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The Use of Frameworks in Business Model Development



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Summary

The concept 'business model' have gained a lot of popularity in the last decades. Firms see understanding and using business models as a very important factor for their competitive advantage. To stay competitive firms need to create new business models and innovate in their 'old' ones. Several researchers and consultants have designed so-called 'frameworks' to help in this process. This research has attempted to answer to what extent and how firms use frameworks for creating and innovating their business models and what the effectiveness of this process is. To help answering this question the research discussed some relevant sub questions: which frameworks are used by firms to create and innovate their business models?, how do firms make use of business models? and who is involved in the business model process and what is their role? To answer these questions the research made use of a qualitative study. Within this study interviews were held in twelve Dutch firms who actively participate in business model development. With the help of interview topics which were based on the research and sub question(s) firms gave their opinions and experiences according to the use of business models and the relevant frameworks. The results showed that different frameworks were used by firms, both theoretical as well as 'own' frameworks'. The process of coming from a business idea to a working business model was often an iterative process. Frameworks were relevant in a few or all phases of this process, and have different purposes; checklist / guidelines or as a main tool to analyse a business model. Also the results showed that many different stakeholders were involved. Both internal and external did play different roles in this entire process. Concerning the effectiveness most firms were very satisfied with the use of their frameworks, and saw the process as very effective. Overall using frameworks seems to make the business model development process more easy. The frameworks reduces complexity and improves communication. In conclusion firms make active use of business model frameworks, use them for different purposes and when frameworks are used this creates an effective business model process.

Research Abstract

Aim of the research: The aim of this research is to find out to what extent and how firms use frameworks for creating and innovating their business models and what the effectiveness of this process is. Other relevant issues discussed are which frameworks are used by firms, how do firms make use of business models and who are involved in the business model process.

Methodology: To answer the research question of this study an exploratory research was executed. The study was qualitative and consisted of interviews with different firms. The firms were selected on different criteria and participated anomalously in the research. Several interview topics based on the research questions were presented to the firms. Within these topics firms free to respond on all relevant criteria. To steer the interview and to provide relevant interview results the researcher made use of a funnel approach. In this approach the research began with asking open questions and ended with closed and structured questions.

Results: The results showed that different kinds of business model frameworks are used by firms. Some firms see frameworks as checklists, guidelines or helpful tools but not as the main purpose of creating or innovating a business model. Others however see completing a framework as a crucial step and describe it as very essential in the process of creating a business model. Also the results revealed that a lot of internal and external stakeholders can be involved in the business model process. Regarding the effectiveness most firms were very satisfied with the use of their frameworks, and saw the process as very effective. Overall using frameworks seems to make the business model development process more easy.

Implications: The research showed that the use of business model frameworks has a positive effect on a firm's business model development process. During different phases of this process frameworks reduce complexity, improve communication, foster knowledge, ensure good visualizing and stimulate understanding a firm's business model. For managers in different types of firms these results can be of great value, and also is this topic very relevant for researchers who focus on business models.

Future research: To expand and improve the results of this study future research can make use of a quantitative method like a survey beside a qualitative method. This ensures triangulation, whereby reliability is improved. Also the number of interviews can increase, which will lead to higher validity. In addition future research can try to reveal how the positive relationship between business model frameworks and a firm's business model development process is related to a firm's performance.

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1. Introduction

Business model innovation has proved to be a critical success factor within the rapidly changing global business environment these days (IBM, 2009). Different studies show that business model innovation can lead to revenue growth (Johnson et al., 2008), reduction of costs (Chesbrough & Schwartz, 2007; Chesbrough, 2010) and possibilities to enter new markets for mature firms (Markides, 2006; Chesbrough & Schwartz, 2007; Johnson et al., 2008). Changing, innovating, reviewing or developing a firm's business model can be done with the use of frameworks, models and tools (called frameworks in this research), which can help in this critical process by identifying components, elements or factors of a firm's business model. Hence, a better understanding of the business model innovation process can be supported with the use of frameworks (Hoffmann, 2013).

A business model is a strategic model that especially gained popularity in the last twenty years. This mainly due to the rise of the internet, upcoming emerging markets and the growth of industries and organisations that use advanced technologies (Zott, Amit & Massa, 2011). The popularity of the business model has increased with a reason: it is currently seen as equally or even more valuable for a firm's competitive advantage than new products and services (The Economist Intelligence Unit, 2010). In the future firms will not only compete each other with products and technologies, but competition will take place between business models (Gassmann et al., 2014). However, to keep this competitive advantage companies have to continually change, innovate and review their business model, which can be done with the use of different business model frameworks. Regarding to the gained popularity of business models a lot of attention has been given to the concepts created by researchers (Zott, Amit & Masa, 2011). However, models created and innovated in firms also contain enormous practical value (Magretta, 2002) and managers in practice have tacit 'internal' knowledge that researchers do not have (Baden-Fuller & Morgan, 2010).

Osterwalder, Pigneur & Tucci (2005) were one of the first authors who emphasised the relevance and understanding of the concept, concerning business models and frameworks. They describe business models as the blueprint of how a firm does business. Or in other words, it shows how strategic issues are translated into a conceptual model that reveals how the business functions. With the use of this definition Osterwalder, Pigneur & Tucci (2005) describe a Business Model Canvas that can be used to identify and innovate a firm's business model. Another addition to the concept of business models if given by Teece (2010). He sees business models as an important concept of how companies can create and deliver value to its

customers. A lot of definitions and compositions of business model are known and there is not one widely accepted definition. But one thing seems clear, a business model is a relevant concept for companies and can play a positive and powerful role in corporate management (Shafer, Smith & Linder, 2005). Or as defined by Magretta (2002): 'A good business model remains essential to every successful organization, whether it's a new venture or an established player'. It seems that a firm must clearly state and understand its business model for initial success, but the success or failure depends also on the capability of the firm to innovate their model (Keen & Qureshi, 2006). Without a well-developed business model, firms will fail to deliver or capture value from their innovations (Teece, 2010).

In the scientific literature there are different opinions how to interpret the term 'business model'. Some authors refer to the term business model as the way a company does its business (Galper, 2001; Gebauer & Ginsburg, 2003) while other authors emphasize the model aspect (Weill & Vitale, 2001; Chesbrough & Rosenblom, 2002; Osterwalder, Pigneur & Tucci, 2005; Morris, Schindhutte & Allen, 2005). These authors who emphasize the model aspect of business models and highlight the use of frameworks, will be the main focus of this research. Or in others words, how frameworks can be used by firms to work on their business models. The most famous and commonly used business model framework in practice is the Business Model Canvas of Osterwalder & Pigneur (2010), however there are other relevant business model frameworks (Hamel, 2000; Alt & Zimmerman, 2001; Weill and Vitale, 2001; Chesbrough & Rosenbloom, 2002; Gordijn & Akkermans, 2003; Morris, Schindehutte & Allen, 2005; Keen & Qureshi, 2006; Johnson et al., 2008; Al-Debei & Avison, 2010; Gasman et al., 2014; Amit & Zott, 2015). Because these other and useful frameworks do exist, it seems relevant to examine what these frameworks are and how they are used in practice.

Firms need to respond to different drivers such as globalization, technical change and a changing competitive environment. An important way how firms can do this is to compete differently and innovate in their business models (Casadesus-Masanell & Ricart, 2009; Chesbourgh, 2010). Thus it can be said that creating and innovating business models happens within firms and plays an important role. However some firms will make use of existing and standard frameworks, tools and models developed by researchers and consultants instead of their own. While other firms do develop their own frameworks, models and tools to create and innovate their business models.

Thus, firms have to develop and innovate their business models. How this process works and especially which kinds of frameworks they use seems to be an important aspect. Several

researchers (ea. Morris, Schindehutte & Allen, 2005; Johnson et al., 2008; and Osterwalder & Pigneur, 2010), consultants and organisations have proposed business model frameworks to work with. However how these frameworks are used by firms for creating and innovating a business model, and if using frameworks is effective is still relatively unclear. With the use of all previous insights the following research question can be formulated:

To what extent and how do firms use frameworks for creating and innovating their business model(s) and what is the effectiveness of this process?

Hence, the focus of this research will be on the use of frameworks by firms for business models in practice and to identify which frameworks there are and how frameworks are used. To see how this business model development process works in practice this research will make use of three concepts mentioned in the Strategy as practice theory namely: practitioners, praxis and practices (Whittington, 2006). Where practitioners are the employees who do the work of making, shaping and executing strategies, or in this case business models. What these employees do is strategy praxis, which contains all the various activities involved in the deliberate formulation and implementation of strategy. And at last there are the practices, which are the shared routines of behaviour, including traditions, norms and procedures of employees. When this theory is applied on the research question the following sub questions can be formulated regarding the creation and use of business models in firms:

- 1. Which frameworks are used by firms to create and innovate their business models? (Practices)
- 2. How do firms make use of business models? (Praxis)
- 3. Who is involved in the business model process and what is their role? (Practitioners)

In the next chapter the theory of business models will be more extensively discussed. With the help of the Strategy as practice theory we will try to describe and explain the concept of business models and the corresponding frameworks from a scientific point of view. With a more clear view of the concept and its frameworks, the third chapter, the methodology of the research, will be covered. Then in chapter four the results of the data collection will be analysed. The research finally ends with a conclusion.

2. Theoretical background

As mentioned in the previous chapter there is a lot of theory about the concept business model, but the important difference described by Osterwalder, Pigneur & Tucci (2005) has to be strictly taken into account. There are authors who see business models as the way a company does its business while other authors concentrate on the model aspect of business models. The model aspect; how a business model can be created and innovated with the use of frameworks is the main aim of this chapter and research. To cover this aspect of business models a few relevant insights from theory will be described. First the concept of a business model will be explained. This because definitions of a business model have been subject to much debate and there is not yet a general accepted definition (Fielt, 2014). Then the supporting theory of Strategy as Practice will be discussed. According to this theory the conceptualisation of business models will take place. Starting with explaining what frameworks for business models are and highlighting some examples from theory, which means that different frameworks of several authors will be analysed to get a better understanding of the current situation of the proposed theoretical business model frameworks. Then the process of using frameworks for business model will be explained and how these frameworks are used in practice. The last sub question is about the stakeholder theory, which actors are involved by the use of frameworks in business model development. Then concerning the research question, the effectiveness of this entire process will be addressed based on insights of different theories. Finally, the last part will summarize all gathered insights from the business model theory and use it as a starting point for the methodology chapter.

2.1 Business Models

A lot of scientific articles and papers about business models contain the question: 'what is a business model?'. Not because this is a very complex or difficult definition but because there are so many different opinions and insights concerning the term (DaSilva & Trkman, 2014). So it seems that when authors write about the term 'Business Model' they do not always mean the same thing (Linder & Cantrell, 2000). Because of the different definitions that exist this section will describe definitions of several authors, and finally select the kind of definitions which will be the foundation of this study.

2.1.1 Definition of a Business Model

The term business model can be defined in different ways. Some definitions are rather short like: 'it spells out how the company makes money' (Rappa, 2002) and 'an abstraction of a

business identifying how it profitability makes money' (Betz, 2002). A more extensive description is given by Magretta (2002) who sees the business model as a logical story; who are your customers, what is their value and how you will you make money in exchange for the given value? While other authors like Chesbrough & Rosenbloom (2002), Chesbrough (2010) and Osterwalder, Pigneur & Tucci (2005) describe the term in further detail and highlight the model aspect. The business model can provide a holistic view of a company, which shows how a company's internal structure is managed and how it connects with its external environment (Chesbrough & Rosenbloom, 2002). According to Chesbrough (2010, p.355) a business model fulfils several functions: it 'articulates the value proposition, identifies a market segment and specifies the revenue generation mechanism, defines the structure of the value chain, details the revenue mechanisms, estimates the cost structure and profit potential, describes the position of the firm within the value network linking suppliers and customers and formulates the competitive strategy'. Fielt (2014, p.96) covers also the concept of value and defines business models as; 'A business model describes the value logic of an organization in terms of how it creates and captures customer value and can be concisely represented by an interrelated set of elements that address the customer, value proposition, organizational architecture and economics dimensions'. Osterwalder, Pigneur & Tucci (2005, p.17) describe the business model as follows: 'A business model is a conceptual tool that contains a set of elements and their relationships and allows expressing the business logic of a specific firm. It is a description of the value a company offers to one or several segments of customers and of the architecture of the firm and its network of partners for creating, marketing, and delivering this value and relationship capital, to generate profitable and sustainable revenue streams'. Beside these discussed definitions, there are many other relevant definitions of a business model from theory. To get a better understanding of those definitions Table 1 covers a selection of them.

Author(s)	Definition
Hedman & Kalling (2003, p. 49, 52–53)	Business model is a term often used to describe the key components of a given business. That is customers, competitors, offering, activities and organization, resources, supply of factors and production inputs as well as longitudinal process components to cover the dynamics of the business model over time.
Morris, Schindehutte & Allen (2005, p.727)	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.

Shafer et al. (2005, p. 202)	A representation of a firm's underlying logic and strategic choices for creating and capturing value within a value network.
Andersson et al. (2006, p.1)	Business models are created in order to make clear who the business actors are in a business case and how to make their relations explicit. Relations in a business model are formulated in terms of values exchanged between the actors.
Johnson, Christensen, and Kagermann (2008, p.52)	A business model, from our point of view, consists of four interlocking elements that, taken together, create and deliver value. The most important to get right, by far, is the customer value proposition. The other elements are the profit formula, the key resources and the key processes.
Demil and Lecocq (2010, p. 227)	Generally speaking, the concept refers to the description of the articulation between different BM components or 'building blocks' to produce a proposition that can generate value for consumers and thus for the organization.
Teece (2010, p.173)	In short, a business model defines how the enterprise creates and delivers value to customers, and then converts payments received to profits.

<u>Table 1 – Definitions of a Business Model</u>

All of these authors do not only see a business model as a way a firm does its business but describe more extensively the model part of the concept and how the firm is internally structured and connects with its external environment. Also the concept of creating, delivering and capturing value for the customer is relevant. In this research these 'model-based' and 'value creating, delivering and capturing' business model definitions will be the point of departure.

2.1.2 Focus of the Study: Business Models as Frameworks

The described definitions and the corresponding requirements can be converted to a particular focus of this study. Related to insights in the previous section, Baden-Fuller and Morgan (2010) define that business models have a multivalent character as models, where business models can occur in different forms such as scale and role models, scientific models and recipes. The scientific models and recipes cover the thought of business models as frameworks consisting of different interrelated elements, each with a specific function, representatives for a class of things and as generic descriptions. This corresponds with the insights provided by Osterwalder, Pigneur & Tucci (2005) who also highlighted the model aspect of a business model. They identify components, domains, concepts and relationships of a business model that can be constructed as a framework. Arend (2013) describes this as a cognitive tool for visualization, which will help by identifying components and detecting inconsistencies in the overall set of operations. All these authors emphasize the importance of identifying and describing the model characteristics of a business model, and not just showing

a simple overview of a firm. Seeing a business model as a model or framework consisting of characteristics (components, elements, building blocks will therefore be the focus of this study.

2.2 Strategy as Practice and Business Models

To analyse the concept of business models and the corresponding frameworks this research will make use of the Strategy as practice theory. This theory is treats strategy as something people do (Jarzabkowski, 2004; Whittington, 2006). This will help this research to show what the process of business model development with the use of frameworks looks like in practice (further explained in Chapter 3). It will cover which business model frameworks are used, how they are used and who are involved in the process, instead of just looking at the theoretical foundation. The first section will cover the theory of Strategy as practice and try to explain the concept briefly. The second part will use Strategy as practice as a starting point for the use of frameworks in business model development.

2.2.1 Theory of Strategy as Practice

Strategy as practice is about what strategic actors actually do and the kinds of activities they do when they strategize (Carter, Clegg & Kornberger, 2008). The concept of Strategy as practice was first introduced by Whittington in 1996. He focused on strategy as a social practice, and try to find out how practitioners of strategy really act and interact. Whittington (1996) identified four basic perspectives on strategy: process, policy, planning and practice. Based on two factors: issues; where strategies should go and how actually getting there, and levels; the unit of analysis, organisational or individual. The first approach, the 'planning' approach focusses on tools and techniques to help managers make decisions about business direction: where to go and on an individual (managerial) level. The second approach is named the policy approach, which covers analysing the organisational pay-offs when pursuing different strategic directions and where the focus lays on where to go and on an organisational level. Thirdly there is the process approach which identifies how organizations come first to recognize the need for strategic change and then actually to achieve it, so how to actually get there and on an organisational level. The last proposed approach by Whittington (1996) is called the practice approach which also covers (just like the process approach) the need for strategic change and actually achieving it (how to get there) but then on a managerial level. Thus the practice perspective is concerned with managerial activity, how managers 'do strategy' (Whittington, 1996, p.732). Jarzabkowski (2004) contributes to the Strategy as practice theory by explaining the concepts of recursiveness and adaptation. Where recursiveness means the socially accomplished reproduction of sequences of activity and

action because the actors involved possess a negotiated sense that one template from their repertoire will address a new situation (Jarzabkowski, 2004, p.5). And adaptation means varying degrees of change from incremental adjustment to radical reorientation (Jarzabkowski, 2004, p.8). Jarzabkowski (2004) developed a linkage between practice and firm behaviour by doing an analysis of recursive or adaptive use of practices and the impact this can have on a strategic action, over time and under different competitive and institutional circumstances.

After the introduction of the term, Whittington (2006 made an important addition to the Strategy as practice research field a few years later. He introduced the concepts of praxis, practices and practitioners. Jarzabkowski & Spee (2009) define this as 'doing of strategy'; who does it, what they do, how they do it, what they use and what implications this has for shaping strategy. This is largely equivalent to the three concepts of Whittington, which will be the central concepts in this research. Firstly, there are the strategy practitioners who do the work of making, shaping and executing strategies. These practitioners of strategy are not only the top managers but also can be the middle managers, strategic planners and external strategy consultants. What these practitioners actually do is strategy praxis, the formulation and implementing of strategy in an organisation. According to Whittington (2006, p.619): 'Thus, the domain of praxis is wide, embracing the routine and the no routine, the formal and the informal, activities at the corporate centre and activities at the organizational periphery.' The last part of Strategy as practice are the practices, where practitioners draw their praxis on. Whittington (2006) says that a combination of all three elements of Strategy as practice is not necessary. But they can be combined in an integrated framework. Where the practitioners are seen as a connection between the praxis and the practices.

