the industry. Depending on how a firm choses to decide, the boundaries are set different for its network and therefore links to the resources a firm could get from partners, customers, suppliers in order to extend its own (Onetti et al., 2012, 361f).
4.3.4 Business Model Innovation within Born Globals, Start Ups and Entrepreneurship

According to Philipson (2016, 134), within a start-up, the business model concept is a way to show how a young firm thinks it can deliver what value to which customers, in comparison to an established company, where the business model innovation happens to incrementally change the model, in order to gain an competitive advantage or to radically change it, if conditions require it. According to Hennart (2014, 117) some firms go international very early in their business life, which is commonly called born globals. The term born global is defined by Knight and Cavusgil (2004, 124) as firms which strive for exceptional performance in international markets since their founding or close to it. This is achieved by using knowledge-based resources in order to generate sales in several countries. As newly founded firms commonly have to deal with challenges of limited resources concerning financials, employees and tangible resources, born globals try to use knowledge, capabilities and innovative approaches to succeed in international markets early on. While traditionally firms would use something similar to the traditional internationalization process, which has been described previously, where firms operate for a comparably long time in their original domestic market, and then step by step gradually move towards becoming an international firm. In comparison born globals can potentially move into international markets within three years or less (Knight & Cavusgil, 2004, 124-125).

According to Knight and Cavusgil (2004, 124) there are two major drivers for this very early adoption of internationalization, which are globalization and technological progress. Since markets became globalized there is the possibility of international sourcing, producing abroad, or creating strategic alliances across borders in order to develop and distribute products. Furthermore, globalization of market is also associated with a homogenisation of customer preferences on an international level. Hence, as product development and positioning in foreign markets became easier, international business became more popular. Secondly, the technological progress, in the fields of information and communication technology has made international business more accessible. But technological progress did not stop there, production methods, transportation and also logistics were improved, which furthermore, reduced transaction costs for businesses and enabled growth through international trade. The broadening of the internet made going international even more viable and less expensive (Knight & Cavusgil, 2004, 125).
4.4 Business Models in the Digital Era

Manyika et al. (2016, 2) argue that globalization is changing, from trading with tangible goods of gigantic multi-national corporations to data flows and digital platforms, which do enable a lot more countries and companies, regardless of size, to participate in globalization. Or as Manyika et al. (2016, 2) put it, “globalization has entered a new era defined by data flows that transmit information, ideas and innovation”. Business model innovation has gained a lot of attention over the recent years. Part of this growing interest in the model is the increasing technological potential, and as a part of it digitalization. Connection between hardware, software and storage of data allows complex systems, which are smarter and more connected than ever before. Next to products, also processes, value chains and services get digitalised, which creates the need for new business models and also create opportunities for establishing new business models (Schallmo & Rusnjak, 2017, 2).

Manyika et al. (2016, 1) argue that through digital platforms, for instance Amazon, Alibaba or Facebook, even tiny firms can get in touch with suppliers and customers from different countries, hence almost any enterprise regardless of its size can be a born global. Thus, through those digital platforms markets have reached an previously unseen degree of efficiency and transparency. Furthermore, the drastically reduced costs for communicating internationally and also for international transactions, have enabled international business on a tremendous scale (Manyika et al., 2016, 2).

According to Anderson and Wladawsky-Berger (2016, 2), the transformation of business into the digital area has become normal, and the digital business is not only a part of the economy, to say it harshly, digital business is the economy. During this time of rising digital business there are sheer endless opportunities for some firms and harsh competition, disruption as well as displacement for others. There are many stories of companies unable to adapt to the digital age, examples would be Blockbuster, Sears or Kodak. All of those firms missed out on innovations or were simply unable to adapt, whilst the competition is simply pulls further ahead (Anderson & Wladawsky-Berger, 2016, 2).

According to Kreutzer (2017, 36) companies, who do not operate digitally, will not exist anymore in the future. Tongur and Engwall (2014, 525) argue similarly by suggesting that shifts in technology can be lethal threats if missed. Every company is operating digitally, while they might operate on a different intensity, all of them are impacted by economy 4.0. Kreutzer (2017, 35) argues that the term industry 4.0 is limited to the integration process of classical production firm and the industrial branch. While those firms definitely benefit of the digitalization, the benefits are not exclusive to them. Due to this broadly spread benefits, Kreutzer (2017, 35) is calling the fourth stage of the industrial revolution economy 4.0 instead of industry 4.0.

Industry 4.0 or rather economy 4.0, as it is the preferred method of the scholar how to call it, is the interconnectedness of value chain processes beyond the borders of individual firms. Suitable internet access has become an important factor when choosing a site for the company. Addi-
tionally, the term economy 4.0 is advising that the integration should not stop at the outskirt of a firm, customers can be included into processes, as source of information, idea generator or as co-producers. The dynamics of today’s markets force companies into more cooperation, also between strategic competitors, in order to overcome challenges and solve problems which lie ahead (Kreutzer, 2017).

### 4.4.1 The Digital Business Model

Grgurevic (2017, 135) argues that, especially in the age of technological innovation, it is new ways of value creation, which are important for business models and their success. The ability to fully or only partly transform a business model into a digital one is not given at all firms, as some struggle with the task, while digitally mature companies indicate clear signs of transformation (2017, 135). Werani et al. (2017, 245f) argues that in all business model configurations is a potential to digitally transform each unit of the model, yet the question is how high the potential for digitalization of the dimension actually is and if it is worth to digitalize it. As example Werani et al. (2017, 246) argue that segmentation of markets and customers is something a company should not waste time on to digitalise. Reason being that there are no activities which can be digitalised, in comparison the management of customer relationships or the management of key activities, which should be fully digitalised. According to Schallmo (2016, 7) digital transformation of business models can target single dimensions, the whole models, the value network or different partners of the network. Regarding the scope of change, it can be a incremental, respectively small change, or a radical, respectively fundamental change of a business model. The customer could potentially be used as a benchmark concerning the scope of innovation, but it could as well be the corporation, competitors or partners. Becker et al. (2017, 288) argues similarly by stating that the scope of digitalisation of a model is depending on the business model innovation, hence it can be incremental or radical innovation. According to Baden-Fuller & Haefliger (2013, 422) the assumption of a radically new or improved service or product will more or less lead to increasing profits for the firm by itself. This assumption ignores assumption that business models are linking technology and the choice of a model together. The choice of business model can be considered as the tie between technology innovation and competitive advantage. Gorevaya and Khayrullina (2015, 350) argue that among other factors, technological advancements, such as improving information technologies, are going to have a tremendous impact on companies and their business models, not only long run but already in the near future. According to Weiland Woerner (2013, 71) companies must act and create strong digital business models or otherwise parts of its customers might switch to a competitor who has a strong digital presence. As a digital business model is the company’s way of how it create value digitally.
4.4.2 Definition of Digital Transformation

Currently the situation regarding a definition for digital transformation is quite similar to the
definition regarding concept of business models or innovation of business models, there is no
commonly accepted definition of the term (Schallmo & Rusnjak, 2017, 3).

Schallmo and Rusnjak (2017, 5) approach the definition by arguing that digital transformation is
happening when all actors, for instance customers and firms, get connected across all different
steps of the value creation process, through using new technologies as an essential part.

Digital transformation requires capabilities in order to capture and exchange data, analyse it
and transform it into information. Those generated informations should be used to draw out all
options, evaluate them and enable better decision-making respectively initiation of activities. It
is important to point out that digital transformation can happen in companies, business models,
processes relationships, products and many more, in order to enhance performance and reach of
a corporation (Schallmo & Rusnjak, 2017, 5).

According to Berman (2012, 17) transforming a business in order to be prepared for the digi-
tal age, it needs a reconfiguration of the value proposition presented to the customer, as well as
a new operating mode. Hence, Berman (2012, 17) proposes to rethink what a company offers
and how it delivers the value.

Bouée and Schaible (2015, 6) define digital transformation as the creation of a continuous digital
network throughout all areas of an economy and as the adaption of the actors to the new digital
environment. Those continuous digital networks include transferring of data, analysis of data,
calculation and evaluation of options and of course choosing actions and initiating consequences.

Westerman et al. (2011, 5) argue that digital transformation is when firms use technology to
improve their performance or reach radically. This is done through analytics, smart devices,
social platforms and mobility, in order to change the processes, customer related channels, or
even value proposition of a company.