2.2.2 Strategy as Practice as starting point for business model development

Now the theory of Strategy as practice is briefly discussed it can be applied to this specific research. As already mentioned the problem statement of this research will be divided in three sub-questions, which will focus on: which frameworks are used by firms, how do firms make use of business models (based on the information from the frameworks) and who are involved in this entire process. To cover all of these sub-questions later on in the research, the remainder of this chapter will focus on aspects based on the three concepts; practices, praxis and practitioners. Firstly, the practices can be seen as something that guides activity and as an activity itself (Whittington, 2006). In this case the 'guides' can be seen as frameworks for business models, which are guiding but also an activity itself. Secondly, praxis refers to actual

activity, what people do in practice (Whittington, 2006). In the case of this research it is the process of the use of business models in practice; how do firms make use of business models. Thirdly, the practitioners, who are involved in the process are in this research the people who are involved in the business model development process. These people or positions will be identified with the Stakeholder theory (Freeman, 1984). At the end all these insights from the three Strategy as practice concepts can be combined in term of business models and business model frameworks.

2.3 Frameworks

The theory of Strategy as practice describes how to divide the concept of business model theory in three components (Whittington, 2006). Starting with analysing the 'Practices'; which covers which frameworks for business models there are and giving some theoretical examples of these frameworks. As previously discussed, one of the most known and popular proposed frameworks for business models is the Business Model Canvas (based on the nine building blocks) developed by Osterwalder (2004). Beside this Canvas, there are also a lot of other relevant frameworks concerning business models (Hamel, 2000; Alt & Zimmerman, 2001; Weill and Vitale, 2001; Chesbrough & Rosenbloom, 2002; Gordijn & Akkermans, 2003; Morris, Schindehutte & Allen, 2005; Keen & Qureshi, 2006; Johnson et al., 2008; Al-Debei & Avison, 2010; Gasman et al., 2014; Amit & Zott, 2015). In this section we will highlight the most important aspects of a selection of these frameworks, tools and models to get a better view of the different components and tools that exist. The selection made is based on different perspectives concerning business models and notoriety (Hamel, 2000; Morris, Schindehutte & Allen, 2005; Johnson et al., 2008; Osterwalder & Pigneur, 2010; Maurya, 2010; Gasman et al., 2014). Also two other methods are given; the Sequoia Business Plan (Sequoia Consultants) and the Balanced Scorecard (Kaplan & Norton, 1992). These methods are not seen as business model frameworks but can serve as alternatives. But first this discussion will focus on what frameworks for business models there are in general and how they can be used.

2.3.1 Frameworks for Business Models

In the business model literature a common opinion as to which components exactly make up a business model has not yet been reached (Lucassen et al., 2009; Gassmann et al., 2014). Several frameworks for business models have been designed in the last two decades. All these frameworks cover different aspects and components but also have a lot in common. An important similarity is the fact that all frameworks and their elements show how a firm creates and captures value (Fielt, 2014). Hoffmann (2013, p.41) described a framework as: 'Different

business model components are provided in a comprehensive template or canvas, which, leading the team through a fixed number of consecutive boxes and visualizing relationships between components, shall enable firms to arrive at new business models'. When looking at the function of a framework, Fielt (2014) says that all these business model frameworks address what a business model is made-off. The business model of a firm consists of several elements, or otherwise said; components (Pateli & Giaglis, 2004), questions (Morris, Schindehutte & Allen, 2005), building blocks (Osterwalder & Pigneur, 2010) or functions (Chesbrough & Rosenbloom, 2002). The frameworks for business models do not only show and select these elements, but also highlight the relations between these elements (Gordijn et al., 2005) and show a hierarchical structure (Fielt, 2014). All of these aspects can be identified in the following examples of different business model frameworks.

2.3.2 Framework: Hamel (2000)

Starting with the framework of Hamel (2000), who has made a business model proposition. He described a more general business model framework with several elements consisting of four main components namely; core strategy, strategic resources, value network and customer interface. The core strategy defines the overall business mission, or in other words what the overall business model tries to accomplish. Further it shows the products, markets and segments the company is competing in and it explains how the firm competes differently than its competitors. The Strategic Resources contain the core competencies like the skills, knowledge or unique capabilities of the company. Beside that it specifies the strategic assets of the company and the core process of the company. The Customer Interface also has several functions like, how the company can reach it customers, all the insights of the customer and the interaction between the company and its customers. The last component, the value network shows the network of the company such as suppliers, partners and coalitions. These components, also decomposed in different sub-elements, are related to each other via three connections (Figure 1).

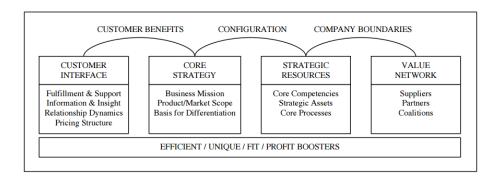


Figure 1. Business Model Concept (Hamel, 2000)

The concept of the business model of Hamel (2000) connects all these four components and thereby its sub-elements with three relations namely, Customer Benefits, Configuration and Company Boundaries. Where the Customer Benefits provides the link between the Customer interface and the Core strategy, it shows what particular benefits are actually being offered to the customer. The Configuration connects the Core Strategy and the Strategic Resources and shows how the particular strategy is supported by the unique combination of competencies, assets and processes of the company. The last connection between the Strategic Resources and the Value Network, the Company Boundaries shows how the strategic decisions are converted to the Value Network.

2.3.2 Framework: Morris, Schindehutte & Allen (2005)

Morris, Schindehutte & Allen (2005) propose a strategic framework for conceptualizing a value-based venture. The framework can be used by any company and allows the user to design, describe, categorize, critique and analyse a business model. Their framework consists of three levels of decision making namely: the Foundation, Proprietary and Rules levels. This difference in levels is made because of the different managerial purposes of the model. At the Foundation level there is a need to make general decisions concerning what the business is and what it is not. The Proprietary level enables the development of variables resulting in marketplace advantage and how eventually value can be created. The last level, the Rules level, creates the guiding principles for the decisions made at the levels one and two. All these levels can then be divided in six basic decision areas (key questions).

	Foundation level	Proprietary level	Rules
Component 1: Factors related to offering	Sell services only Standardized offering Narrow breadth Shallow lines Sell the service by itself Internal service delivery Direct distribution	Short haul, low-fare, high-frequency, point-to-point service Deliver fun Serve only drinks/snacks Assign no seats/no first class Do not use travel agents/intermediaries Fully refundable fares, no advance purchase requirement	Maximum one-way fare should not exceed US\$ Maximum food cost per person should be less than US\$
Component 2: Market factors	B2C and B2B (sell to individual travelers and corporate travel departments) National Retail Broad market Transactional	Managed evolution from regional airline to servicing to 59 airports in 30 states Careful selection of cities based on fit with underlying operating model	Specific guidelines for selecting cities to be serviced 85% penetration of local markets
Component 3: Internal capability factors	Production/operating systems	Highly selective hiring of employees that fit profile; intense focus on frontline employees Do not operate a hub and-spoke route system. Fly into uncongested airports of small cities, less congested airports of large cities Innovative ground operations approach Independent baggage handling system Use of Boeing 737 aircraft No code sharing with other airlines	At least 20 departures per day from airport Maximum flight distance should be less than miles Maximum flight time should be less than minutes Turnaround of flights should be 20 minutes or fewer
Component 4: Competitive strategy factors	Image of operational excellence/ consistency/dependability	Differentiation is achieved by stressing on-time arrival, low fares, passengers having a good time (spirit of fun) Airline that love built	Achieve best on-time record in industry
Component 5: Economic factors	Fixed revenue source High operating leverage High volumes Low margins	Short-haul routes and high frequency of flights combined with consistently low prices and internal efficiencies result in annual profitability regardless of industry trends	Maintain cost per passenger mile below US\$
Component 6: Growth/exit factors	Growth model	Emphasis on growth opportunities that are consistent with business model	Managed rate of growth

Figure 2. Design of the Business Model SW Airlines (Morris, Schindehutte & Allen, 2005)

At the Foundation Level the main components consist of the questions; How will the company create value? (Factors related to Offering) For whom will the company create value? (Market Factors) What is the company's internal source of advantage? (Internal Capability Factors) How will the company position itself in the market? (Competitive Strategy Factors) How will the company make money? (Economic Factors) What are the Entrepreneur's time, scope and size ambitions? (Personal / Investor Factors). With the use of these questions, the main essence of the model can be captured. While this part of the model is quite easy to copy by competitors, the next level, the Proprietary Level is not. The copying by competitors is particularly difficult because of the interaction between the Proprietary components. With these unique combinations the 'actual' value can be created and finally competitive advantage can be achieved. The last level, the Rules Level, creates operating rules and guidelines which can ensure that the foundation and proprietary elements are converted into ongoing strategic actions. An example of this process of designing and explaining a business model is outlined in Figure 2 for Southwest Airlines.

2.3.4 Framework: Johnson et al. (2008)

According to Johnson et al. (2008) a business model framework can be developed based on four interlocking elements, that when combined can create and deliver value. The first and most important element they describe is the Customer value proposition (CVP). A firm need is to create value for customers, which Johnson et al. (2008) call 'to help customers to get an important job (fundamental problem that needs a solution) done'. Johnson et al. describe the job and CVP as (2008, p.52): 'The more important the job is to the customer, the lower the level of customer satisfaction with current options for getting the job done, and the better your solution is than existing alternatives at getting the job done (and, of course, the lower the price), the greater the CVP'. The second element is the Profit formula, that shows how a firm can create value for itself as a result of creating value for the customer. The Profit formula consists of the Revenue model (price*volume), Cost structure (different costs and economies of scale), Margin model (contribution needed for desired profits) and Resource velocity (how well to utilize resources to support the expected volume). The third element are the Key resources, which consist of different kinds of assets that need to deliver the proposition to the targeted customer. The last element are the Key processes that allow the firm to deliver value in a way they can successfully repeat and increase in scale. Examples of these processes are training, development, manufacturing, budgeting, planning, sales, and service (Johnson et al., 2008). All elements are put together in Figure 3.

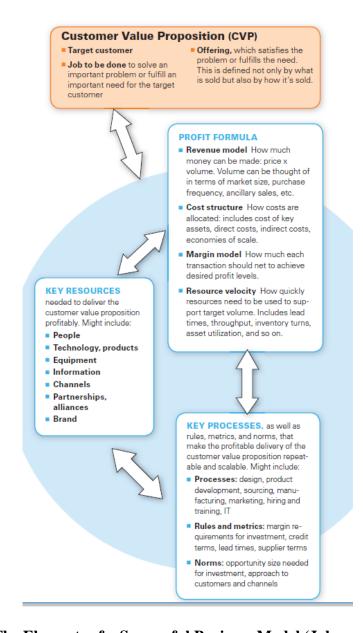


Figure 3. The Elements of a Successful Business Model (Johnson et al., 2008)

According to Johnson et al. (2008) the described elements form the fundament of any firm. An important part of the framework are the interdependencies between the elements. All elements are connected to each other, and major changes in one element will result in changes in all elements.

2.3.5 Framework: Osterwalder & Pigneur (2010)

Another framework, and probably the most famous, for business models was developed by Osterwalder (2004). With this framework they tried to describe and explain the business model of a firm. They divided the business model of a company in four areas and nine building blocks, this all based on the research of Kaplan & Norton (1992) and Markides (1999). The framework consists of these four areas: the Product, Customer Interface,

Infrastructure Management and Financial Aspects (Osterwalder, 2004). The Product area tells what business the company is in, the offered products and the value proposition offered to the market. The Customer Interface shows who the company's target customers are, how they deliver the products or services to them and how it builds strong relations with their customers. The third area, the Infrastructure Management consists of the way the company efficiently performs its infrastructural or logistical issues, with whom, and as what kind of network enterprise. The last area, the Financial Aspects, shows what the revenue model is, the cost structure of the company and the business model's sustainability. To be more detailed, Osterwalder (2004) divide the four areas in nine more demarcated building blocks namely; value proposition, target customer, distribution channel, relationship, value configuration, capability, partnership, cost structure and revenue model. In Table 2 below the four areas haven been split into the nine building blocks.

Area	Building Block	Description	
Product	Value Proposition	A Value Proposition is an overall view of a company's bundle of products and services that are of value to the customer.	
Customer Interface	Target Customer	The Target Customer is a segment of customers a company wants to offer value to.	
	Distribution Channel	A Distribution Channel is a means of getting in touch with the customer.	
	Relationship	The Relationship describes the kind of link a company establishes between itself and the customer.	
Infrastructure	Value Configuration	The Value Configuration describes the arrangement of	
Management		activities and resources that are necessary to create value for the customer.	
	Capability	A capability is the ability to execute a repeatable pattern of	
		actions that is necessary in order to create value for the	
		customer.	
	Partnership	A Partnership is a voluntarily initiated cooperative	
	-	agreement between two or more companies in order to	
		create value for the customer.	
Financial Aspects	Cost Structure	The Cost Structure is the representation in money of all the	
		means employed in the business model.	
	Revenue Model	The Revenue Model describes the way a company makes	
		money through a variety of revenue flows.	

Table 2. - The Nine Building Blocks (Osterwalder, 2004)

The above described theory of Osterwalder (2004) consisting of the four areas and by the nine building blocks were expanded in a more recent book by Osterwalder & Pigneur (2010). They suggested a more practical framework, called the Business Model Canvas (Figure 4). With this framework it is possible for firms to develop and change (new) business models, and thereby create, deliver and capture value for their customer.

The Business Model Canvas

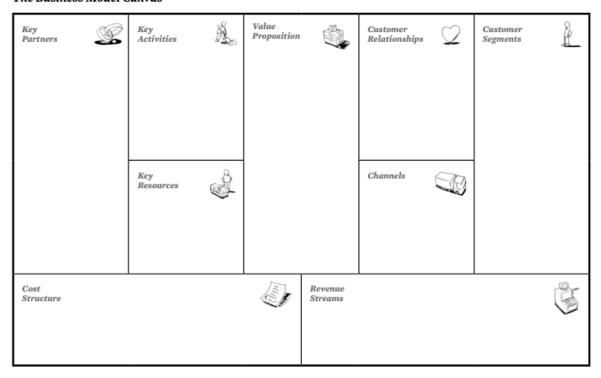


Figure 4. Business Model Canvas (Osterwalder & Pigneur, 2010)

One firm will be used to illustrate how to use the Canvas, this to get a better view of all building blocks and the relationships between them. This firm is the well-known, large Swedish, low cost furniture firm Ikea. *The Customers segments*; the different groups of people or organizations an enterprise aims to reach and serve (Osterwalder & Pigneur, 2010). For Ikea are different kinds of people like families, elderly or students who are price sensitive. Ikea offers them a Value Proposition; the bundle of products and services that create value for a specific Customer Segment (Osterwalder & Pigneur, 2010). In this case high-quality furniture, household items and food at low prices. Ikea can contact their customers through the use of *Channels*; how a company communicates with and reaches its Customer Segments to deliver a Value Proposition (Osterwalder & Pigneur, 2010). Examples are the internet, catalogues, television commercials and stores. How Ikea stays in touch with its customers is described as the Customers Relations. This describes the types of relationships a firm establishes with specific Customer Segments (Osterwalder & Pigneur, 2010), what can be done with contact with the working staff, the Ikea family card or different kinds of services Ikea offers. The Revenue streams; the cash a company generates from each Customer Segment (Osterwalder & Pigneur, 2010), are the sales of Ikea for their furniture, food, household items and services. The Key Resources are the most important assets required to make a business model work (Osterwalder & Pigneur, 2010). In case of Ikea these are

resources like their brands, stores, working staff, designs etc. In relationship with the resources there are the *Key Activities* what are the most important things a company must do to make its business model work (Osterwalder & Pigneur, 2010). The activities of Ikea are offering high quality products, launching marketing campaigns to contact the customer and services to interact with the customer. Next to that there are the *Key Partners*; the network of suppliers and partners that make the business model work (Osterwalder & Pigneur, 2010). Ikea has profit partners as material, food, logistics and manufacturing suppliers but also works together with non-profit organisations. The last building block is the *Cost Structure* which are all costs incurred to operate a business model (Osterwalder & Pigneur, 2010). Ikea has different costs such as production of goods, marketing, rents, logistics and wages. If firms combine all these nine building blocks this will result in a well-working and effective business model.

The Business Model Canvas can be used in different kind of ways. An example will be discussed to give an impression of the Business Model Canvas, it is acquired from the Business Generation Book by Osterwalder & Pigneur (2010). In this example the building blocks of the Business Model Canvas are identified and connected to each other to realize a business process. The example is called 'Freemium', a concept describing particularly webbased business models, that offer free basic services and paid premium services. The largest group of users that make use of the services of the firm are the users who make use of the free basic services. Only a small group of users (around 10%) make use of the premium services of the firm. However, this small group of premium users subsidizes the large group of free users. The reason for this are the low marginal costs of serving additional free users. The two most important key features of Freemium are the average cost of serving a free user and the rates at which free users convert to premium users (Osterwalder & Pigneur, 2010). An example of a Freemium firm is the photo sharing firm Flickr where free users have access to a basic account, for uploading and sharing photographs. For a small fee users can get access to a premium account with more storage space, more uploads per month and other special features. When this method is applied on the Business Model Canvas, the business process can be outlined in the canvas (Figure 5). The free and premium users are displayed in the customer segment building block. The users are connected through the revenue streams, if they have a free or paying account, to the value proposition; free basic photo sharing or premium photo sharing.

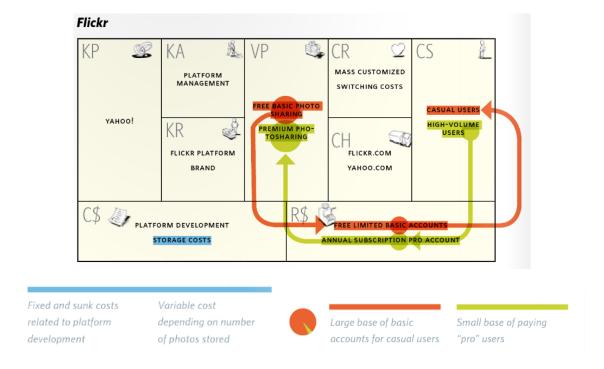


Figure 5. Flickr Business Model (Osterwalder & Pigneur, 2010)

A related framework of the Business Model Canvas is the Value Proposition Canvas (Figure 6). It explicates how you can create value for your customers (Osterwalder & Pigneur, 2010). It highlights the building blocks value proposition and the customer segment of the Business Model Canvas. The canvas can help you to tackle a core challenge of very firm; the creation of compelling products and services customers want to buy (Osterwalder & Pigneur, 2010). The customer segment exist of the job profile, the jobs customers want to get done. These can be the needs they want to satisfy or the problems they want to solve. Customers can experience gains and pains in this process. A firm can observe all these customers aspects in the market and try to solve them. Within the value proposition firms can create products and services. They can also try to solve the pains and stimulate the gains of the customer, what they can do with gain creators and pain relievers.