Werani et al. (2017, 259f) argue that the digital transformation of business models does not fol-
low a general pattern, much rather business models with different digital focus emerge, which
are commonly based on the focus of the underlying original dimension of the business model.
Hence, digital transformation of business models should be seen as a phenomena which is much
broader than it is currently displayed in literature (Werani et al., 2017, 260).
4.4.3 Process of Digital Transformation by Schönbohm and Egle

Schönbohm and Egle (2017, 217) argue that before the digital transformation, there are three steps to master in the process of digitalization. Hence, the two scholars came up with a process to describe the way from experimenting to transforming in four steps:

- Experiment
- Island Model
- Strategy
- Transformation

Starting with the first step of the process, the experiment phase. According to Schönbohm and Egle (2017, 217) in the beginning of the digital transformation of a business model there is often a phase of playful experimenting to get access to the topic. With limited human and financial resources first tests are launched to bring attention to the topic of digitalisation within the corporation and to start the process of digital transformation. It is not uncommon that such tests are launched without a dedicated financial budget or human resources, but nevertheless those projects can have huge success and inspire others (Schönbohm & Egle, 2017, 217).

Next up is the phase of island models, which is commonly started through the monitoring of competitors activities regarding digitalisation or the integration of supporting activities, which could come from acquired companies. Those activities usually have small and limited budgets, nevertheless through small business models they generate revenues, which do not have any synergies with each other usually. An example would be digital sales channels, which can be tried out on a smaller scale in order to see how the market and the customers react (Schönbohm & Egle, 2017, 217f).

The third step of the process would be the strategy for digitalisation. Positive experiences can lead the closer examination of digitalisation in the whole firm. During this step a strategy for digitalisation gets put up by an interdisciplinary team. The budget for digitalisation projects get increased and used for goal-oriented realisation of digital opportunities. This can lead to increasing of revenues or reduction of costs for processes. Additionally, a firm can invest strategically into start-ups in order to acquire talent, know, growth potential and talented employees (Schönbohm & Egle, 2017, 218).

The last step would be the phase of digital transformation. During this phase the vision for the future digital business model gets developed. The goal is commonly defined to digitally transform the whole value chain and to build up synergies, all based on the previously built knowledge from the process. The transformation also includes the systematic termination of
4.4.4 Approach to the Digitalization of Business Models by Schallmo & Rusnjak

In comparison to Schönbohm and Egle (2017, 217) who described the digital transformation process on a general level, Schallmo and Rusnjak (2017, 11) focus their approach around the units of the business model. Schallmo and Rusnjak (2017, 11) came up with a process, for which the scholars have chosen a roadmap approach to digitalization. This approach is supposed to make explaining how the digital transformation of a business model could look like easier. According to De Reuver et al. (2013, 15f) a road map approach helps to visualise how actions will impact a business model. The roadmap of Schallmo and Rusnjak (2017, 11) consists of five different phases in the step-by-step order as visible in figure 19.

Figure 19: Digital Transformation of a Business Model - own figure based on Schallmo & Rusnjak, 2017, 13
The first phase would be *digital reality*, during which the company is focused on drawing out the existing business model, analysing the value chain of the industry and the actors within it, gathering information on customer demands. Drawing out the existing model is strongly related to the transformation of it, as there is a certain knowledge necessary regarding the current business model. Investigating the value chain is used in order to get a deeper understanding of the industry and the scope of digitalisation. By drawing out every step and actor of the value chain combined with the degree of digitalisation, a firm can gain valuable information regarding how attractive each step of the chain is and who are potential partners. Gathering information regarding customer demands is done by a customer or user profile. Depending on which type of value a customer is looking for the solution has to be derived (Schallmo & Rusnjak, 2017, 16f).

The second phase is the *digital ambition* phase, during which goals regarding the transformation of the business models are set and also priorities for the dimensions of the business model. The goals have to be set in certain categories, which would be time, budget, quality and space. According to these categories, goals for each business model dimension get articulated. The category time covers the time related aspect of the business model, for instance faster production. The financial category includes prospects, such as cost cuts or increasing revenue. Space is including facets of the business model such as networking and automatisation. Last but not least quality aspect of the business model is included, in order to set goals regarding process quality or product quality for instance. Due to including all four categories the representation of each one is guaranteed and there will not be a focus on a single category such as quality as example (Schallmo & Rusnjak, 2017, 18).