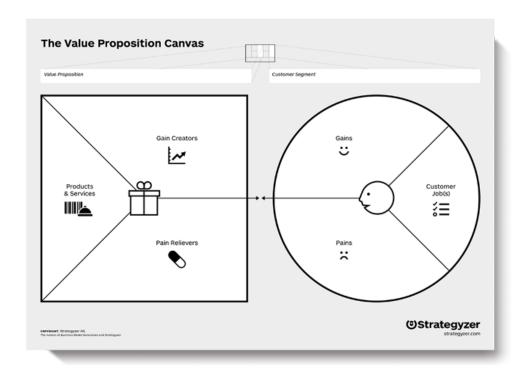


Figure 6. Value Proposition Canvas (Osterwalder & Pigneur, 2010)

2.3.6 Framework: Maurya (2010)

Another framework relevant to the Business Model Canvas is called the Lean Canvas. The work of the Lean Canvas is an extension of the Business Model Canvas. Maurya (2010) says that the Business Model Canvas missed some aspects regarding to high risk, and that some other building blocks are not that relevant concerning risk. Thus, four buildings blocks were exchanged for four others (Figure 7). He proposed the Lean Canvas that can help with the aspect of problem understanding, so a firm will not waste time, money, and effort building on the wrong product (Maurya, 2010). Other aspects added to this canvas are the solution; how to solve the problem, key metrics; few key actions that a firm needs to take and unfair advantage; the unique competitive advantage of a firm. These four elements were implemented in the framework instead of key partners, key activities, key resources and customer relationships. The Lean Canvas was especially designed for entrepreneurs. It was created as actionable as possible while staying entrepreneur-focused (Maurya, 2010).

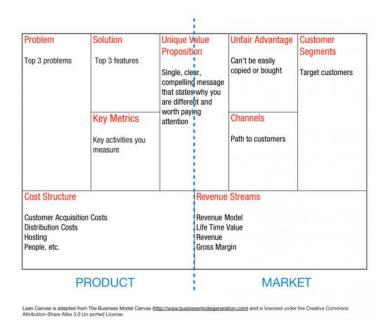


Figure 7. Lean Canvas (Maurya, 2010)

2.3.7 Framework: Gassmann et al. (2014)

In the article of Gassmann et al. (2014) four central dimensions are discussed regarding a business model framework. The four distinguishable dimensions are the Who, the What, the How and the Value. First, there is the Who, which covers who is the customer? Second, the What question, describes what is offered to the customer in terms of bundle of products and services (Value proposition). Third, the How question covers how to build and distribute the value proposition. The last dimension, the Value deals with the financial aspect of the business model, or put differently how to make money in the business. Gassmann et al. (2014) added this together in a 'magic triangle' (Figure 8).

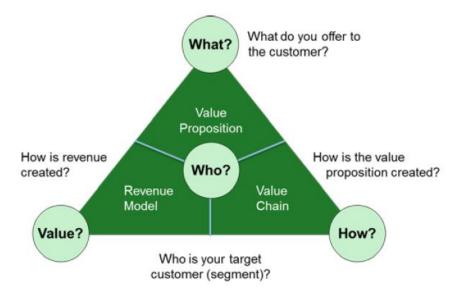


Figure 8. Business Model Definition – the Magic Triangle (Gassmann et al., 2014)

When all the dimensions are put together and form the magic triangle the business model of a firm becomes tangible and a common ground for its re-thinking is achieved (Gassmann et al., 2014). A strength of this is that the business model combines internal and external factors, and shows how a firm is embedded and interacts with its environment.

2.3.8 Framework: Alternatives: Sequoia Business Plan & Balanced Scorecard

Two other well-known methods are the Sequoia business plan and the Balance Scorecard. Both are not seen as typical business model frameworks. However both can serve as helpful tools when working on a firm's business model. Therefore, these two methods will be described here. The Sequoia Business Plan is not a typical business model framework like the previous described frameworks but it uses several steps to construct a business plan. But in essence it covers most of the same aspects (Website Sequoia: sequoiacap.com). It defines for instance the company's purpose, problems, solutions, products, customers and financials just like actual business model frameworks do(Figure 9). When a firm moves along all these steps it can construct a structured business plan.

Company purpose - Define the company/business in a single declarative sentence Problem - Describe the pain of the customer (or the customer's customer). -Outline how the customer addresses the issue today. Solution - Demonstrate your company's value proposition to make the customer's life better. - Show where your product physically sits. - Provide Why now - Set up the historical evolution of your category, - Define recent trends that make your solution possible. Market size - Identify/profile the customer you cater to. - Calculate the TAM (top down), SAM (bottoms up), and SOM. Competition - List competitors - List competitive advantages Product - Product line-up (form factor, functionality, features, architecture, intellectual property). - Development roadmap Business model - Revenue model - Pricing - Average account size and/or lifetime value - Sales and distribution model - Customer/pipeline list Team - Founders and management - Board of Directors/Board of Advisors Financials - P&L - Balance sheet - Cash flow - Cap table - The deal

Figure 9. Sequoia Business Plan (sequoiacap.com)

Another relevant strategic tool called the Balanced Scorecard can also act as a helpful alternative for a business model framework. The Balanced Scorecard was introduced by

Kaplan & Norton (1992) and allows managers to look at the business from four perspectives namely; customer, internal business, innovation and learning, and financial (Figure 10). The scorecard translates the strategy of a firm into these four perspectives. Although the Balanced Scorecard is not seen as an actual business model framework it was also used as input for the Business Model Canvas of Osterwalder & Pigneur (2010). Firms can use this method to see if business ideas have any potential or helping with implementing a business idea.



Figure 10. Balanced Scorecard (balancedscorecard.org)

2.3.9 Framework: Conclusion

Some general insights about business model frameworks and several examples of different frameworks have been analysed in this section. All these discussed frameworks have different lay-outs and elements. However, in essence most of the elements and components of the described business model frameworks correspond with the Business Model Canvas of Osterwalder & Pigneur (2010). The names other authors give to these specific components can be slightly different but in the end they mean almost the same. For example, Morris, Schindehutte & Allen (2005) call the customers segments market factors, but both authors try to describe who the target customer of a firm is. When analysing the frameworks it can be said that most of them try to identify some important elements of a business model like who is the customer, what is the value proposition, how is revenue created and how can this all be funded. Next to this the relationships between these elements seems also very relevant; how are all the elements connected to each other. Finally it can be said that the analysed

frameworks identify different important business elements and their relationships in a particular structure.

2.4 Processes: Business models in practice

After identifying some main elements, components or building blocks with the use of a business model framework the output can be used in practice. How firms use this output is called the 'Praxis', the actual activity, according to the Strategy as practice theory (Whittington, 2006). This section will discuss the process of business model development and will cover how the information from the business model frameworks can be used and implemented in practice. To do this several concepts of different authors will be discussed (Teece, 2010; Eyring, Johnson & Nair, 2011; Blank, 2013). All these theories will cover the actual process of a business model, and how the identified elements, components or building blocks can be integrated in a business model, and to actual implementing it in practice.

2.4.1 Processes: Steps of implementing a Business Model

According to Teece (2010) a business model demonstrates how a company creates and delivers value to its customers. To accomplish this and get advantage of a business model, different elements have to be determined in a business model: technologies and features embedded in the product/service, the benefit of these products/services, segments targets, revenue streams and the design of mechanisms to capture value (Figure 11).

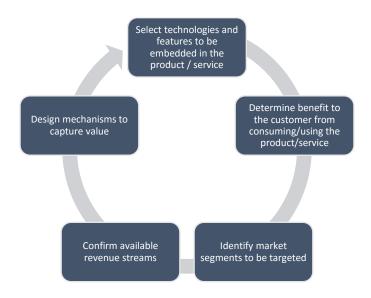


Figure 11. Elements of a Business Model (Teece, 2010)

With the use of this design, the business model will create value for customers, entice payments and eventually convert these payments to profit. If the business model is simple but successful, this will not immediately lead to competitive advantage because imitation of competitors can be rather easy. However if the business model is differentiated and difficult to

imitate, and thereby effective, it can lead to competitive advantage and more likely to yield profit (Teece, 2010). To reach this competitive advantage a firm needs to achieve superior execution of particular activities within the company's internal value chain, coordination among those activities and good management of the interface between the company and others in the network (Morris, Schindehutte & Allen, 2005). Thus, implementing a well-designed and differentiated business model can be a source for competitive advantage and eventually more profit.

Another business model theory proposed by Eyring, Johnson & Nair (2011) has it focus especially on multinationals who try to enter emerging markets. In these markets there are different needs and circumstances which means you have to do business in a different way. With the use of their domestic business models multinationals will fail to capture value and generate sufficient returns (Eyring, Johnson & Nair, 2011). To approach these different circumstances they propose a tool to construct a new business model which can be implemented in emerging markets (Figure 12).

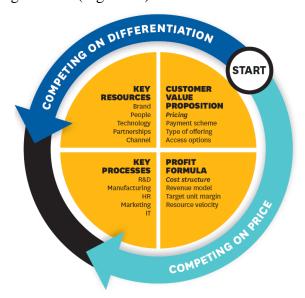


Figure 12. Building a New Model (Eyring, Johnson & Nair, 2011)

This business model tool has four parts: the customer value proposition, a profit formula, key processes and key resources. To implement all these parts a firm has to make a decision regarding its strategy e.g. Will it focus on differentiation or on price? According to Eyring, Johnson & Nair (2011) developing new business models in emerging markets always begins with inventing a new customer value proposition. However, models designed to compete on differentiation have to follow the three remaining parts in a different way than models designed for competing on price. After devising a new customer value proposition,

differentiation models have to establish their key resources, key processes and finally the profit formula. For price models it is the other way around, starting with determining the profit formula and then selecting the key processes and resources. By implementing this business model tool multinationals can enter emerging markets, gain sustainable competitive advantage and make profits (Eyring, Johnson & Nair, 2010).

2.4.2 Processes: Lean Start-up

Another approach for launching business models is the lean start up, a new process that recognizes that searching for a business model is entirely different from executing against that model (Blank, 2013). Or in other words, according to the lean approach start-ups (new firms) look for new business models and existing firms try to execute existing business models. Three key principles are at the root of the lean approach. Firstly, founders of new firms summarize their hypotheses in the Business Model Canvas of Osterwalder & Pigneur (2010). Secondly, to test their hypotheses lean start-ups make use of the customer development approach (Blank, 2013). With this approach they try to get 'fast' feedback on all elements of their business model. After the feedback is given they will use it to make changes in their model. Thirdly, the lean start-up make use of a concept called agile development. Instead of a process of long and slow product development, agile development eliminates wasted time and resources by developing the product iteratively and incrementally (Blank, 2013). Constant customer feedback is the foundation of business model development in the lean start-up theory. Blank (2013) describes a model to make use of this feedback and to implement it in a new firms business model (Figure 13).

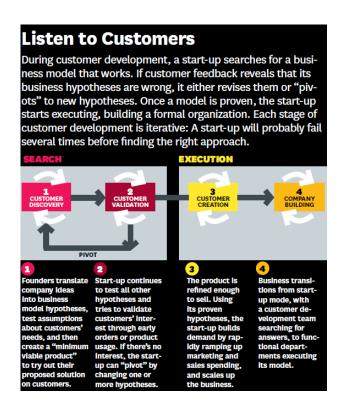


Figure 13. Listen to the Customer (Blank, 2013)

The lean approach helps new start-ups to counter threatening factors in their environment. Such as the high cost of getting the first customer, and the even higher cost of getting the product wrong and long technology development cycles. The lean approach counters these factors with helping start-ups launch products that customers really want, far more quickly and cheaply than traditional methods (Blank, 2013). The lean theory was first invented for start-ups but it has become clear in the business landscape that mature firms also can benefit from it. Improving existing business models is not enough anymore, mature firms also need to innovate in their business and especially inventing new business models (Blank, 2013). This all to survive in a changing and turbulent environment.

2.4.3 Processes: Business Model Canvas

One of the most famous frameworks, the Business Model Canvas from the Business Model Generation book (Osterwalder & Pigneur, 2010) identifies building blocks and their relationships. After this identification process the information can be used to generate viable business model ideas. Osterwalder & Pigneur (2010) describe this business model design process in five phases: mobilize, understand, design, implement and manage. The process is displayed linear. However an important remark the authors give is that this is rarely the case, and that phases often intertwine. The first phase, mobilization, is the preparation for a successful business model design project. Within this phase a few key activities are important

such as: framing the project objectives, testing preliminary ideas, planning the project and assembling the team (Osterwalder & Pigneur, 2010, p. 250). To successfully manage these activities you need the appropriate people, experience and knowledge. Next to these essential activities and success factor there is also one danger in the mobilization phase. People can tend to overestimate the potential of business model ideas, which leads to a closed mind set and less exploration of other possible business model ideas. The second phase is the understanding phase, which consists of developing a good understanding of the context in which the business model will involve (Osterwalder & Pigneur, 2010, p.252). In this understanding process, the firm needs to scan the environment, study potential customers, interview experts, explore past research and collect ideas and opinions. It is critical that the members of the project team finally have a deep understanding of potential target markets and look beyond the traditional boundaries (Osterwalder & Pigneur, 2010). Within this phase there are again some dangers the firm can encounter. They can 'over-research' and try to identify too much information. Next to this there is also the chance that there is a biased research because of pre commitment to a certain business idea. In the third phase, the design phase, the key objective is to generate new business models. The members of the project team need to brainstorm for different business models, define prototypes, test these models and finally selecting viable models. To succeed in these steps the project team has to co-create with people from across the firm, able to see beyond the status quo and take time to explore several business model ideas. To avoid dangers, project members need to watch out for watering down or suppressing bold ideas and falling in love with ideas too quickly (Osterwalder & Pigneur, 2010). The fourth phase, the implementation of a business model idea is the actual start of bringing it in practice. The business model is executed and communicated by the firm. To successfully do this, the firm must have the ability and willingness to rapidly adapt the business model, and aligning the new model with the old models. If not, a danger of a weak and fading momentum can occur. The last and very important phase is the manage phase. To be successful firm the creation of new business models or innovating in existing ones is not a one-time exercise. The firm need to continuously review it to stay successful. Important activities regarding this success are scanning the environment, continuously assessing your business model, rejuvenating or rethinking your model, aligning business models throughout the enterprise and managing synergies or conflicts between models (Osterwalder & Pigneur, 2010, p.258). To manage these activities the firm needs to be proactive to market evolutions, at least one person should be responsible for long-term evolution of the model, and there must be governance of

business models. An obvious danger that can occur is that a firm becomes a victim of its own success, and fails to adapt its business models. An overview of all five phases is given in Figure 14.

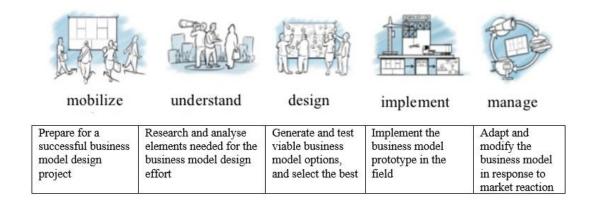


Figure 14. Five Phases of the Business Model Process (Osterwalder & Pigneur, 2010)

Another process described in the Business Model Generation book for producing innovative business model options is the ideation process. This process exists of five topics with each one key question to generate effective new business model ideas (Osterwalder & Pigneur, 2010, p.142). (1) Team Composition: is our team sufficiently diverse to generate fresh business model ideas?, (2) Immersion: Which elements must we study before generating business model ideas? (3) Expanding: What innovations can we imagine for each business model building block? (4) Criteria selection: What are the most important criteria for prioritizing our business model ideas? (5) Prototyping: What does the complete business model for each shortlisted idea look like?

2.5 Stakeholders: Involvement in Business Model Development

Until now the frameworks and the implementation of business models has been discussed or, according to the Strategy as Practice theory: the practices and the praxis. The practitioners, the last of the three concepts will be addressed now. As discussed, in this research the practitioners are the actors who are involved in the process of business model development. Involvement has been identified as a core element in a strategy-making process (Collier et al., 2004). According to the view of Strategy as practice, not only top management is involved in this process but other actors as well (Mantere & Vaara, 2008). In the following sections the practitioners of business model development will first be identified with the 'classical' stakeholder theory of Freeman (1984). Unfortunately the part of the process of participation in business model development did not receive much attention yet. Therefore, the stakeholder theory will complement itself with the corresponding theory of participation in strategy.

2.5.1 Stakeholders: Stakeholder Theory

To analyse who are involved in this process this research will make use of the Stakeholder theory, which describes groups and their relationships that have a stake in the firm (Freeman, 1984). A lot of different groups can have a stake in a firm and thus in its business operations. Figure 15 gives a brief position of a firm and different stakeholders who can be connected to it.

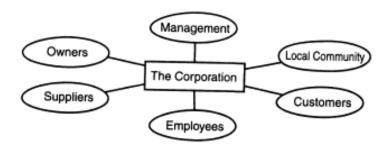


Figure 15. Stakeholder Model of the Cooperation (Freeman, 2001)

Freeman and Mcvea (2001) mention that managers of firms need to understand stakeholders for success of the firm, and therefore firms have to actively explore their relations with all stakeholders in order to develop business strategies. The contributions of stakeholders are relevant for executing or creating business strategies and thus for business model development. An important distinction can be made between the internal and external stakeholders. The internal stakeholders who can participate in the business model development process can be for example the owners, managers and employees. According to the Strategy as practice theory, these people involved are not only the senior executives or managers but also the middle managers and other employees (Whittington, 2006), and operating-level managers (Collier et al., 2004). Osterwalder & Pigneur (2010) speak about internal stakeholders in the business model generation process. Teams in this process must be diverse and exist of different people across the entire organisation. They give six criteria where internal stakeholder in the business model process must comply with: (1) From various business units, (2) Of different ages, (3) With different areas of expertise, (4) Of differing levels of seniority, (5) With a mixture of experiences and (6) from different cultural backgrounds (Osterwalder & Pigneur, 2010, p.143). In the process the firm can also collaborate with many external stakeholders across its ecosystem such as partners, customers, suppliers, financiers (Amit & Zott, 2015). Blank (2013) identifies several external stakeholders as useful groups in the process of business model development. When a business model is developed potential users, purchasers and partners can give feedback on it, and identify potential errors for creating value and resolve them.

2.5.2 Stakeholders: Participation in Strategy

In the literature of participation in business model development there are some relevant insights concerning 'who is involved in the process' (Osterwalder & Pigneur, 2010; Blank, 2013; Amit & Zott, 2015). However a helpful addition can be made from a different research field, that is why this research will use some related and important insights from participation in the related literature of strategy. While there is no agreement to the degree which managers and employees of a firm should participate in strategy formulation, a lot of researchers agree that a lack of participation leads to dissatisfaction among the employees who are excluded, poorly developed strategies and difficulties in implementation (Mantere & Vaara, 2008). Adding to this, participation is a positive factor in the implementation of strategic plans, because of increased commitment, collective sense making and integration of submit goals (Mantere & Vaara, 2008). Other positive effects of active participation or involvement in strategy implementation are high quality strategic decisions, improved strategy execution, enhanced organisational learning, higher job satisfaction and improved organisational performance (Collier et al., 2004). Thus, participation can be seen as an important concept in implementing strategies. A strategic concept as a business model will also benefit from a high degree of participation in the process of developing and innovating these business models. The previous section discussed a distinction between different groups of stakeholders, such as internal and external groups. This section confirmed the importance of the participation of stakeholders in the strategy implementation process, and from the formulated assumption also the importance in the implementation of business models. But what this participation process really looks like has not yet been discussed. Participation in the process of strategy development can be take place in different stages (Beer & Eisenstat, 2004; Sull, 2007) and different roles (Groysberg & Slind, 2012). Sull (2007) describes the implementing process with an iterative strategy loop, consisting of four different steps (Figure 16).

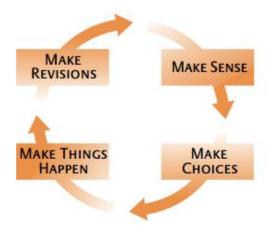


Figure 16. Strategy Loop (Sull, 2007)

In the first step, making sense, a shared mental model of the situation is developed. Involved stakeholders can give alternative interpretations in this stage. The second step, make choices, covers the agree on clear priorities to guide action and resource allocation. Step three ensures that people make good promises and deliver them. The last step senses anomalies and revises key assumptions (Sull, 2007, p.36). Stakeholders in business model development can participate in all these four steps. Next to these steps where stakeholders can participate, active involvement of stakeholders can also result in the adoption of different roles. Groysberg & Slind (2012) describe three of these potential roles: (1)brand ambassadors; stakeholders can representative the products, services and the entire business model of a firm, (2) thought leaders; where stakeholders can test and promote the business model among key players and (3) storytellers; when stakeholders communicate the business model to the 'outside world'.

An adjoining theory that speaks about the involvement of different stakeholders in projects is Scrum. The theory is most often applied on the development of software, executed by project teams and facing high uncertainty, and thus closely related to business models. Agile software development process designed to add energy, focus, clarity, and transparency to project teams developing software systems (Sutherland et al., 2007, p.1). In the so-called Scrum meetings problems are discussed by internal (developers) and external (customers) involved people (Paasivaara et al., 2008). The developers and customers complement each other which will lead to better results and communication. The internal stakeholders in the Scrum can be divided in different roles: the Product Owner (focussed on the product), the Scrum Master (leading the team) and the Team (Sutherland et al., 2007).

2.6 Effectiveness of the Business Model Process

This section will cover the effectiveness of the use of frameworks in business model development, a main element of the formulated research question that has not yet been discussed in the concepts of the Strategy as practice approach. The insights of previous research of Lucassen et al. (2009) and Hoffmann (2013) will be the starting point of the effectiveness of the use of frameworks in business model development. The Business Model Canvas (Osterwalder & Pigneur, 2010) is one of the central frameworks discussed in these studies, and in this study, and will therefore be used as an example by describing the proposed effectiveness factors. However, both studies indicate that till now not many attention has been given to this topic of research, and that effectiveness factors have not yet been extensively studied.

2.6.1 Effectiveness: Lucassen et al. (2009)

The main aim of the study of Lucassen et al. (2009) discusses and compares three 'visual' business model techniques on different effectiveness and efficiency factors. The first thing described concerns the information regarding the seven concepts that a business model framework needs to contain. These concepts were identified after an literature review and interviews with industry experts, and are the foundation for the effectiveness factors. The seven concepts that were found to be essential: (1) Customer: Which customer segments are targeted?, (2) Value Proposition: What bundle of products and services creates value for a specific customer segment?, (3) Revenue: How much money can be made by price x volume?, (4) Partners: Who are the partners that provide the key resources to the company?, (5) Activities: What makes the profitable delivery of the value proposition repeatable and scalable?, (6) Resources: What are the most important assets required to make the business model work? and (7) Costs: How are costs allocated? (Lucassen et al., 2009, p.5). All concepts that are relevant according to the study match with the Business Model Canvas, however two of the building blocks of the canvas do not seem to be relevant according to this study. Beside these essential framework concepts, the analysis of the three techniques test the effectiveness of business model frameworks, where effectiveness is formulated as the extent the business modelling technique successfully communicates and captures the entirety of the business model. The communicating effectiveness according to Lucassen et al. (2009, p.9) consists of three factors namely; (1) Acceptance: of the technique in business and academics, (2) Internal Cohesion: the elements of the model are related to one another and (3) Number Concreteness: concrete numbers are shown in the model. The other kind of effectiveness described by Lucassen et al. (2009, p.9) is the capturing effectiveness, which also consists of three elements: (1) Explicit Modelling Method: instructions explicitly defining the approach are provided, (2) Method Efficacy: instructions are easily translated into practice and (3) Absence of Redundancy: the resulting models contain no redundant information. If a business model frameworks scores positive on these factors, it can be said that the framework is effective in use. Lucassen et al. (2009) test these factors on three visual business model techniques (frameworks), including the Business Model Canvas. According to most industry experts, who analysed the canvas using the proposed effectiveness factors, the Business Model Canvas scores very positive. However there was still room for improvement; the canvas identifies the revenue streams, cost structure, key partners and key activities but regarding these factors no detailed information is given in the form of numbers, figures and roles between the firm and the partners.

2.6.2 Effectiveness: Hoffmann (2013)

The research of Hoffmann (2013) defines some requirements for business model idea generation methods (frameworks). The three comprehensive requirements found for business model generation methods are: (1) fostering knowledge creation and understanding, (2) supporting creativity and (3) embracing some form of visualization and tangibility. According to Hoffmann (2013) most methods concentrates on fostering knowledge and understanding and fostering creativity, while less attention has been given to visualization and tangibility. However if a method covers all three requirements it is highly potential as a source of generation of new business model ideas, and thus supports innovating, changing or even developing a firm's business model. Several methods were tested by the researcher and set against the three proposed requirements (Figure 17).

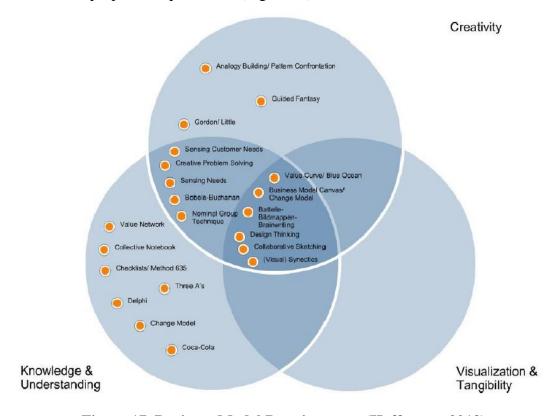


Figure 17. Business Model Requirements (Hoffmann, 2013)

As described most methods met the requirements regarding knowledge and understanding, and creativity. Some methods met all requirements and can be seen as good source for generating new business model ideas. One of these methods, the Business Model Canvas will be taken as an example to describe the application of the requirements. The creativity of the canvas is enhanced by several factors such as the visualization of the current business model, triggering of questions, achieving joint identification, analysis of the business model

components and the use of visual techniques (Hoffmann, 2013, p.59). Concerning the knowledge and understanding requirement the canvas also scores positively. By exchanging knowledge on different aspects of the business model, the creation of joint knowledge across departments and positions is supported and a common language is created (Hoffmann, 2013, p.59). The last requirement, the visualization and tangibility, describes that the visualization of the canvas creates a common understanding of its individual components and the relationships between the components. After defining the business model visually, visual storytelling is suggested, creating many different visual prototypes of potential business model ideas (Hoffmann, 2013, p.59).

2.7 Summarizing

In this chapter the relevant theories concerning business models and its corresponding frameworks have been discussed. Because there are a lot of different definitions of the business model concept the chapter first covered what types of definitions have been formulated by researchers. The definitions that endorse the model and value aspect where considered to be the starting point of this research (Chesbrough, 2002; Osterwalder, Pigneur & Tucci, 2005; Baden-Fuller and Morgan, 2010; Arend, 2013; Fielt, 2014), and not definitions that sees business models as 'just a way of doing business'. After determining the right aspects of the business model concept the research implemented the theory of Strategy as practice (Jarzabkowski, 2004; Whittington, 1996; 2006) as an guideline for the use of frameworks and business models. The theory introduced three concepts namely; practices, praxis and practitioners. Based on these three concepts the remainder of this chapter was written. First by explaining what business model frameworks are and what kind of frameworks exist (practices). Thereafter the process of implementing business models, based on these frameworks, was discussed and some examples (steps of implementing a business model, Lean Start-up, five process phases were given (praxis). Next, the chapter analysed who can be involved in the process. These groups were identified with the use of the Stakeholder theory (Freeman, 1984). This theory showed that internal stakeholders (managers, employees etc.) and external stakeholders (suppliers, customers etc.) can be involved in the process (Freeman, 1984), and that the process of participation of these stakeholders is a very important aspect (Collier et al., 2004; Mantere & Vaara, 2008). The chapter ended with defining the concept of effectiveness. According to the few theories (Lucassen et al., 2009; Hoffmann, 2013) that have concentrated on this part of research, there are several factors that can help to measure the effectiveness of the entire process of making use of frameworks in

business model development, being an important concept concerning the research question of this study.

Finally it can be said that firms can make use of different kinds of frameworks in the business model process, implement the information from these frameworks in different ways and involve a lot of groups in the process. What this process and the effectiveness looks like in practice will be further discussed in the following chapters.

3. Methodology

After discussing the relevant literature concerning business models and its frameworks, this chapter will focus on the design of the empirical research. Firstly, there will be a discussion on what the kind of research is and which data collection method will be used. Secondly, the research units will be determined and how these respondents were selected. Finally, the reliability and the validity of the research will discussed.

3.1 Kind of Research and Data Collection Method

Morgan & Smircich (1980) argued that when you want to perform an effective research, you cannot longer remain an external observer and only measure what you see. You have to investigate the subject of study from within and use several research techniques to achieve that task, in other words making use of a qualitative approach. When following this idea, and in combination with the information from practice, the suggested qualitative approach seems most suitable for this research. This approach involves the systematic collection, organisation, and interpretation of textual material derived from talk or observation, and is used as exploration of social phenomena as experienced by individuals themselves, in their natural context (Malterud, p.483, 2001). There are different methods which can be used in a qualitative research, the next section will therefore cover and select one of these methods.

3.1.1 Selection of the Data Collection Method

In a qualitative research there are different ways to collect your data: interviews, observations and review of documents (Patton, 2001, Cassel & Symon, 2004). This research made use of interviews, because of the relevance of this method for gathering the preferred information. Interviews explore the experiences of participants and the meanings they attribute to them (Tong et al., 2007). Patton (1980) defines four types of interviews, based on the degree the interview is pre-structured. First the 'Informal conversational interview' is the least structured of the four types. Besides the subject of the interview, nothing is pre-conceived and the questions that occur to the interviewer are asked. The second type of interview is the 'Interview guide'. This form of interviewing is more structured than the first one. The researcher make use of topics and determines the order in which these topics are discussed. Questions that are considered relevant by the researcher, will be asked. Thirdly, there is the 'Standard open-ended interview'. This kind of interview is more structured than the preceding two. The order and the questions are fixed, but the answer of the question is open. The last type the 'Closed fixed field response interview' is almost the same as the previous type, the only difference is that the answers are fixed.

This research made use of the Interview guide method. Regarding to this chosen method the funnel protocols concept was additionally used (Harrell & Bradley, 2009). With Funnel protocols the researcher first asks broad and open questions, and after that more closed and structured questions (Figure 18). This is appropriate because of the structure and the content of this study, and the topic of business models. The open questions in the beginning of the interview will cover most aspects of what the interviewee has to say about the process of business model development and the corresponding frameworks in his or her organisation. After a while the interviewer can use these insights to ask closed and structured questions to come to the point of the entire process.

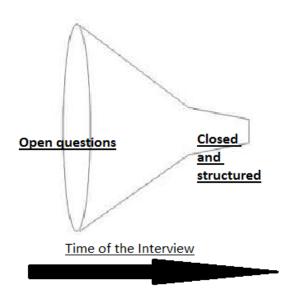


Figure 18 Funnel Interview

3.1.2 Interview Structure

Now that the data collection method is determined the structure of the interview can be designed. The topics in the Interview Guide have been asked in a funnel form and were preceded by an introduction of the research, interviewee and the interview itself. The interview ended with optional additional comments. Concerning the reliability of the research the structure and topics of these interviews have been based on a standard protocol (Table 3), which was used in every interview.

	Interview Structure	
1.	Introduction of student and research	
2.	Introduction of interviewee and the firm	
3.	Discussing the structure of the interview	
4.	. Interview Guides: four main topics	
5.	Additional comments	
6.	Ending the interview	

Table 3. Interview Structure

All interviews were recorded, so that no information was lost. Each interview took approximately 45-60 minutes. After the interview all gathered results were analysed and structured according to the proposed interview topics (section 3.1.3). The gathered data is confidential. This means that interviewees may check the data and no firm names are mentioned in the study.

3.1.3 Interview Topics

After selecting the kind of research, method and structure the focus will now change to the content of the interviews. As described in the theory of Patton (1980) the researcher decides in the chosen 'the Interview guide' method which topics to discuss and then determines the order in which these topics are discussed. In this study this is also the case. The topics and order can be found in Table 4. The interview topics are based on the research question and the corresponding sub-questions, which are related to the concepts from the Strategy as practice theory; the practices, praxis and practitioners, and the additional concept of effectiveness of the entire process. For all four different sections of the interview the funnel approach was applied, starting with more open questions where the interviewee has the space to answer extensively. After a while the questions become more specific. The theoretical foundation regarding these questions has already been discussed in the second chapter (Freeman, 1984; Kaplan & Norton, 1992; Hamel, 2000; Collier et al., 2004; Morris, Schindehutte & Allen, 2005; Whittington, 2006; Sull, 2007; Sutherland et al. 2007; Johnson et al., 2008; Lucassen et al., 2009; Osterwalder & Pigneur, 2010; Maurya, 2010; Teece, 2010; Eyring, Johnson & Nair, 2011; Groysberg & Slind, 2012; Blank, 2013; Hoffmann, 2013; Gassmann et al., 2014; Amit & Zott, 2015).

Question / Concept	Interview Topic	Author
	Kind of Frameworks used	Kaplan & Norton (1992)
		Hamel (2000)

Which frameworks are used by		Morris, Schindehutte & Allen
firms to create and innovate		(2005)
their business models?		Johnson et al. (2008)
(Practices)		Osterwalder & Pigneur (2010)
		Maurya (2010)
		Gassmann et al. (2014)
	Elements, Relations and	Kaplan & Norton (1992)
	Structure of the Framework	Hamel (2000)
		Gordijn et al. (2005)
		Morris, Schindehutte & Allen
		(2005)
		Johnson et al. (2008)
		Osterwalder & Pigneur (2010)
		Maurya (2010)
		Fielt (2014)
		Gassmann et al. (2014)
How do firms make use of	Mobilize	Osterwalder & Pigneur (2010)
business models?		
(Praxis)	Understand	Osterwalder & Pigneur (2010)
	Design	Osterwalder & Pigneur (2010)
	Implement	Osterwalder & Pigneur (2010)
	Manage	Osterwalder & Pigneur (2010)
Who is involved in the business	Internal Stakeholders: for	Freeman (1984)
	example owners, project members,	Collier et al (2004)
	managers (top, middle,	Whittington (2006)
	operational) and employees.	Osterwalder & Pigneur (2010)
	External Stakeholders: for	Freeman (1984)
	example partners, customers,	Blank (2013)
	suppliers, financiers.	Amit & Zott (2015)
	Steps of participation: making	Sull (2007)
· ·	steps of participations making	
	sense, making choices, making	
	sense, making choices, making	
1	sense, making choices, making things happen and making	Groysberg & Slind (2012)

	Product Owners, Scrum Masters	
	and team members.	
To what extent and how do	Overall satisfaction of the	-
firms use frameworks for	effectiveness of the process	
creating and innovating their	Communicating effectiveness:	Lucassen et al. (2009)
business model and what is the	(1) Acceptance: of the technique	
effectiveness of this process?	in business and academics.	
(Effectiveness)	(2) Internal Cohesion: the	
	elements of the model are related	
	to one another.	
	(3) Number Concreteness:	
	concrete numbers are shown in the	
	model.	
	Capturing effectiveness:	Lucassen et al. (2009)
	(4) Explicit Modelling Method:	
	instructions explicitly defining the	
	approach are provided	
	(5) Method Efficacy: instructions	
	are easily translated into practice a	
	(6) Absence of Redundancy: the	
	resulting models contain no	
	redundant information.	
	Knowledge and understanding:	Hoffmann (2013)
	fostering knowledge creation and	
	understanding.	
	Creativity: supporting creativity.	Hoffmann (2013)
	Visualization: embracing some	Hoffmann (2013)
	form of visualization and	
	tangibility.	

Table 4. Interview Topics

Thus, the topics are derived from insights of different authors and are the leitmotif of the interview. For the first question several concepts of business model frameworks were selected to form a topic. In the second question information is used from the authors who spoke about the process of implementing a business idea by means of a framework into a business model, describing which steps to take in this process to create a viable business model. The process described by Teece (2010), Eyring, Johnson & Nair (2011) and Blank (2013) gave a lot of relevant information. However the steps described by Osterwalder & Pigneur (2010) cover most of the relevant subjects and overview of the process, and therefore were selected as the

main focus of the topics discussed in the interviews. The third question describes the involvement of different stakeholders in the business model development process: who are involved (Freeman, 1984; Collier et al, 2004; Whittington; 2006; Amit & Zott, 2015), in what step do they participate (Sull, 2007) and what roles do they have (Sutherland et al., 2007; Groysberg & Slind, 2012). The last question, the research question, combines all three previous questions and adds an additional aspect, the effectiveness of the entire process. The effectiveness is based on the topics based on the literature review of Lucassen et al. (2009) and Hoffmann (2013).