Up third would be the phase of *digital potential*. After outlining the reality and setting goals, this phase is focused on identifying digital potentials for the business model. During the process of identifying potentials, best practices are analyzed and enabler of digital transformation identified in order to generate options for a future digital business model. Analysing best practices in a firm’s industry and also in other industries is a good way to generate ideas for a firm’s business model. Finding enablers is important for the transformation, as such facilitators are essential to the transformation of the business model. There are four distinctive types of enablers, digital data, automatisation, digital customer channels and connectivity. Collecting, analysing and evaluating digital data allows a firm to make better predictions and find better decisions. Automatisation is a combination of classic technology with artificial intelligence, which enables autonomous systems. Such systems lower the amount of errors, increase speed and reduce costs. Digital channels to connect with the customer through the internet allow a rather direct approach towards the customer, who in return gets a higher amount of transparency and new services. Which leads to the fourth enabler, connectivity. Connectivity is the mobile or wired connection of the entire value chain via high bandwidth telecommunication technology. This enables the synchronisation of supply chains, reduction of production time and innovation cycles. Those enablers make it possible to design the business model, the digital customer experience and the
digital value chain. Based on the best practice analysis and the identification of the enabler, options for a future digital business model design are created. It is important to list all options first without immediately evaluating them. At the core this part of the phase is focused on which units of the business model should be digitalised, in which form and how enablers can be used to improve those components (Schallmo & Rusnjak, 2017, 21).

The focal point of the fourth phase, the digital fit step, is to find congruent options, as those combinations while be integrated into the existing business model. In order to find fitting combinations, the options have to be evaluated. Each option gets evaluated according to the fit to the business model, fulfillments of the customer demands and completion of goals. Criteria of the fit with the existing business model depend on how the model is designed. Customer demands and goals have been defined previously in the digital ambition phase and are now the benchmark for each combination. Furthermore, during this phase the starting point as well as the preferences of the firm get brought into the choice regarding the choice of a path for the digital transformation. Either the operating model or the customer value proposition can be changed, therefore three different paths for digital transformation transpire. Those are digitalization of corporate processes, digitalization of the customer value proposition respectively the value creation dimension, which would be an internal transformation. Transformation of the partner, customer or value chain dimension, an external transformation. Last but not least a combined approach where both an internal and external transformation happens simultaneously (Schallmo & Rusnjak, 2017, 22ff).

The final step of the roadmap proposed by Schallmo and Rusnjak (2017, 24) would be the digital implementation. This phase is where the digital business model is finalised and implemented. Additionally, the digital customer experience and the digital value network are designed in detail. Based on the previous evaluation the most promising option should be chosen and integrated into the business model. Necessary resources and capabilities play an important role when a project plan gets created. Furthermore, the customer demands, which were determined in the first phase of the process, get used in order to create and optimise the user experience. In order to do so the most important aspects from a customer’s point of view get determined and for each aspect needs, tasks, experiences and performances are designated. Last but not least, the digital value network gets established and the partners integrated. Based on the previous analysis of the value chain and the actors of it, the digital value chain gets implemented and the partners integrated. The firm should take the role of the integrator and use enablers to establish the network. During this last phase the roll out should include tests so small adaptations can be made (Schallmo & Rusnjak, 2017, 26f).
4.4.5 Drivers of the Digital Transformation Process

Anderson and Wladawsky-Berger (2016, 2) identify four main drivers, which are forcing firms to start enrolling the transformation into a digital model:

- customer expectations
- product enhancements
- collaborative innovations
- organizational forms

Starting with customer expectations, which is probably the most challenging transformation. The advancements in technologies have drastically increased service expectations of the customers during the digital age. Hence it has become increasingly difficult for corporations to offer a unique and outstanding experience at affordable costs, despite engaging with customers has become easier. Due to the higher expectations customers become increasingly more calculating and unpredictable. The enabler for the demand of a proactive customer experience is big data. Companies, as well as start-ups, are trying to leverage data to analyze it, address security issues or data privacy problems (Anderson & Wladawsky-Berger, 2016, 2f).

Berman (2012, 16) agrees and argues that today customers have an previously unseen range of choices. A lot of those choices are out of reach of what traditional marketing can influence, therefore customer decisions are more and more often informed by social networks. Through those digital platforms information regarding personal and business contacts, choice of products, new trends, even real estate are shared and rated instantly with an previously unseen reach. What started out with people asking for advice, in cases such as when they bought personal items for their homes, has now reached the business world. Consumers who picked up the habit of asking for independent evaluation and advice before buying a product or a service, usually do the same in the business world. Hence, firms need to start making use of the data social platforms provide in order to take advantage of it (2012, 16).