3.2 Research Units

To get a clear and valid view of the use of business model frameworks in firms different cases need to be analysed. This section will therefore try to set some requirements for the firms that will participate in this research. After these requirements are determined the actual selection of the firms will take place.

3.2.1 Requirements for Research Units

To gain valid results in this study three criteria regarding to the research units were selected. These criteria are; (1) all firms are originated from one country because it is then a comparable group. In this study the unit of analysis are Dutch established firms, and especially owners, the managers in the business development department or managers who make strategic decisions concerning business models. (2) The most important requirement for these research units was that the selected firms participate actively in business model development. In this study 'active' refers to making use of business models as a foundation of the firm's core business, plus eventually reviewing the business models to stay competitive. With or without the use of frameworks. This requirement is very important because when the selected firms do not participate active or barely in business model development the results are useless. (3) Next to this 'active' requirement, firms who participate in this study need to be private and not public organisations. This because private firms need to deal with competiveness and environmental turbulence, which requires them to critically review and change their business model to survive in their market. However, in what kind of market these private firms operate is not relevant, because how they use their business models (frameworks) is important not what their operations or who their customers are. The first criteria was based on the geographical location of the researcher (Dutch) and the two other criteria on the business model theory ('active' and private firms).

3.2.2 Selection of Research Units

In research different insights exist regarding the number of interviews that need to be held (Guest et al., 2006). Some experts say that every research is a unique case and different circumstances play an important role in the number of required interviews (Morse, 2000; Baker & Edwards, 2012). Mason (2010) sees fifteen as the smallest acceptable sample for interviews. According to Guest et al. (2006) six to twelve interviews will always be enough to achieve desired results in your research. Francis et al. (2009) appoints thirteen interviews as a sufficient amount. Different opinions regarding the amount of interviews exist, however based on these academic insights and the interpretation of the researcher regarding the content of this study, an assumption is made that twelve interviews in twelve different firms are sufficient for this research. These insights combined with the proposed criteria (Dutch, private and active in business development) led to the selection of the following twelve firms (Table 5).

Firm number	Sector	Job Function - Interviewee
1	Waste Management	Senior Project Leader
2	Technological Equipment	Marketing Manager
3	E-Commerce	General Manager
4	Retail – Online Department	Business Development Manager
5	Banking and Financial Services	Product Manager
6	Internet of Things Products and	General Manager
	Services	
7	Administration and Consulting	Owner
8	Energy Network	Strategic Consultant
9	Accounting and Consulting	Owner
10	Software	Owner / Project Leader
11	Logistics	Business Development Manager
12	Software	Owner

Table 5. Selected Research Units

Because firms participate anonymously in this research, firms are given a number instead of their business name. To differentiate and express the participating firms two additional factors are defined namely, the sector the firm competes in, and the job function of the interviewee. More information related to these firms will be described in the fourth chapter of this research.

Additionally in Table 6 a more extensive overview of the participating firms is given.

Relevant factors to outline the firms are firm size, firm age, customer orientation (business to

business or business to consumer) and if they are part of a parent company or not. Firm size and firm age is classified in three categories, namely for size: less than 100 employees, between 100 and 1.000 employees and more than 1.000 employees, and for age: younger than 10 years, between 10 and 50 years and older than 50 years.

Firm	Sector	Firm Size	Firm Age	Customer	Part of Parent
number				orientation	Firm
1	Waste Management	100 – 1.000	10 – 50	B2B	Yes
		employees	years		
2	Technological Equipment	100 – 1.000	>50 years	B2B	Yes
		employees			
3	E-Commerce	< 100 employees	< 10 years	B2C	No
4	Retail – Online department	100 – 1000	> 50 years	B2C	Yes
		employees			
5	Banking and Financial Services	> 1.000 employees	> 50 years	B2B / B2C	No
6	Internet of Things Products and	< 100 employees	< 10 years	B2C	No
	Services				
7	Administration and Consulting	< 100 employees	< 10 years	B2B	No
8	Energy Network	> 1.000 employees	> 50 years	B2C / B2B	No
9	Accounting and Consulting	100 – 1.000	> 50 years	B2B	No
		employees			
10	Software	< 100 employees	< 10 years	B2C / B2B	No
11	Logistics	100 – 1000	10 – 50	B2B	Yes
		employees	years		
12	Software	< 100 employees	< 10 years	B2C	No

Table. 6 Overview of Participating Firms

3.3 Reliability and Validity

The obtained results in this research need to score as high as possible on two relevant research criteria namely; reliability and validity. Or in other words, are the results by repetition the same and are the results which are measured, the results which you want to measure (Vennix, 2011).

3.3.1 Reliability

The first criterion is the reliability. A research is seen as reliable when the gathered results are independent and can be replicated in other studies (Swanborn, 1996). There are two different kinds of reliability: the internal and external. The internal reliability is seen as the consistency of the research process (Everaert & van Peet, 2006). When there are more units of analysis (like in this study) then all tasks have to be executed in the same way to prevent potential

errors. Making use of an interview structure and a fixed list of topics improves the reliability of this research. All interviews will be held using these two structures to guarantee that the internal reliability is as high as possible. The other kind of reliability, the external is not relevant in qualitative research. This because it is quite difficult to replicate a qualitative study because of its uniqueness.

3.3.2 Validity

The second criteria is the validity of the research. Validity can be seen as the justification in the manner the research data in the study is generated (Swanborn, 1996). There are different kinds of validity. The first type is content validity. This is the only type of validity that can be determined before the data collection. Content validity refers to whether the final instrument is a good reflection of the measured concept (Vennix, 2011). Or in other words does the instrument measure what the researcher wants to measure? In this study the content validity is established through translating the research questions into topics based on the literature review. These topics cover the main aspects of each research question. The second kind of validity is the construct validity. Which describes how a certain concept is associated with other concepts from theory (Vennix, 2011). The researched questions are based on three related concepts of the theory of Strategy as Practice which causes enough consistency between the questions, and also the topics. This kind of validity can only be guaranteed after the measurement tool is constructed and applied. The third and fourth kind of validity are called the convergent and discriminant validity (Vennix, 2011). The first controls whether different measuring tools that measure the same theoretical concept correlate positively with each other. In this study this validity is irrelevant because only one measuring tool (conducting interviews) is used. The second, describing consistency between de different measured concepts and the different measuring tools needs to be low is also irrelevant because there is only one measuring tool. The last type of validity is called the criterion validity (Vennix, 2011). A measurement tool is seen as valid if it is possible to predict a concept with the results of another. With regard to this research measured topics must lead to prediction of others topics.

4. Results

In this fourth chapter the collected data obtained from the interviews is analysed. As disclosed in the methodology chapter the data is analysed according to the qualitative method 'the Interview Guide' (Patton, 1980). Within this method the research and sub-questions where translated in to related topics, and the interviewer handled these topics in a fixed pattern and asked firm-related questions. The interviewer showed the theoretical frameworks (Hamel, 2000; Morris, Schindehutte & Allen 2005; Johnson et al., 2008; Osterwalder & Pigneur, 2010; Maurya, 2010 and Gassmann et al., 2014) and the process steps (Osterwalder & Pigneur, 2010) as described in the second chapter to all participating firms. If firms used different frameworks they were searched online. Thereafter all information from the conducted interviews was transcribed. In this section the research questions and topics will be analysed with the use of the information obtained from the interviews in chronological order; starting with the use of different business model frameworks by firms, then how this information is used in the business model of the firm, subsequently who is involved in the process and finally what the effectiveness of the whole process is. Results obtained from different firms will be summarised in a table per interview topic, and thereafter be analysed and compared. As mentioned in the third chapter firms participate in this research completely anonymous. Thus details and quotes from the interviews will refer to the number a firm was given (see Table 5 & 6). If quotes are given these will be tagged with quotation marks. Before the research questions will be analysed the following section will first give a brief description about the firms and the industry they operate in.

4.1 Introduction of the Participating Firms

In this research twelve firms have been interviewed about the use of frameworks regarding their business models, how they implement this information in their business processes, who are involved and what the effectiveness of the entire process is. However each interview began with an introduction of the interviewee and the firm. That is why this section will first give an impression of the participating firms (plus the interviewees), their operations and similarities plus differences between these firms. The introduction of the firm and the interviewee gave the researcher a good insight before discussing the main topics regarding to their business models and the use of frameworks. It is possible that there are even relationships between for instance the kind, size or industry of a firm and the use of business model frameworks. Therefore this section will describe the detailed information of the firms. Information regarding the firm's position, operations, business development and the function

of the interviewee is given in a short narrative description. All this information was acquired during the interview and serves as a starting point for the rest of the research.

Firm 1 Waste Management

The waste management firm is one of the largest in the Netherlands. The firm is engaged in the transformation of waste into different kinds of energy. Also the residuals of the waste are converted to raw materials for other products. Business development within this firm happens most often in large projects, where a project manager seeks for possibilities to expand their business operations. These potential new business models are based on different criteria. The person who was interviewed in this firm is a senior project leader, who is continuously trying to find and manage projects to expand the firm's business activities.

Firm 2 Technological Equipment

The technological equipment firm is part of 'coalition' of four different companies in which each firm delivers one specific product or service to contribute to the final product. The technological equipment firm is specialised in the 'outside' of the final product, and is responsible for the packaging, enclosures, network cabinets and distribution systems. Because the market is quite steady and the firm delivers only to other firms instead of end-customers, reviewing or changing their business model happens only once a year. However the whole year new business possibilities are tested, and only once a year these are introduced in consultation with the parent firm. A marketing manager who contributed actively to this process was interviewed in this firm.

Firm 3 E-Commerce

This E-commerce firm concentrates on the selling of sportswear via the internet. It is also a relatively new firm. They offer several types of clothing, equipment and accessories for different kind of sports. To stay competitive they critically look at their business model. Innovation in their products, targeting new customers and looking for new partners are some of these aspects. To do this they make use of one theoretical framework namely; the Business Model Canvas. The overview of the canvas give them a clear view of which business elements are important. The general manager of the company who is responsible for the innovation process was interviewed.

Firm 4 Retail – Online Department

The fourth firm is a large Dutch retail company, and in this research specifically their online department. Because of the fast growing online environment the firm tries to find continuously new business possibilities, for this it often collaborates with start-ups to speed up the entire process. To identify and innovate (new) business models the firm makes use of several frameworks. The person who was interviewed is a business development manager, who is currently leading several projects regarding finding new online business possibilities.

Firm 5 Banking and Financial Services

This firm is active in banking and financial services, and is within this sector one of the biggest companies in the Netherlands. Due to changes in this sector and especially because of the arise of new technological innovations the firm is actively managing their business models. To do this no specific frameworks are used, but to create and innovate their business models own criteria are used. The interviewee is a product manager who is intimately involved in this process.

Firm 6 Internet of Things Products and Services

The sixth firm is a corporate start-up company in the energy management market that has just recently been founded. Important is that this firm is not an entirely new start-up, but a corporate start-up that stems from another large firm. They concentrate on the development and innovation of new products and services in the internet of things market, which can be used in energy management. This process happens within the start-up and not in the parent company because of the flexibility and easiness to innovate. To create and innovate their business models this firm makes use of different theoretical frameworks. The person who was interviewed is the general manager of the firm.

Firm 7 Administration and Consulting

The administration and consulting company is a relatively young firm. Founded almost ten years ago it rapidly grew to a steady player in their field. Consisting now of three 'own' offices and almost fifteen franchisers, they are actively expanding their operations. Next to administration and consulting the firm is also engaged in delivering administration software. For finding new business models they make use of one specific 'framework' namely; the Sequoia business plan. One of the owners of this firm was interviewed, who learned this technique in a training and decided to use it in his own firm.

Firm 8 Energy Network

The eight firm is one of the biggest players in the energy network market in the Netherlands. Due to fast technological changes in their environment the firm needs to be active in business development. To guide their necessary innovations they make use of two theoretical frameworks namely; the Business Model Canvas and Value Proposition Canvas. The person who was interviewed is a strategic consultant who is very involved in the entire process.

Firm 9 Accounting and Consulting

This firm is a Dutch medium sized company that is specialized in accounting and consulting. It consist of three different offices with more than 100 employees. To expand their business and innovate in their business model they do not use frameworks. The owners of the firm have formulated several criteria which are important and are used as a guideline to innovate in their business. Because of recent changes within the firm and the environment the use of these criteria is very relevant to set the direction of the company. One of the owners of the firm was interviewed.

Firm 10 Software

The first software firm is a young firm and is currently fast growing in their industry. They sell different kinds of software to other businesses and consumers. This software can be used for several devices. To grow they try to create new business models and also innovate in their current business models. They do this with the help of different kinds of frameworks. The person who was interviewed for the research is the owner of the firm, who is also actively working on new business projects.

Firm 11 Logistics

The logistics firm is part of a large global company that is active on different continents. The subsidiary in the Netherlands is divided in three business divisions in the field of logistics. Where the customers are particularly other Dutch companies. Within the three divisions the firm tries to create and innovate their (new) business models, and thus expand their business activities. To accomplish this it uses different kinds of models and tools in the process of business development. However, a part of the new business development is also done by the international headquarters and is outside the range of this Dutch logistics firm. The interviewee is an experienced business development manager who is involved in the business development process for the Netherlands and two neighbouring countries.

Firm 12 Software

The second software firm in this research focusses especially on consumers. It is a young company that develops several apps for electronic devices. To create and innovate their business models they make use of two theoretical frameworks. This is a very active process, because the application market is highly competitive and there are a lot of alternatives. The firm has to identify the problem the customer experiences, needs to find a solution and translate this to a product. The interviewee is one of the owners of this firm.

4.2 Frameworks Used by Firms to Create or Innovative in their Business Models After the short introduction of the participating firms and their activities this section concentrates on the actual use of frameworks in the business model development process within these firms. It tries to answer the following sub question: 'Which frameworks are used by firms to create and innovate their business models?' To answer this question the first part of the section will analyse the different kind of frameworks used by firms. The second part highlights some important insights according to the firms regarding the relevant elements, relations and structure, and purpose of the frameworks they use.

4.2.1 Kinds of Framework

One of the most important questions is 'what kind of frameworks' are used by firms in their business model development process. In all interviews this was the first question asked. A few different answers regarding to this question were possible. Some firms make use of theoretical frameworks as described by authors in the second chapter, others make use of their own frameworks and some do not use frameworks in the process of creating or innovating their business models. In this context own frameworks refers to a bundle of different criteria firms have drafted to help them in the creation and innovation process regarding their business models. In Table 7 an overview is given which described which firm uses what kind of frameworks.

Firm	No	Own	Theoretical	If a (Theoretical)	
	Framework	Framework	Framework	Framework is used,	
				which?	
Firm 1		X		-	
Firm 2	X			-	
Firm 3			X	Business Model Canvas	
Firm 4			X	Lean Canvas	
Firm 5		X		-	

Firm 6		X	Business Model Canvas /
			Value Proposition Canvas
Firm 7		X	Sequoia – Business Plan
Firm 8		X	Business Model Canvas
Firm 9	X		-
Firm 10		X	Business Model Canvas /
			Lean Canvas
Firm 11		X	Balanced Score Card
Firm 12		X	Business Model Canvas /
			Value Proposition Canvas

Table 7. Kind of Frameworks used

Table 7 shows the differences and similarities in the use of frameworks between the firms. Where two firms say they do no use any kind of framework, two other firms use an own framework consisting of a set of different criteria, and eight firms make use of theoretical frameworks when determining their business model. What immediately can be noticed is the absence of most of the described business model frameworks from the theoretical chapter. Frameworks of Hamel (2000), Morris, Schindehutte & Allen (2005), Johnson et al. (2008) and Gassmann et al. (2014) are not used at all by the participating firms. When the researcher showed the firms the previously described frameworks they were not enthusiastic. Pronunciations like: 'not entirely clear', 'too difficult', 'chaotic' and 'too scientific' were defined by the firms. The interviewee of Firm 12 put it in this way: 'When using this kind of tools to help in the creation process of new business models it must above all make the process easier. These tools will not take care of this.' Besides the absence of most of the described frameworks, one of them is actively used by a lot of the firms. Five out of twelve make use of the Business Model Canvas of Osterwalder & Pigneur (2010). The canvas was described earlier as the most popular and commonly used framework in practice, apparently with good reason because it is often used in practice. Also two related frameworks to the Business Model Canvas are used by the firms namely; the Lean Canvas (Maurya, 2010) and the Value Proposition Canvas (Osterwalder & Pigneur, 2010). In the theoretical chapter the Lean Canvas was described as an alternative for the Business Model Canvas. The interviewee of Firm 4 agrees with the beliefs of Maurya (2010) and sees the Lean Canvas as a helpful tool for solving customer related problems. The other framework used by the interviewed firms is the addition of the Business Model Canvas namely the Value Proposition Canvas. Firm 6 uses the Value Proposition Canvas next to the Business Model Canvas and describes it as a more specific tool to help with identifying what the problem of the customer is, what the solution

for this can be, and how to design that process. Another method used is the Sequoia business plan. As defined in the theoretical chapter this method is not seen as a business model framework but in essence covers most of the same aspects, and the owner of Firm 7 sees it as: 'a well-defined and structured way to construct your business model'. Also the second alternative method which were described in the theoretical chapter; the Balanced Scorecard is used by one firm in this research. Firm 3 indicates that they work a lot with the Balanced Scorecard, it serves as a helpful tool for working on their business models. In Table 8 an overview can be found of the general thoughts and usage of business model frameworks by the participating firms.