Product enhancements are the second driver which Anderson and Wladawsky-Berger (2016, 3) suggest. Companies starting to shift towards industry solutions, where an integration of related products and services allows the extension and restructure of industry boundaries, which can even lead to the development of completely new industries. This shift is enabled through technological advances, which enable companies to collect more data, and analyze those quicker as the data is available immediately through the internet connection. Furthermore, companies have discovered the on-demand economy. Platforms, which only connect demand and supply, for instance Uber or Lyft where drivers and guests get connected, or the App Store of Apple or Google where simply buyers or seller get in touch, or Airbnb, where landlord and tenant get connected, have been invented. Firms active in this industry try to harness the power of connecting
demand and supply, successfully redefining some industries (Anderson & Wladawsky-Berger, 2016, 3).

Thirdly, collaborative innovations are becoming essential for companies. As the environment of companies has become more and more competitive and global, businesses are forced to become more innovative in order to respond to their changing environment. Through collaboration, within the boundaries of a company as well as outside of them, companies can become more innovative. Through collaborative digital ecosystems, such as Amazon, PayPal, Apple or Microsoft, companies are moving past the common supply chains and instead partner with providers of complementary products and/or services, in rare cases even partnerships with competitors are engaged. Especially in the so called “internet of things”, which is an emerging field, collaboration is of particular importance as companies must ensure that their offers work together in very complex industries, such as healthcare, where commonly several companies are providing parts to a bigger process or an activity, which have to work together flawlessly (Anderson & Wladawsky-Berger, 2016, 4).

Last but not least Anderson and Wladawsky-Berger (2016, 4) suggest organizational leadership. The argument is that for the sake of dealing with the new market environments and also with new business models, companies should, or rather must rethink, their approach to structures and also their culture. In comparison to the usually production-oriented industries, the digital industries are fast paced and more globally active, hence, the commonly applied hierarchic organizational structure most likely will not work. There is already a cultural shift visible in digital companies, where decisions are increasingly based on data than on the decisions of senior management. Furthermore, data scientists are employed in order to enable and enhance organizational learning. While on the one hand those companies are making decisions partly through algorithms and are introducing artificial intelligence, robotics and so on, on the other hand those companies must invest a tremendous amount of resources into cybersecurity in order to protect their data (Anderson & Wladawsky-Berger, 2016, 4). Anderson and Wladawsky-Berger (2016, 4) argue that the digitalization of the economy is one of the most pressing issues of today. As previously mentioned the technological advances are having tremendous influence on both business and also society, furthermore they are essential for the innovation-driven economy. Compared to the technological progress, organizations and also skills develop rather slowly. The gap between development of humans and technologies could be widening in the years to come. Therefore, creating effective organizations is one of the major challenges of the digital transformation (Anderson & Wladawsky-Berger, 2016, 4f).
4.5 Chapter Summary

The last chapter before the conclusion of this thesis had the intention to show the link between globalization, technological innovation and the business model concept. As stated previously the business model of a firm is not static and neither is the environment of a firm. It has been shown in the beginning of this chapter that several scholars agree on the influence the environment of a firm has on its business model (M. Johnson et al., 2008, 2; Demil & Lecocq, 2010, 220; Osterwalder & Pigneur, 2010, 210; (Wirtz et al., 2010, 273); zu Knyphausen-Aufseß & Zollenkop, 2011, 112 Bucherer et al., 2012;De Reuver et al., 2013, 2; Laudien & Daxböck, 2015, 15; Wagner et al., 2015, 1307; Buschmann, 2016, 153)

In order to show the influence the environment can have on a business model, the approaches to the business model environment of Osterwalder and Pigneur (2010, 200), Knyphausen-Aufseß and Zollenkopf (2011, 113), Schallmo (2014, 18) and Bertels et al. (2015, 24) have been compared and analysed. This led to the realisation that a macro and a micro level of the firm’s environment exist. Hence a firm has to deal with different influential factors through these different environment levels. Five key trends which according to Krys (2011b, 373) and Eckert (2014, 4) will change the business environment, as well as the world significantly. Those trends are the demographic change, globalization, shortage of resources, climate change and technological innovation.

Furthermore, in the last part of this chapter the influence, opportunities and risks globalization and digitalisation have been brought together with the business model concept. The reasoning for this being, business model innovation can be a way for firms to deal with major changes, hence business models can help a firm in a global and digital environment. Firms cannot ignore the digitalisation or globalization anymore. Casadesus-Masanell and Ricart (2010, 195) argue that globalization is a driver, which leads to a change in the competitive environment of a firm. Furthermore, this influences the business models of firms, as the firm who follows the changes with an innovational business model grows the faster than its competitors.

Kreutzer (2017, 36) argues that companies who do not operate digitally do not exist anymore in the future. According to Anderson and Wladawsky-Berger (2016, 2), the transformation of business into the digital area has become normal, and the digital business is the economy now.
5 Conclusion

This last chapter of the master thesis is presenting the answer to the research question, a critical review of the paper and opportunities for future research.

5.1 Compendium and Answer of the Research Question

This part of the conclusion is giving a summary about what has been discovered in this thesis and furthermore answer the research question. As a reminder the objective of this master thesis was to give an comprehensive overview regarding the business model concept, business model innovation and to answer this research question:

• How can the business model innovation concept be adapted to a globalized and digital environment?

Starting with a summary regarding the comprehensive overview of business models and business model innovation. The answer to this question has to be separated into two parts. Firstly the business model concept and secondly business model innovation are presented.

The business model concept itself is a rather new idea. The concept has its roots in the theoretical approaches of the resource-based view, transaction cost economics and market-based view (Amit & Zott, 2001, 397; Afuah, 2004, 11; Morris et al., 2005, 729; Steininger et al., 2011b, 11; DaSilva & Trkman, 2014, 383) Since the early 2000’s the topic has increased tremendously in popularity (Nielsen & Lund, 2013a, 22). Starting point of this literature review was the definition of Timmers from 1998. As a reminder, Timmers (1998, 2) defined a business model as “an architecture of the product, service and information flows, including a description of the various business actors and their roles; a description of the potential benefits for the various business actors; a description of the sources of revenues”. Since then several scholars came up with a great variety of definitions and designs for the concept. The latest definition within this thesis has been published by Saebi et al. (2016, 1), who define business model as “the firm’s value proposition and market segments, the structure of the value chain required for realizing the value proposition, the mechanisms of value capture that the firm deploys, and how these elements are linked together in an architecture.”.

In total this paper has presented 22 different definitions for the business model concept. Furthermore, those different approaches have been analyzed and compared, leading to the following insights. The concept of a business model does represent the core logic and strategic decisions a firm has taken and is taking (Shafer et al., 2005, 727). Furthermore, the concept displays how an organization actually functions, how it does create value for customers, and additionally how it captures value during the process (Magretta, 2002, 2; Afuah, 2004, 2; M. Johnson et al., 2008, 4 Osterwalder & Pigneur, 2010, 14; Wirtz et al., 2010, 275; Bieger & Reinhold, 2011, 32). The business model theory also can be seen as an blueprint on how a firm gains its competitive
advantage or is planning to gain a competitive advantage (Schallmo, 2013b, 23; Ranjith, 2016, 204). The concept includes customer orientation, due to the importance of knowing who a firm’s customer is (Schallmo, 2013b, 126). Furthermore, it incorporates the relationship of a firm with its partners, suppliers and also customers Shafer et al., 2005, 202; Osterwalder & Pigneur, 2010, 28; Schallmo, 2013b, 126; Afuah, 2014, 25). Last but not least, the theory of the business model is also reflecting which strategy an organization has persecuted (Casadesus-Masanell & Ricart, 2010, 195).

Zott et al. (2011, 4) argue in one of their many publications, that the there is a plurality of definitions concerning the business model concept. Furthermore, the scholars came to the insight that these overlap only partially. Six years later, and including many new definitions it seems like the statement of Zott et al. (2011, 4) in their respective paper still applies and describes the level of literature quite adequately.