Firm	Framework: Results
Firm 1	To make business decisions and working on our business models our
	company does not use any standard framework. But we do continuously try
	to find new business possibilities and improve our current processes. To
	accomplish this we make use of a set of (strategic) pillars. These aspects are
	chosen inside the organisation and form together 'our own framework'. It
	helps with the creation of new business projects and shows if the project is
	viable.
Firm 2	Within our firm no specific framework is used to work on our business
	model. Together with our parent company we look actively to our current
	and future business. We know what we want to achieve, who the customer
	is, what products we offer and what resources we need for that. But this is
	not fixed in a certain model, and is not written down. It can be said we are a
	pragmatic firm, we base our business on our history in terms of customer
	demand, orders and margins. These aspects are important to achieve the set
	of requirements like revenues and costs our parent company has established.
Firm 3	The Business Model Canvas is very helpful to determine your business
	direction. From the beginning it is very clear how you can convert your
	thoughts to those building blocks. I see it as well-designed overview you can
	use, so if one building block or even more cannot be properly completed or if
	there is a lack of fit, the business model you working on maybe does not
	have that much potential. You can use the canvas in my opinion for a new
	business but also for new projects, innovation in your business and the
	creation of value propositions. In meetings the framework is very useful

	because of the visual elements. Very important is that it serves as a tool, and
	to fill in the canvas is not the main goal to come to a good business model.
Firm 4	A large part of our firm does not make use of frameworks, tools or models to
	help in the process of business model development. However, we as the
	online department make use of the Lean Canvas. In our company there are a
	lot of business ideas and issues that need to be implemented and tested. But
	how to convert these ideas to viable and working business models is not
	entirely clear. This is due to the high complexity we face as a company. With
	the help of the Lean Canvas we can structure our thoughts, test the new
	business ideas and receive feedback of customers. We are constantly
	working and changing the canvas to create the most effective business
	models.
Firm 5	Within our company we base our business decisions on different criteria.
	These criteria have been established by our own company, and so we do not
	use any theoretical framework. We use these aspects for the innovation in
	existing business models but also for the creation of new business models.
	The criteria are put into a value matrix and get a certain score. With this
	method we can see very quickly if a new business idea has any potential. If
	this is the case the idea can be expanded.
Firm 6	We make use of the Business Model Canvas, and the relevant expansion of
	this framework; the Value Proposition Canvas. We use this method next to
	the Business Model Canvas because it is an excellent model to formulate
	your individual propositions, and how you can create extra business value.
	Both frameworks are perfect tools for designing your business models
	however they are not guiding. They are especially helpful to let you think
	about all relevant business elements. Also it is a very helpful tool in
	workshops because of the visual overview which is given.
Firm 7	In my organisation I have made use of the Sequoia Business Plan. It is not
	actual a framework, but is closely related. It describes what the customer
	wants, how to solve the problem, with what value proposition and what you
	need for it. It describes the business model of my organisation, in a narrative
	story. I used it in the early stage of the organisation, but you can also use it if
	customer demands, markets or the competition change, and therefore you

	have to change the value proposition you offer. So it can also be a
	convenient tool to innovate in your business model.
Firm 8	In our company we work a lot with the Business Model Canvas. We use it in
	our innovation process, product development and value proposition creation.
	It is not a required tool to use, but is very useful in the early phase of the
	creation of a business model. It is even used so often within our company
	that there are several types of the canvas created, where building blocks are
	renamed or added. What is very important to say is that the completion of the
	canvas is not the objective itself, but it is a very helpful tool that can be a
	reference to see if a business idea has any potential.
Firm 9	We as a company do not use any kind of business model framework,
	although, because of recent changes in the market we need to take a critical
	look to our current business activities. We have to identify our resources,
	activities, partners, the changing customer segments and customer relations.
	After this identification we have to reformulate our value propositions. Thus,
	at the moment frameworks are not used, however they can be very helpful in
	the future.
Firm 10	When starting our business a few years ago we used the Business Model
	Canvas to identify and create our business model. The ideas we had could be
	easily translated into the canvas and into the nine building blocks. It served
	as a helpful checklist and ensured we did not overlook something. However
	over time we have started to also use another tool: the Lean Canvas. This
	tools helps especially to understand the needs of the customers, which is of
	course the most important aspect a business has. The tool is used to test new
	concepts and identify what the customer really wants. According to use both
	tools are very good in use.
Firm 11	We make use of the Balanced Scorecard model to help us with creating new
	business possibilities but it also works for measuring our current business
	activities. Before every new project we begin with the use of this tool to
	analyse the current situation. It is also suitable for reviewing our already
	implemented projects. We identify opportunities, threats and formulate a
	strategic plan. It helps us to identify the customer needs, how to create value,
	internal business operations and the financial aspect. Important is that the

	tool is not leading. We do this especially for the Dutch market, but is has to
	be approved by our international parent company.
Firm 12	Our company uses two frameworks to design our business model namely;
	the Business Model Canvas and the Value Proposition Canvas. Both we see
	as helpful guides to work on our business models. The Business Model
	Canvas is an orderly framework which stimulates that you do not forget
	some relevant business factors. It combines all these relevant factors and
	shows how the business needs to function. We use it when we translate new
	business ideas to business models. The other framework we use is the Value
	Proposition Framework. This method highlights the Value Proposition
	Building and the Customer Segments block. We believe it is very easy and
	detailed way to understand the customer. We translate these needs and
	convert them into customer value propositions.

Table 8. General Thoughts about the Frameworks

When analysing the use of business model frameworks within firms some relevant insights are noticeable.

First, as already mentioned most firms actually make use of frameworks to create new business models or innovate in their current business models (see Table 7). Only two firms declare no frameworks are used to work on their business models. However both of these firms indicate they certainly look to most aspects in the shown frameworks by the researcher like for example the value proposition, customer segment and the key resources. As explained by Firm 2: 'For instance the Business Model Canvas, it provides all disciplines that we should exactly know. But we take a look at everything but not according to a certain model. Nothing is fixed, but I admit a model can make it easier and more structured.'

Second, most firms that make use of frameworks emphasise they see them especially as helpful tools and that the completion of the framework is not the main goal (Firm 3, 4, 6, 8, 10, 11). Firm 8 described this as follows: 'The framework is not a goal itself, but how you can deploy this framework as good as possible to work on your business models is its main purpose'. This thought is enhanced by Firm 6: 'I see it as just a framework, it is not a guiding principle. But it makes actually clear what you have to do.' This quote covers one of the main thoughts of the firms. Business model frameworks are helpful tools because they can serve as a kind of checklist. If a firm has an idea or innovation, and wants to create or innovate their business models they can arrange their thoughts in a framework.

Third, it seems that smaller (less than 100 employees, see Table 6) and hence often younger (younger than 10 years, see Table 6) firms make more use of business model frameworks. All five firms who participated and match those criteria make use of frameworks. However firms 4, 8 and 11 confirm that the use of frameworks in business model innovation is not just for start-ups and younger firms. They successfully make use of theoretical frameworks like the Business Model Canvas, the Lean Canvas and the Balanced Scorecard in organisations with hundreds or even thousands of employees. The interviewee of Firm 11 says: 'Our company in the Netherlands has hundreds of employees, but on each level and in every new product or project team the Balanced Scorecard can be used.'

Fourth, it can be said that business model frameworks, no matter what form, are seen as very good-working and helpful tools. They help in the process of translating a new business idea or innovation to an identification of all relevant business elements, and finally to the actual implementation of the business model. There appears to be a distribution in what stage frameworks are used. Firms 1 and 8 confirm that an own framework or the Business Model Canvas is used for the creation of new business models. However after implementation the frameworks are no longer used. Thus when the firms need to innovate their business models they don't go back to the framework but handle their innovations in a more practical way. The manager of Firm 8 adds: 'After implementation of a new business model, proposition or product the Business Model Canvas is no longer used. Ideally with an innovation you will return to the 'design board', but in practice it does not work this way.' Also Firm 1 confirms this: 'After designing a business model or project on basis of our own strategic pillars the theoretical work is over, problems or innovations that occur are handled in practice and this is obviously based on the revenues and costs.' Next to these perceptions Firm 3, 4, 5, 6, 7, 10, 11 and 12 indicate frameworks are not only used for the creation but also for the innovation of any form of business. So when a business model, product, proposition, service and / or project need to be changed because of internal or external changes the firms will return to their frameworks. Firms 4 and 10 which work with the Lean Canvas are especially convinced of this way of working. Firm 10 describes it as follows: 'We are testing new concepts and business models with the Lean Canvas. After receiving feedback from our customers we return to the canvas and apply our gained experiences. It can be seen as a trial and error process' Also firms who work with the Business Model Canvas, Value Proposition Canvas, Sequoia Business Plan and Balanced Scorecard see the relevance of innovation in business models using frameworks. For instance Firm 3 confirms that: 'When there are recent changes in the market or customer demand we have to ensure changes are made in our business model.

Then we go back to the Business Model Canvas, and thereafter identify what need to be changed.'

4.2.2 Elements, Relations and Structure of the Frameworks

After determining that business model frameworks are used and to what extent this section highlights the thoughts of firms concerning the relevant elements, relations and structure, and purpose of the frameworks they use. This to point out that firms can have different conceptions about business model frameworks and their aims. It will therefore provide a complete picture that will help when answering the research question. In Table 9 an overview is given about the thoughts regarding to the relevance and specific purposes of the used frameworks.

Firm	Firm's Insights: Results
Firm 1	Our own framework consist of several elements. We test if our new projects
	/ business models match with these criteria. If this is the case we will start
	with the implementation phase. The criteria in our model are: strategy,
	technology, regulatory, market, business case and (financial) planning. Every
	element is linked with each other. For instance: we have developed a new
	technology, does it fit with our strategy, market (customer demand),
	regulatory, our business (our propositions) and the financial aspects?
Firm 2	Not specifically mentioned in the interview.
Firm 3	When there is a business idea in our company. We translate this idea into the
	Business Model Canvas. According to us all building blocks are important.
	However it depends what you are changing, you can change just an
	individual value proposition or an entire new business model. When a single
	value proposition is changed or added, you often do not have to change the
	key partners, activities and resources. But the customer relationships,
	customer segments and channels may eventually change.
Firm 4	When using the Lean Canvas we try to understand our customer. All
	elements in this framework are relevant because you need to know them for
	the understanding phase. Because this is an iterative process we continuously
	look critical to all elements and their relationships. What the main problems
	are, how to solve this, with what matching value proposition etcetera.
Firm 5	When we are looking at (new) business models we use a value matrix. The
	elements that are present in this matrix are costs, benefits, risks and

	customers. All elements receive certain scores to measure them. If all factors
	are satisfactory a new business model, project or product can be launched.
	Although in our industry we have to be very cautious concerning the
	legalisation. What can be seen as another important (external) element.
Firm 6	All building blocks of the Business Model Canvas are relevant. Though, I
	think when creating a new value proposition the Business Model Canvas is
	not sufficient. The building block Value Proposition lacks in detailed
	information. To solve this problem we use the Value Proposition Canvas.
	Within this canvas this important building block is decomposed in other
	relevant elements.
Firm 7	In my opinion when you use the Sequoia Business Plan, not all elements are
	relevant. Like the element Company Purpose, Competition and Team, this is
	for us always the same (except for the first use). Especially when we try to
	innovate in our business model.
Firm 8	The Business Model Canvas is a very helpful tool. Although in a large firm
	as this one, the top left side of the model is not that relevant. Key partners,
	activities and resources are 'a given thing'. When you speak about a Start-up
	this is not given, and it is very helpful. Within our firm we use different
	kinds of the Business Model Canvas where we add different building blocks.
	For instance a building block like Advantage or Right to Play.
Firm 9	Not specifically mentioned in the interview.
Firm 10	Both the Lean Canvas as well as the Business Model Canvas have relevant
	elements and relations. In a more exploratory phase the Lean Canvas is
	relevant because it highlights what the customer wants. When this is clear a
	well-designed overview as the Business Model Canvas can help to create the
	new business model. In this process all elements are relevant.
Firm 11	Not specifically mentioned in the interview.
Firm 12	Not specifically mentioned in the interview.

Table 9. Firm's Insights of the Frameworks

In general all firms confirm that all elements of the framework they use can be seen as relevant. However a distinction can be made in two different ways.

First, larger firms (1, 5, 8) seem to look less to their own strengths, resources and partners. As described by Firm 8: 'because the left side of the business model canvas (key resources,

activities and partners) is a given thing for a larger firm like us we do not concentrate on these building blocks but on other elements.' This thought is confirmed by Firm 1 and 5 who look with their own framework not to their own resources but to customer demand, financial aspects and their value propositions. However the thoughts of these firms can also be dangerous. Not identifying 'given thing' elements like key resources, activities and partners Second, creating or innovating a firm's business model with the help of frameworks happens in different ways. Where the content of frameworks as the Lean Canvas (Firm 4 and 10) and the Value Proposition Canvas (Firm 6) tries to really understand the customer and subsequently creates the business model out of this. Where frameworks as the Business Model Canvas (Firm 3, 6, 8) and the Sequoia Business Plan (Firm 7) tries to outline the entire business model at once, and then test it. The Balance Scorecard and a value matrix attempt to test the elements and see if the business model fits within the firm. Finally it seems that all frameworks have the same purpose namely helping to create a viable business model (Osterwalder & Pigneur, 2010), but the structure and the content of them differ. However, for this research the existing differences between the content and structure of frameworks is not crucial, but it can lead to disparities in the business model design process. How these frameworks are used to come eventually to a business model will be described in the next section of this chapter.

4.3 Use of Business Models

The process to come from a business idea to a viable business model has been described in the theoretical chapter of this research. Process steps of different authors (Osterwalder & Pigneur, 2010; Teece, 2010; Eyring, Johnson & Nair; 2011; Blank, 2013) were a good starting point to outline the process of creating, implementing and managing a business model. Especially Osterwalder & Pigneur (2010) described this process in their book Business Model Generation in a well-structured and practical way. The steps they formulate cover the most relevant subjects and overview of the process of other authors, and fit best in the practical way firms think and act. Therefore, this section will analyse the process steps firms take with the support of the five phases of Osterwalder & Pigneur (2010). Based on these five phases: mobilize, understand, design, implement and manage this section will try to answer the second sub question of this research: 'How do firms make use of business models?'. The process of the five phases is displayed linearly (see Figure 11). Although an important remark the authors make is that this is rarely the case, and that phases often intertwine. However, to structure this section the steps are described in chronological order but can intertwine with

each other. If firms indicate that a step is performed multiple times, in a different order or is according to them not relevant this is highlighted.

4.3.1 Mobilize

The first phase defined by Osterwalder & Pigneur (2010) is called Mobilize. Within this step a firm is preparing to set up a successful business model design project. Key activities in this phase are framing the project objectives, testing preliminary business ideas, planning and assembling the team (Osterwalder & Pigneur, 2010, p.250). To successfully complete the phase and hence the activities, the (project) team needs the appropriate people, experience and knowledge. As confirmed by Firm 7: 'When we start working on a new business model we ensure we have all the objectives clear and our team is entirely informed.' The several reported thoughts of the firms about the first phase are summarised in Table 10.

Firm	Mobilize: Results
Firm 1	Our process of implementing a successful business model looks a little bit
	different than the process steps from the Business Model Generation book.
	The first step in our process is mostly about the discovering of new business
	/ project ideas and see if they fit in our business. Normally this is done by
	only two persons instead of an entire project team. Also the objectives and
	planning are not stated yet. Our first step is just a 'Business Idea phase'. In
	this step our strategic pillars are not yet used.
Firm 2	When looking at the steps of Business Model Generation I see a lot of
	similarities. We always begin with the mobilize phase; determining the
	objectives, gathering ideas and assembling the team. But in essence most of
	this is always the same in this company, and therefore nothing is fixed. We
	have no fixed steps.
Firm 3	This first step is often intertwined with the second step; understand. You first
	have to know the context you want to implement your business model in.
	Before you are setting any objectives, assembling a team or making a
	planning you have to analyse the environment, technologies, innovations and
	the customers. When this is done new business ideas arise and the Business
	Model Canvas can first be used to create 'rough sketches'.
Firm 4	The phases in this company are different than the phases from the book of
	Osterwalder. We start with the exploration phase. Within this phase we start
	gathering ideas and see if ideas have any potential. We also try to find out if

	we have any access to resources. I think this phase matches with both the
	mobilizing as well as the understanding phase. During this phase our team
	members are already using the Lean Canvas.
Firm 5	Before working on creating or changing a business model we need input or
	other signals. These signals are ideas, which can occur from different sources
	like the environment, employees or other firms. These gathering of ideas can
	be seen as our first phase. It is just an exploration phase.
Firm 6	In our company we work in a scientific way, we are not testing new business
	models the entire time. We try to understand the market, you have to
	understand the problem. How you eventually get there is not important. The
	first step is not very important, because we are a start-up the team is already
	there. When the problem is clear, we can start translating them into business
	ideas and formulating them into objectives.
Firm 7	I see a lot in common with our orientation phase and the first step; mobilize.
	We try to find out if there is any potential in the market for our business
	ideas. When there is, we formulate our objectives and decide who will work
	on the project.
Firm 8	At first everybody in your team has to understand the new business idea.
	This is our first phase; the team is formed, we understand the idea, we have
	analysed the environment and the objectives are set. It corresponds a little bit
	with the first two steps of the Business Model Generation book. When
	everybody has faith in it we determine if we proceed. Important is that in
	these first steps the Business Model Canvas is not used.
Firm 9	We do not follow a fixed pattern when implementing new business. Very
	important is that we really need to understand what we want to do. The idea
	of innovating or creating a new business model starts with 'is this change or
	implementation necessary'? Hence, it is very related to the understand phase.
Firm 10	Within our company we work a lot in projects teams. In the mobilize phase
	we form this team and set objectives. In this phase we also make use of the
	Lean Canvas, for testing new business ideas. What also matches with the
	understanding phase, where you need to understand the customer and the
	current market.
Firm 10	implementation necessary'? Hence, it is very related to the understand phase. Within our company we work a lot in projects teams. In the mobilize phase we form this team and set objectives. In this phase we also make use of the Lean Canvas, for testing new business ideas. What also matches with the understanding phase, where you need to understand the customer and the

Firm 11	The process steps in our firm are quite often not in chronological order.
	However I think that the steps of the Business Model Generation book
	correspond with our own steps. But in my opinion the step understanding
	needs to be before the step mobilize. We first have to take all external factors
	into account. Really understanding what we want to do and what the
	opportunities are before setting any direction. We do not use the Balanced
	Scorecard yet in this phase.
Firm 12	The phases seem quite familiar with our own process. A small team is
	formed that starts working on a business idea. This can be seen as our first
	step. The team will formulate several objectives related to the business idea,
	and start working on a new business model. The Business Model Canvas and

Table 10. Phase: Mobilize

The thoughts of the firms regarding the first phase are quite similar. A few observations can be made according to the gathered results.

First, as indicated by Osterwalder & Pigneur (2010) phases in a business model design project often intertwine. According to the firms the first step; mobilize intertwines especially with the second step understand. Firm 4 describes this as follow: 'In our exploration phase we work in an iterative process. We are testing if there is any customer demand, if not we adjust the model, so our ideas were not completely right and the objectives are reformulated. This is a combination of the mobilize and understand phase'. For firms that actively make use of the Lean Canvas like Firm 4 and 10 the process steps are closely related to the 'Search phase' described by Blank (2013). In this process customer discovery and validation are continuously alternating with each other.

Second, next to the firms that see the first phases as one phase there are others (Firm 5 and 11) that declare that the understanding phase comes before the mobilize phase. 'You first need to understand your environment, customer and market trends before setting up objectives and constructing new business ideas (Firm 11).

Third, there seems to be a difference between the use of frameworks in this first step. Some firms indicate they use their business model frameworks in this first step (Firm 3, 4, 10 and 12) while others declare the frameworks are not yet used (Firm 1, 8 and 11).

4.3.2 Understand

The second phase in creating a successful business model design is named Understand. Important activities are scanning the environment, studying potential customers, interviewing experts, analysing past projects and collecting ideas and opinions (Osterwalder & Pigneur, 2010, p.252). To succeed in this phase a deep understanding of the market and customer is needed. As described in the previous section a lot of the firms see this phase strongly intertwined with the mobilize phase, or even before as the first step to take. In Table 11 an overview is given with the interview results concerning the thoughts about the step understand.

Firm	Understand: Results
Firm 1	After selecting the new business model concept we start working in a
	funnel form. We analyse the market, the potential customers and the
	financial aspects, and see if they match with our strategic pillars. If a
	business model concept corresponds with the aspects we turn it into a
	business case and proceed to the third step. Because we make use of gate
	reviews, we will not return to a previous phase.
Firm 2	We execute market analyses to see if an idea has any potential. We also
	base these decisions on the costs and revenues from the past, because we
	stay very close to our original concepts, markets and customers.
Firm 3	As described the first two phases are strongly connected and alternate with
	each other. In both we are already using the Business Model Canvas to
	transform our ideas, customers segments and propositions into a
	framework.
Firm 4	The mobilize and understand phase intertwine together, within this firm we
	call this the discovery phase. In our Lean process we continuously look to
	customer demand and translate it into our Lean Canvas. When we and our
	customers are satisfied we start with the design phase. Another important
	note is that we have to take a critical look to our current business models
	and if there will be any overlap with the new one.
Firm 5	When identifying the ideas and selecting them we continue to the second
	phase. Subsequently we analyse if there is customer demand, are their
	possibilities or are there any problems. During this phase we talk a lot with
	different parties like experts, other firms and customers to see if there is

	any value to start designing the business model for it. The value matrix is
	used in this stage to determine if there is any potential in the business
	concept. We need to entirely be sure with this before start designing a new
	business model. In our organisation failing is poorly tolerated.
Firm 6	After the mobilize phase we start understand how everything works. We
	analyse and select elements for our business model, and decide how we are
	going to design and implement these elements. We try to accomplish this
	step as much as possible with the cooperation with customers and partners
	because they can help us with creating a viable business model.
Firm 7	This phase is very similar to the previous phase. Combining what elements
	you need through analysing the environment with the devising of business
	ideas. During this process we write parts of our business plan.
Firm 8	In the understanding phase which is strongly connected to the mobilize
	phase we still do not use the Business Model Canvas. If in the first two
	phases the concept is clear, there is customer demand and enough potential
	we start in the next phase with designing the business model. Within this
	phase we make first use of the business model framework.
Firm 9	This step is very closely related to the first one. In both we really need to
	understand the problem and provide all resources we need to solve it.
Firm 10	In this step we are continuously trying to understand the customer with the
	help of the Lean Canvas. This to get a deep understanding of the customer
	and the market we want to enter. When all elements (like what are the
	problems, how can we solve them, for what customer segments, is it
	financially interesting and what is the advantage we have) are clear we
	continue to the next phase. In that phase we start working with the Business
	Model Canvas.
Firm 11	The second step in our process is more the mobilize phase. At first we have
	tried to understand the market and the customer. When this phase is
	completed we start with formulating our objectives, forming a team and
	gathering all our business ideas.
Firm 12	After mobilizing our team we start looking at external factors and try to
	gather information. When the formed team has an idea for a certain kind of
1	l l

market should look like, who the main competitors are and of there are any comparative products. The Business Model Canvas and the Value Proposition Canvas are actively used within this step. A new business model can have an effect on the previous described elements, for instance there can be an effect on the existing business units. This potential effect has to be taken into account when proceeding to the next step. Finally, if this is clear and according to the team there is potential we start with the design phase.

Table 11. Phase: Understand

Within this phase the firms try to understand what elements will be important in their business model. The use of frameworks is still the same as in the previous step, some firms use them to identify and order their thoughts and findings, while others indicate they start working with the framework in the design phase. 'In most sessions I organise with for example start-ups, I try to put less emphasis on the Business Model Canvas because completing the framework could be seen as the main goal. This can lead to negative effects for the inventing of business ideas and understanding the context. If this is all clear, in the design phase the Business Model Canvas will construct itself.' (Firm 8). Furthermore according to more firms it is very important you have a good understanding of all relevant factors like customers, markets and competitors. They agree with Osterwalder & Pigneur (2010) about the risks that can occur when designing the business model without a good understanding. Firm 11 strengthens these thoughts: 'One time the process of understanding was skipped or not fully completed. After the process of mobilizing, designing and implementing the business model, we find out in the manage phase the business model did not function. When analysing they situation it was revealed the project team did not fully complete the understand phase.' Related to the understanding another important thing to consider is the effect of the new or changed business model on the rest of your business and your customer. 'In the understanding phase we need to find out what the effect of the new business is with respect to our existing business, customers and market.' (Firm 12).

4.3.3 Design

The third phase in the process described by Osterwalder & Pigneur (2010) is the design phase. During this phase the project team starts brainstorming about business model designs, makes prototypes, tests them and eventually selects the most appealing option. They use the ideas, information and resources of the previous two phases to design a new business model. Within

this phase it is very wise to take the time to explore multiple business models. Osterwalder & Pigneur (2010) describe that understanding and design phase proceed quite often in parallel, and that for instance prototyping can start already in the understanding phase. Vice versa may also be the case, when a new prototype gives the team members new insights and they return to gather more data in the understand phase. Firm 3 confirms this: 'The design phase is closely related to the first two phases and there is a continuous interaction between understanding and collecting information, and building and testing business model prototypes. All this with the help of the Business Model Canvas.' All interview results regarding the design phase are described in Table 12.

Firm 1 When the first two steps have finished we start working on the business of This corresponds with the design phase. Different in our company is that use gate reviews, if a phase is finished we do not go back. Hence we must ensure that in the first two phases we have all information we need to have In this step we use this to select the elements we need and starting on constructing our business case. This is the case because we work on big	we t ve.
use gate reviews, if a phase is finished we do not go back. Hence we must ensure that in the first two phases we have all information we need to have In this step we use this to select the elements we need and starting on	t ve.
ensure that in the first two phases we have all information we need to have all this step we use this to select the elements we need and starting on	ve. De
In this step we use this to select the elements we need and starting on	oe
constructing our business case. This is the case because we work on big	
projects which bring along many costs. When implementing we need to l	
sure the business model we have implemented will succeed.	~
Firm 2 In this step we use all information gathered in the previous phases to des	gn
a business model. We do not test it, and when the design is finished we	
implement it in our organisation.	
Firm 3 In the third phase we continue with the creation of a complete Business	
Model Canvas. With all information and ideas we try to create several	
business model prototypes. The canvas shows us all important elements	ve
need to think of. Within our firm we discuss all prototypes and eventuall	y
select the best one of them.	
Firm 4 This step is very related to the two first phases. The exploration and	
discovery phases return after we have tested a newly designed business	
model concept. It fits perfectly in the Lean approach we use, we are	
continuously trying to improve the concept. In this iterative process this	tep
is also called design of the business model. When finally all information	is
implemented and a viable business model is found we go through to the	
implementation phase.	

than the theory describes. In a big corporate firm like us the	design phase can
already bring high costs with it. Before the money for this p	bhase is available
the firm wants to be entirely sure that the business model w	ill be a success. If
it is not successful the costs can be very high and then it can	n have
implications.	
Firm 6 During this phase we are continuously busy with creating b	usiness model
prototypes. The Business Model Canvas is very important i	n this process
step of creating a new business model. In an early stage of a	a firm (like our
start-up) you need to put a lot of effort in designing a uniqu	e value
proposition. This will result in your first business model, w	hich you will try
to optimize.	
Firm 7 All the information gathered during the two previous steps	will be translated
into a business concept. Most information like the financial	s, market size and
competitors are clear. But you are still searching for the per	fect formulation
of the problem and the related solution / value proposition y	ou offer. Hence,
you are going back to the previous phase to optimize your b	ousiness model
concept.	
Firm 8 In this phase we start to use the Business Model Canvas. Al	l ideas are clear,
we have gathered all the relevant information and we have a	access to all the
resources we needed. I try to emphasise especially the first	two phases
because there lies the foundation of the business idea. With	in the design
phase we complete the canvas and test it in the field. When	we are content
with the result we proceed to the next phase.	
Firm 9 If all business ideas and the information according to the ma	arket, customer,
financial aspects and competitors are clear we start creating	our business
concept. As told we do not use a certain tool for this proces	s. However using
one seems to be a good solution to eventually implement th	e most successful
business model.	
Firm 10 The Lean Canvas helped us especially in the two previous p	phases. It helps us
to understand everything we need to know about all relevan	t factors. In the
design phase we use this information, and the Business Moo	del Canvas to set
our direction. This canvas adds different elements to our mo	odel. These

	elements can be identified rather easily but it ensures we do not forget
	something important. With the help of the two canvases we test different
	business models prototypes and return to the understand phase if new ideas
	occur.
Firm 11	During this phase we make use of the Balanced Scorecard. The identified
	information in the understand stage is translated to the framework and we
	see how this can fit. We test the elements like customers, financials and
	internal business and design on basis of this a business model prototype. If
	we are satisfied with the result and all elements score 'good' according to the
	Balanced Scorecard we continue to the implementation phase.
Firm 12	Most factors and elements are identified in the understand phase. The
	Business Model Canvas and Value Proposition Canvas are completed in this
	phase and a business model prototype will be designed. This is always a trial
	and error process, where finally the best option will be selected.

Table 12. Phase: Design

There seems to be a common thought regarding the design phase. Most firms see this phase as an important stage of the process where the collected information from the understanding phase and preparation from the mobilize phase is translated and a business model prototype is created. Although the results show also some differences.

First, following from the results of the previous sections regarding to the use of business model frameworks now every firm uses a framework (if they have declared they use one). This seems to be a main difference in the process of using frameworks. Theoretical frameworks as the Lean Canvas (Firm 4 and 10), Business Model Canvas (Firm 3, 6 and 12) and the Sequoia Business Plan (Firm 7) are used in all three phases where firms have indicated they serve as a helpful tool. These thoughts seem to match with the business model literature (Osterwalder & Pigneur, 2010; Blank, 2013). 'Own' frameworks are used only in the understanding phase (Firm 1 and 5) to see if the ideas in combination with the opportunities will fit with the firm's business. However the Business Model Canvas (Firm 8 and Firm 10) can also be introduced in just the design phase where the collected ideas and information is translated into the canvas, and where the canvas serves as a checklist. This corresponds with the Balanced Scorecard (Firm 11), which is also used as a checklist to see if the identified business ideas and information fits with the firm's strategy, business processes, customer orientation and the financial aspects.

Second, there appears to be some disagreement concerning the business model process. Some firms indicate it is a linear process while others see it as an iterative process. Firm 1 and 5 define the process as linear. If a phase is completed there is no turning back. To ensure this will not cause any problems gate reviews are used (Firm 1) where all information, assumptions and elements are checked. These two firms work this way because the business model projects they launch is very cost extensive and when business models fail there will be serious consequences. This may be contradictory with the literature but Firm 6 confirms this process: 'The moment you start a large-scale business model project, you should understand the entire process and follow the steps in a linear way.' The other firms (Firm 2, 3, 4, 6, 7, 8, 9 10, 11, 12) see it more as a iterative process where business models prototypes can be adjusted if necessary. But these firms are in general smaller firms with less cost-intensive consequences. Firm 4 confirms this thought: 'Within our own online department we work in an iterative process making use of the Lean method. In the rest of the company no such methods are used because this new business development concerns huge and capital extensive projects.'

4.3.4 Implement

After selecting the most suitable business model prototype the process moves on to the implementation phase. In this phase the business model is executed and communicated into the firm. To succeed in this phase the project team needs to ensure the entire organisation is willing to adapt the new business model as quickly as possible, and align the business model with the old business models (Osterwalder & Pigneur, 2010, p.256). Table 13 shows the interview results concerning this phase.

Firm	Implement: Results
Firm 1	In this step we work with a feasibility study. We translate our developed
	business model prototype into the firm. Because we have analysed all
	relevant factors in the previous steps and designed out of this the business
	model prototype is almost always a success.
Firm 2	If a new business model is developed we discuss this with our parent firm.
	If they give the green light, we start with implementing it in our
	organisation. This is a standard process, because our new models and
	products are often quite similar.
Firm 3	After the final business model prototype is designed we start with the
	execution phase. Our firm works together to make it a success. The new

	business model has to be aligned with the current business model to
	function. This can sometimes cause some problems. Because the new
	model can entice customers to switch.
Firm 4	The validation step is the fourth step in our process. After continuously
	improving the business model with the help of the Lean Canvas we
	implement it in our organisation. Our firm takes care a campaign is
	launched to highlight the new business model, this will help with the
	integration of the new concept.
Firm 5	Due to the critical requirements set by our firm the implementation phase
	is often a smooth process. Before the implementation everything is tested
	and ensured the concept will work. When the implementation phase
	begins the new business model fits often perfectly in our organisation.
Firm 6	The implementation phase within the firm is a smooth process. In a start-
	up like us the first phases are very important, if these steps are well-
	performed the implementation phase is often quite easy.
Firm 7	Not specifically mentioned in the interview.
Firm 8	After the use of the Business Model Canvas by creating a business model
	prototype the framework is no longer used. Implementing the model, let it
	fit in your business and align it with your current business models is a
	more practical approach.
Firm 9	Not specifically mentioned in the interview.
Firm 10	In the fourth phase we start with translating the business model concept
	we have made in the previous phases to a 'real' business. In the beginning
	of our firm this was an easy undertaking. But the more mature the firm
	becomes, the more difficult this process is. All this due to more
	complexity and the existence of other business models.
Firm 11	After the 'conceptualisation phase' the new or changed business model is
	implemented in the organisation. In a large firm this causes several
	difficulties. It has to be adapted into the entire organisation and will affect
	a lot of people, business and customers.
Firm 12	In a start-up like us this phase is a short step. If we tested a business
	model and it can work then the implementation is not that hard. A young

firm does not need to manage a lot of factors to accomplish a well-
performed implementation.

Table 13. Phase: Implement

The implementation phase is seen as an important but not as a comprehensive step in the process of business model development. Based on the interview results a few similarities can be drawn.

First, the firms declare it is important to communicate it to the entire organisation (Firm 4 and 11), let it fit with the current business models (Firm 3, 5 and 8) and that people within the firm become involved (Firm 3, 4 and 11).

Second, another interesting point that occurs is the difference between large firms and start-ups. Where larger firms need to take care that the new business model will fit in their organisation, start-ups does not have that problem because of the absence of complexity and multiple existing business models. 'When starting our firm we just designed a working business model and start 'doing business', now the firm is growing we have to consider more and more other factors.' (Firm 12).

Third, Osterwalder & Pigneur (2010) mention the Business Model Canvas can be used during this phase, however none of the firms pointed out they used a business model framework in the implementation step.

4.3.5 Manage

The last and a recurring step in the business model process is called 'manage'. It is the process of continuously managing your business models. It is seen as an essential step to stay successful. During this phase firms need to assess their current models and keep analysing their environment (Osterwalder & Pigneur, 2010). Firm 6 confirms this: 'In the manage phase you are constantly reviewing your existing business models, next to looking for new business models.' As well as Firm 10: 'Keeping your business models up to date due to constantly reviewing them is essential for your success'. The interview results of all firms regarding to the manage phase are displayed in Table 14.

Firm	Manage: Results
Firm 1	Following from the implementation phase comes the manage step. In our
	eyes this is a very important phase where the newly implemented business
	model and the existing ones will be reviewed. The strategic pillars we have
	used in the previous steps are still relevant but now we analyse the business

	model on basis of more 'practical facts'. This can be the revenues, costs,
	and the market adaption. When there is a negative performance our board
	of directors and the project managers will review the model.
Firm 2	We keep an eye on the existing business models. If we notice that the
	business is performing less smoothly than before we execute a review.
	Most of this is based on turnover.
Firm 3	The step of managing the business models of a firm is a constant process.
	To do this the Business Model Canvas remains very helpful. It serves as a
	tool to analyse external factors and see what elements are changing.
	Therefore it is a perfect tool to use as a team by means of communicating
	and getting a clear overview of the current business models.
Firm 4	The manage phase is a continuously returning process. You must ensure
	business models function, and that you are capable of making changes. To
	do this you have to communicate with the customer, analyse the market and
	look for new innovations.
Firm 5	Within this firm we work with the agile scrum method. Before we worked
	with the waterfall method, where the business model, projects and products
	were analysed after a while. The new method stimulates us to be more
	active. Hence, constantly analysing, adding features and a team who is
	responsible.
Firm 6	Constantly analysing and modifying of a business model is a main
	objective within a company. The Business Model Canvas can help within
	this process.
Firm 7	If a new business model causes struggles we start reviewing it and see what
	needs to be changed. In this analysis the non-functioning elements will be
	identified and a solution needs to be found. This is a very practical
	approach, the we often do not return to our business plan.
Firm 8	It is essential to analyse your current business models and products but in
	my opinion a framework is not helpful anymore in this stage. In our case
	going back to the Business Model Canvas should fit in the 'ideal' situation.
	However you do not return back to your framework, you base your current
	business models on other factors like turnover, market penetration and
	customer demand.

Firm 9	I can see why this step is relevant. Because of recent changes within the
	firm and the environment the use of this phase is very relevant to set the
	further direction of the company. Analysing the market, critically looking
	at our own business processes and reformulating our value propositions is
	something we do at the moment.
Firm 10	Reviewing is important. If you do not focus on the recent changes and the
	relevance of your current business this can cause problems. The Business
	Model Canvas and the Lean Canvas still helps us within this phase. It
	remains an effective tool to identify elements and analyse relevant external
	factors.
Firm 11	Every year, and if necessary more often, we analyse our business. In this
	process we go back to the Balanced Scorecard to see how the business
	model scores.
Firm 12	This is a very important step, even maybe the most important one. To stay
	competitive your business model has to keep functioning. If a firm does not
	react actively to market changes or technological innovations it has no
	chance to survive. The use of the Business Model Canvas and Value
	Proposition Canvas stays important, however other trends and financial
	results are also relevant.

Table 14. Phase: Manage

The results show that the manage phase of a firm is a constantly recurring process. Although firms seems to have different opinions of the use of frameworks in this phase and how to 'manage' your business models.

First, where most firms still use their business model frameworks in this phase (Firm 1, 3, 6, 10, 11 and 12) others do not see the relevance of this (Firm 4, 7 and 8). Firms who do not use frameworks at all also indicate this step is very important and they analyse different elements during this phase.