Similar to the definition of the term business model, the components, which a business model should have, are not clearly defined. At least there is no universally established design to be found in the literature. This master thesis has presented seven different approaches regarding the design of business models. While those approaches differ quite a lot, there is a common ground between them all. As presented earlier in this paper, the mutual understanding between the business model dimensions was that almost every approach has a value proposition within its units. Furthermore, a version of a financial dimension was included in every proposition as well. This dimension represents all financial aspects of a firm, for instance revenue, cost structure or access to capital (Chesbrough & Rosenbloom, 2002, 533f; Shafer et al., 2005, 202f; M. Johnson et al., 2008, 3; Lindgardt et al., 2009, 1; Richardson, 2008, 138; Osterwalder & Pigneur, 2010, 22; Bieger & Krys, 2011, 32; Schallmo, 2013b, 129 Afuah, 2014, 25; Saebi et al., 2016, 1). As a firm has to know who its customers are and what they want, some form of market dimension should be included in the business model as well (Magretta, 2002, 87; Shafer et al., 2005, 202; Chesbrough, 2007, 13; Richardson, 2008, 139; Lindgardt et al., 2009, 1; Osterwalder & Pigneur, 2010, 20; Teece, 2010, 189f; Schallmo, 2013b, 126; Afuah, 2014, 25). Last but not least the firm has to have a process or dimension where it creates value, in form of a product or a service, which it proposed through the value proposition to the targeted customers it defined in the market dimension (Chesbrough & Rosenbloom, 2002, 533f; Afuah, 2004, 5; Morris et al., 2005, 730; Chesbrough, 2007, 13; Teece, 2010, 189f). These four different units might have different names in all the approaches literature has to the business model concept. Yet they exists in every model, because they represent essential units a business model should have at least.
It can be said with caution that besides the lack of a common definition and a common design, it seem like the approaches throughout literature would have some common ground for the concept of business models. Nevertheless, a definition, which is accepted throughout the field of research, would probably positively influence the progress within literature. As Zott et al. (2011, 5) argues the lack of a common definition hinders progress and creates confusion.

It is no surprise that there exists also lack of a commonly agreed on definition regarding the concept of business model innovation. For this master thesis 13 different definitions have been compared and analyzed. Again those interpretations only partially overlap. Nevertheless, there are some factors which can be found in almost all of the definitions. Which led to the acknowledgement that the concept of business model innovation can be described as follows. It can be either of incremental or radical nature (Schallmo, 2014, 13; Wirtz & Thomas, 2014; Waldner et al., 2015, 153; Philipson, 2016, 134). Furthermore, business model innovation is an approach for creating and/or capturing value, as well as increasing value for the customer through approaching things in a different manner (Aspara et al., 2013, 460; Matzler et al., 2013, 31; Afuah, 2014, 4). Depending on the firm it includes either changing one or multiple units of a business model (Frankenberger et al., 2013, 6). The concept bares the potential to change a whole industry by introducing a new business model (M. Johnson et al., 2008, 2; Demil & Lecocq, 2010, 228) and allows a firm to offer different solutions than its competitors (Schallmo, 2014, 13; Souto, 2015, 145). It commonly generates a competitive advantage for the innovating firm (Mitchell & Coles, 2003, 15; Amit & Zott, 2012, 42; Schallmo, 2014, 13; Berends et al., 2016, 182). In comparison to the innovation of services or products, BMI does not inevitably lead to a new product or service (Yang et al., 2016, 1795).

Furthermore, eight different approaches to business model innovation have been analyzed in this paper. While scholars agree that change is included in business model innovation, there is no agreement on the scope or degree of change. Unfortunately, this would be necessary to find a common definition for business model innovation. Hence, the processes for business model innovation vary quite drastically. Despite the differences there is common ground on the creativeness necessary to overcome the old business logic, as well as that business model innovation is often driven by changes in the environment of the firm. These changes could be technological changes, market changes or moves by competitors, which a firm cannot leave unanswered.

In conclusion it can be said despite the theoretical advances in the field of business model innovation there is still a lack of a commonly agreed on framework, which could have influence in practice. Bucherer et al. (2012, 183) argue that despite the benefits business model innovation bares, there is no common framework applicable in practice. Wirtz and Thomas (2014, 47) denounce the lack of practical implementation of business model innovation concepts, as there is clearly a deficit in literature regrading this particular part of business model innovation. Buschmann (2016, 152) also disputes the lack of a concrete idea of how to actually use the business model concept and also innovation of business models in practice.
It could be interpreted as there is a need for a more practical approach on how to implement business model innovation for managers, founders and owners of companies, in order to generate a more reliable process. Furthermore, processes regarding business model innovation are currently linked closely to already existing innovation processes, which might limit those approaches. Hence, it would be interesting if a stronger conceptual anchoring of business model concept, a empirical validation of approaches to business model innovation could potentially help.

Part of the objective of this thesis was to answer the research question, which was How can the business model innovation concept be adapted to a globalized and digital environment?. As it has been said before, business model innovation is a way companies can deal with a changing environment. The business model environment, as it has been defined and presented in this master thesis, is usually heavily influenced by a lot of different factors. This is due to the different levels it consists out of. The macro-economic level of the business environment is heavily influenced by large-scale trends of our time, among those trends are technological shifts and globalization. It can be said that business model innovation and globalization are strongly connected, as globalization can be seen as one of the dominant drivers.

While globalization is partly a threat, it also brings a lot of opportunities for firms, if the business model is innovated correctly. Globalization is changing the business environment of a firm constantly, creating uncertainty and a complex situation for the firm. The business model concept, including the environment of a firm, combined with the approaches to innovation of it, can present a firm with ways to overcome disadvantages, break out of intense competition and create a competitive advantage for itself.

It seems to be clear that a business model is most certainly influenced by the environment the company is active in. Dimensions which describe markets, customers, relationships with customers or partners, those are only designed for one country, or rather one culture. Hence those dimensions should be considered as dynamic and vary accordingly to the specific country and/or culture. Within the reviewed literature, only Rask (2014) and Onetti et al. (2012) include aspects regarding internationalisation or global business in their respective approaches. Rask (2014, 158) is using upstream and downstream activities to include globalized markets and production into the concept. The approach uses business model innovation in order to display potential ways for internationalisation. Onetti et al. (2012, 361) in comparison, include a geographical dimension into the concept, which has its focus on the location of an organization’s activities. While those are creative and interesting approaches, it appears as there might be a lack of attention within this area of the business model innovation field. Yet in theory the powerful approach could be perfectly fitting to help companies to deal with going international. Rask (2014) argues that internationalization is something which is commonly happening in reality.
Yet it is rarely mentioned in connection with business model innovation. According to Rask (2014) relevant literature seems to be missing an international perspective. Maybe future studies could address this as their focal point of research. At this moment the lack of further models could potentially be interpreted as a limitation of concept.

Concerning the more recent trend of digital transformation of business models, it seems like literature is lagging behind. While the business model innovation concept is commonly explained to be driven by technological change, literature regarding the digital transformation of business model is scarce. It is not possible to know what is currently being worked on by scholars in the filed, but this literature review has come to the conclusion that it seems like literature has to catch up with the digital transformation of business models. The review of current literature indicates that only Schallmo and Rusnjak (2017, 18) and Schönhbohm and Egle (2017, 217) have published processes concerning the innovation of business models including digitalization. Schallmo and Rusnjak (2017, 18) already came up with a detailed five step process for the digital transformation. While Schöhnbohm and Egle (2017, 217) came up with a process, which allows quite some interpretation. While those are great starting points, it seems as there is still a lot to discover within this part of literature.

All in all one could say that globalization and digitalization do influence today’s business environment strongly. Both trends most likely are here to stay and will not be reversed anytime in the near future. Hence, to deal with those trends managers should turn towards the concept of business models and business model innovation. To stay successful or become successful, firms should watch their business model closely and develop plans in order to enable business model innovation. Using those concepts creates the potential to get an competitive advantage and to deal with trends, such as globalization or also digitalization.
5.2 Critical Review and Further Research Opportunities

Goal of this thesis was to give a critical, comprehensive and overview on the topic business model innovation. During the process of reviewing the literature for this paper, many different articles, books and papers have been read, analyzed, critically discussed and compared with other sources. As previously mentioned due to the high amount of different approaches it was quite a challenge to get an overview of the topic, identify relevant scholars and significant papers. Hence, it was quite a challenge to structure the approach appropriately for this topic and to combine the different, and also sometimes contradictory approaches, respectively definitions, for the concept of business models, business model innovation in a globalized and digitized environment.

While this literature review was done with the intention to give an throughout overview of the business model and innovation of business models, there is a limitation to it. Despite the good intention and the fact that papers, which did not have business model in the title nor in the abstract, have been analyzed, it could have happened that certain papers have been overlooked. This would be due to the reason that the term business model was missing in title and/or abstract. In this case the search queries would have never shown the literature.

Nevertheless, as a result of the literature review a general overview to the topic business model innovation has been created and it would be interesting to look at certain topics on a more detailed level. Hence, this master thesis will hopefully provide students or even managers with a good starting point for their research or ideas. Especially the areas regarding digitalisation of business models and internationalisation through business model innovation seem to have potential.
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