Second, there seems to be a difference in attitude regarding to reviewing the current business of firms. Some firms are proactive in this step (Firm 3, 4, 5, 6, 10 and 12) while other firms are more reactive to changes (Firm 1, 2, 7 and 11). This active attitude is confirmed by Osterwalder & Pigneur (2010) who say you need to be proactive to market evolutions.

4.4 The Involvement and Role of Stakeholders in the Business Model Process

This section will cover the third and last sub question: 'Who is involved in the business model process and what is their role?'. Now it is known what kind of business model frameworks firms use and what this process looks like, describing who is involved in this business model process is the following step. To do this the Stakeholder theory of Freeman (1984) is used; here it is translated to a distinction between internal and external stakeholders who participate in the business model development process. Next to different kind of stakeholders this section will also describe when they participate and what their role is.

4.4.1 Internal and External Stakeholders

The first and most obvious group that participates in the development of business models within a firm are all internal stakeholders. They are usually heavily involved and often take the lead in a project. The literature suggests that internal stakeholders can have different positions in an organisation (Freeman & Mceva, 2001; Collier et al., 2004; Whittington, 2006) and ideally have different characteristics (Osterwalder & Pigneur, 2010). In Table 15 an overview of the interview results is given who are internally involved in this process.

Firm	Internal Stakeholders: Results
Firm 1	Board of directors and project managers.
Firm 2	Directors, sales manager industry, sales manager IT, head of the office staff and product managers.
Firm 3	All employees: general managers, product owners, marketing / sales and supporting staff.
Firm 4	Team of business development managers.
Firm 5	Product managers, marketing managers, business development managers, risk parties; operations, legal affairs, credit risk management, IT department.
Firm 6	All employees.
Firm 7	Owners and supporting staff.
Firm 8	Created team that depend on the purpose; consisting of different people from the entire organisation.
Firm 9	Owners.
Firm 10	Mostly all employees; depending on the business model project. Often: general managers; IT developers.

Firm 11	A selected team from: top management, country management, regional
	management, branch managers, operations managers, sales managers and
	business development managers.
Firm 12	All employees.

Table 15. Involved Internal Stakeholders

In general working on business model happens in selected teams, across different departments and with employees with different areas of expertise. The interview results show several specialities across the organisation like product management, marketing, sales, top management, middle managers and IT to participate in business modelling. Groups like these with different characteristics will be beneficial for the outcome of the business model design process (Osterwalder & Pigneur, 2010). As expected, in smaller firms most or even all of the employees are involved in the process (Firm 3, 6, 10 and 12) while in larger firms teams are formed (Firm 4, 5, 8 and 11). In addition the process can also be just the responsibility of the owners (Firm 7 and 9) or the top management (Firm 1 and 2). Besides the involvement of internal stakeholders there can also be a role for external stakeholders. Those involved can be partners, users, customers, suppliers or financiers (Blank, 2013; Amit & Zott, 2015). They can be seen as useful groups in the process of business model development and several tasks can be performed and resolved by them. The external involvement as indicated by the participating firms is showed in Table 16.

Firm	External Stakeholders: Results
Firm 1	A technological institute, legal organisations partners and customers.
Firm 2	Suppliers, financiers and customers.
Firm 3	Customers, partners (start-ups) and suppliers.
Firm 4	Start-ups and customers.
Firm 5	Customers, media, other firms (partners), overarching and independent organisation in our industry, legislative bodies and an overarching international organisation.
Firm 6	Partners, financiers and customers.
Firm 7	Partners (franchisers)
Firm 8	Customers, start-ups and other relevant partners.
Firm 9	Customers
Firm 10	Partners and customers.

Firm 11	Partners and suppliers in different segments.
Firm 12	Other start-ups, customers, financiers and users.

Table 16. Involved External Stakeholders

All firms declare that external stakeholders can have any form of involvement in the business model process. The customers seems to be one of the most important groups in here. But also partners, suppliers and other external groups are named. Different firms also mention the involvement of start-ups. Firm 4 indicates: 'Collaborating with start-ups works very well. It is all about speed, start-ups have this advantage. If we need to develop something by our self this can take a long time, not to mention the shortage of capacity.' Another group with influence are legal and other overarching organisations (Firm 1 and 5). 'When implementing and testing a new business model we have to discuss the possibilities with legislative bodies and an overarching organisation, they can decide if a project can proceed or not, hence this is a big influence' (Firm 5).

4.4.2 Participation and Roles

The previous section described who are involved in the process of business model development. Subsequently this section describes what the roles of the stakeholders are and when they participate in the process (Sull, 2007; Sutherland et al., 2007; Paasivaara et al., 2008; Groysberg & Slind 2012). All interview results regarding the participation and roles of the stakeholders are described in Table 17.

Firm	Participation and Roles: Results						
Firm 1	During each phase different kind of stakeholders may participate. In the						
	discovery (mobilize and understand) phase when different business model						
	ideas are gathered the project managers are mostly involved and play a						
	leading role. However a lot of ideas are indeed introduced by external						
	stakeholders, like technological institutes with new ideas or customers						
	with a certain kind of request. In the following phases, the board of						
	directors plays a more monitoring role, if the new concept fits with the						
	current business activities. They and the project managers then construct						
	the business model on basis of the strategic pillars. Before implementing						
	the idea has to be approved by legislative bodies.						
Firm 2	The director is leading in the entire process, together with five other						
	people from marketing, sales and product management. They look for						

	new business due to analysing the market and the customer, and talking						
	with suppliers. When an idea is ready to be designed the parent company						
	makes it appearance. The parent company checks if it fits within the firm						
	and gives approval to implement. During the manage phase all previous						
	named managers participate.						
Firm 3	It really depends on the project who participates and what their roles are.						
	In the first phases, naming the business model ideas and understanding						
	the market, we quite often use customer opinions or input from our						
	suppliers. Our team starts working with this and implements it in the						
	Business Model Canvas. Within this design process we often work						
	together with other small related companies to construct it as effectively						
	as possible with our own team, and usually a selected team member						
	reviews the business model and market when implemented.						
Firm 4	In the entire process till implementation our customers are very important						
	in the construction of a new business model. They are our input. We as a						
	team are constantly updating the Lean Canvas. Filling the canvas is						
	mostly an internal job, although we work a lot with start-us to design new						
	business models and they help us in this phase. After implementation we						
	as business development managers stay watching carefully to the results and trends in the market. Also is there a certain role for a few selected						
	and trends in the market. Also is there a certain role for a few selected						
	team members to effectively communicate the model to the entire						
	organisation. When change is necessary the process starts again from the						
	beginning.						
Firm 5	This really depends. For instance, sometimes ideas comes from the sales						
	department and another time from product management. But the main						
	thought of the firm is that anybody can hand in new business ideas. Ideas						
	can also come indirectly from external stakeholders like customers or						
	partners. All ideas come eventually together to our team. We start						
	constructing new business model prototypes. These have to be checked by						
	several formal authorities before the implementation phase can begin.						
Firm 6	In the beginning of the process the customer and the financier are strongly						
	involved. Quite often the financier can be the customer. If you want to						
	produce something there must be customer demand, this is always your						

	first step. During this phase we try to involve as many customers as							
	possible and start to completing the Business Model Canvas and Value							
	Proposition Canvas.							
Firm 7	We as owners have a leading role in the process. Through analysing the							
	market, customer and competitors we start defining new business model							
	ideas. In the design phase we start working together with a few partners to							
	optimise the concepts and thereafter continue to the implementation							
	phase.							
Firm 8	There is always a certain group or person who takes the lead. This often							
	depends on what kind of project it is. Both internal and external							
	stakeholders can take this leading role. When the new ideas are collected							
	and we really understand the business model idea we start working on the							
	Business Model Canvas. Designing the business model prototypes with							
	the help of the framework is done with all team members, partners like							
	start-ups and frequently also customers. Thereafter the project team is							
	responsible for implementation.							
Firm 9	When listening to the customer and analysing the market new business							
	ideas come up. Customers have an indirect role in this process. The							
	owners start thinking about new business ideas, and start working on it.							
Firm 10	In the first phases of a new business model project information and ideas							
	are collected. Customers, users, partners or internal involved people can							
	come up with these. The process begins with understanding how we ca							
	solve these customers 'problems'. For this the Lean Canvas is used.							
	Completing and editing the Lean Canvas happens with in the							
	organisation, but can also be done with the help of customers or strategic							
	partners. From all collected information we design the Business Model							
	Canvas.							
Firm 11	Ideas come usually from ourselves, but can also be introduced by a							
	supplier or partner. One of these parties has a leading role. All steps after							
	that is often pure internally. We design, test and implement the new							
	business models and use the Balanced Scorecard. This responsibility lies							
	with the formed team, which consists of different specialities and							
	functions.							

Firm 12

We start with gathering all kinds of business model design ideas. By means of listening to the customer or user of our current products: what is missing, what can be better and how can we do that. They provide input and we start working on it. All ideas and information are transformed in a business model prototype which is designed with the Business Model Canvas. Completing the canvas is often a fully internal job, but relevant partners and sometimes even customers may participate. When testing and improving it we perform the 'main role' within this step. The opinion and thoughts of our customers and users remain important. During the last phases the prototype is implemented and managed. Usually by the same team, or a few persons.

Table 17. Participation and Roles

The roles and participation steps as described by the firms do not really correspond to the studied literature, however there are still some similarities (Sull, 2007; Sutherland et al., 2007; Paasivaara et al., 2008; Groysberg & Slind 2012).

First, participation (when certain groups attend the process) along the business model design process is in generally similar in most firms. In the beginning phase there are roles for internal and external stakeholders in almost every firm. When designing and testing starts (when a business model framework is often intensively used) a few firms declare this is an entirely internal process (Firm 1, 2, 7, 9 and 11) while others say external stakeholders like customers and partners are strongly involved in the process (Firm 3, 4, 5, 6, 8, 10, 12). In this phase they try together to complete a business framework, and hence design a viable business model prototype. Firm 6 confirms this statement: 'In the whole stage we try to involve customers as much as possible, because they are always your starting point.'

Second, from the obtained results a few roles can be identified. Customers can play an active and a passive role within the entire process. They can be seen as just input (Firm 1, 2, 4, 7, 9 and 11) or as a valuable partner in designing a business model (Firm 3, 6, 8, 10, 12). The same can be said about the involvement of partners like start-ups or co-operating firms. Another role is the 'leading role'; who takes the initiative in a project, who comes up with an idea or suggests to start working on a new business model. This role can also be performed by internal as well as external stakeholders. For instance, ideas can come to mind by internal employees or they can arise by external groups that try to obtain contact with a firm to start working on a new business idea.

4.5 Effectiveness of the Business Model Framework Process

This section covers the concept of effectiveness regarding the use of frameworks in the business model process. Effectiveness is a main element of the formulated research question what has not yet been discussed in the previous analysed sub questions. To measure if the firms see the process as effective this section will make use of selected theoretical concepts, which were translated to topics, drawn from research of Lucassen et al. (2009) and Hoffmann (2013). Thereby a general question was asked to all firms; 'Are you satisfied with the current business model development process and the use of business model frameworks here in?' The satisfaction and factors will define if the firms see the current process as effective, and if business model frameworks play an important or a minor role.

4.5.1 Overall Satisfaction

In the final part of the interview, the researcher asks if the participating firms were satisfied with the entire business model development process: were business model frameworks seen as helpful, and did they ensure or stimulate that all phases in the process were smoothly completed? If no (theoretical) framework was used the researcher asks if a use of such thing could be helpful in a firm for working on a firm's business model. The summarised interview results concerning the satisfaction can be found in Table 18.

Firms	Overall Satisfaction: Results							
Firm 1	The way we do it now is in our eyes very effective. Everybody knows							
	what is expected of him, the steps are clear and our own strategic pillars give us a good view if new business concepts fit within our firm and in							
	the current market. I do not see the relevance of using a theoretical							
	framework. All elements are checked in our minds, and are quite obvious.							
Firm 2	We are not entirely satisfied about the process. It could certainly be better							
	Implementing more structure such as the use of certain frameworks could							
	really help. At the moment it is often unclear what we exactly need to do							
	and where we have to start when identifying elements like customers,							
	resources and value propositions. Also the phases are not completely							
	clear. The absence of (scientific) models) is because this firm is very							
	informal and pragmatic.							
Firm 3	In general we are very content. The use of the Business Model Canvas							
	helps a lot. However somethings can be improved. We need to involve							

ideas and this will helps us. Firm 4 I am very satisfied. When we used the Business Model Canvas in the past as the main framework, I was less satisfied. Now we are using the Lean Canvas the process works a lot better. It comes to the core, it describes the building blocks that really matter. Firm 5 The value matrix we use works reasonably. Although in some cases it does not work at all. Because we have to deal with other factors that are not present in the matrix. Also the numbers we give to them can be interpreted differently, and thus importance in projects may differ. I see the potential a framework like the Business Model Canvas can have. Firm 6 We see the Business Model Canvas and Value Proposition Canvas we use just as a model. Nothing more, nothing less. However it works very good in all phases. It helps us with creating the business plan, selecting the product and formulating our value propositions. Firm 7 We are satisfied with our current activities and the use of the Sequoia Business Plan. It helps a lot with structuring to your thoughts and makes sure you do not forget something. The frameworks you showed are more clear to present in a team. It is easier to communicate your business model in a template instead of a long story. It is a possibility we might use this in the future. Firm 8 Generally we are very satisfied with the use of the Business Model Canvas. It works very good in my opinion. Firm 9 It works fine, however we need to optimise this process. At the moment it is a very slow process and not always functional / clear. The use of frameworks or other tools can certainly help I think. Firm 10 We are very satisfied about working with frameworks as the Business Model Canvas and the Lean Canvas. In the entire process it works as a great tool to structure, communicate and summarise your ideas.		customers and partners more in the entire process, they can come up with							
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· ·		great tool to structure, communicate and summarise your ideas.							
	Firm 11	The Balanced Scorecard is a very fine tool to see if a business model							
concept has any potential. We are very satisfied with the tool and the		concept has any potential. We are very satisfied with the tool and the							
whole associated process.		whole associated process.							

Firm 12	When making use of the Business Model Canvas and the related Value						
	Proposition Canvas our process runs very smoothly. From the more						
	conceptual phase till the reviewing tasks the canvases prove to be a						
	helpful framework. You can easily communicate and highlight the						
	important elements. If you are in a team meeting or a have meeting with						
	external stakeholders it very handy to present your business model and						
	your value propositions in a template.						

Table 18. Overall Satisfaction

Overall the firms are satisfied with the way they create and innovate their business models. Firms that make use of frameworks seems especially content (Firm 3, 4, 6, 8, 10, 12). They describe the frameworks as helpful communication and structuring tools in the business model process. Other firms who use own frameworks or a more descriptive method like the Sequoia Business Plan see potential in the use of frameworks (Firm 5 and 7). They indicate the use of such methods will be better for the process and effectiveness will improve. Also firms who are not using frameworks at the moment declare these can be an addition to their current process (Firm 2 and 9). Overall using frameworks seems to make the business model development process more easy. The frameworks reduces complexity, improves communication and stimulate understanding a firm's business model.

4.5.2 Effectiveness Factors

In addition to the general question 'how satisfied are you?' the effectiveness of the use of business model frameworks (and the related process) was also measured in a different way. Different factors adapted from the literature were used namely; knowledge and understanding, creativity, visualization, communicating effectiveness and capturing effectiveness (Lucassen et al., 2009; Hoffmann, 2013). Firms gave their own interpretation concerning these factors. The collected interview results concerning the knowledge and understanding, creativity and visualization are displayed in Table 19.

Firm	Effectiveness Factors: Results
Firm 1	Looking at the entire process, and especially to the use of strategic
	pillars, we see that it stimulates focus and not creativity. Thereby it is
	very handy is term of visualization. There are plenty of project ideas.
	The strategic pillars ensure we can focus on the projects which seems to
	be most important. The use of a table with strategic pillars as a guide is

	very understandable to select the business model ideas which are seen as							
	most relevant. It prevents that you give too much attention to less							
	potential ideas, it creates clarity. The only questionable thing is how do							
	you evaluate projects, how do you measure strategic or financial value.							
Firm 2	Not specifically mentioned in the interview.							
Firm 3	The Business Model Canvas obviously stimulates creativity. It makes							
	you look at different building blocks, therefore it gives a possibility to							
	come up with new ideas. Also it is a very nice visual tool, drawn in a							
	'painters' canvas. The design and building blocks stimulates the creation							
	of new knowledge and make sure you understand a firm's business							
	model very well.							
Firm 4	When using the Lean Canvas you try to formulate new value							
	propositions. In this process the canvas ensures all those three factors							
	are covered. You understand the problem a lot easier, the canvas is clear							
	and it works to look for solutions.							
Firm 5	Our matrix does not stimulate creativity, but it makes you understand							
	the situation better. This because the matrix is clear, visual and							
	organised.							
Firm 6	The Business Model Canvas works very well as a tool but does not							
	stimulates our team to be creative. However, it is very useful to							
	understand the problem and transfer your knowledge to a shared							
	platform. Subsequently, you can see if something is forgotten. Visually							
	it is very clear, you can the canvas on a whiteboard an work with post-							
	its.							
Firm 7	The Sequoia Business Plan is really not a tool that stimulates creativity							
	and visualization. But it ensures you really see the important aspects of a							
	business model. So it stimulates the understanding phase.							
Firm 8	It certainly does not stimulates creativity. The Business Model Canvas							
	and Value Proposition Canvas only need to be introduced if the pro							
	or idea is very clear. But it really helps to understand and visualize the							
	problem. The buildings blocks and the complete structure help with this.							
Firm 9	Not specifically mentioned in the interview.							

Firm 10	According to us the Lean Canvas is a more understandable framework in						
	the discovery phase of the entire process. Where the Business Model						
	Canvas is very useful to design a business model. Both score very good						
	in terms of the understanding, fostering of knowledge and visualisation.						
	Concerning creativity it is a bit contradictory. On one side you are very						
	bounded to the buildings blocks, where on the other side those buildings						
	blocks can stimulate to really discover all possibilities.						
Firm 11	We are very satisfied with the Balanced Scorecard regarding to the						
	understanding of a business model idea. All elements summarise if a						
	new concept may fit in the current business. Creativity is certainly not						
	the case but the model is visually very strong.						
Firm 12	Both frameworks we use help with the understanding and fostering of						
	knowledge. As for creativity I am not entirely convinced. The elements						
	are forethought, and if something is not in the canvas you are not using						
	it. As regards to visualization it is of course truly helpful.						

Table 19. Effectiveness Factors (1)

All business model frameworks seem to stimulate the understanding process and fostering of knowledge. The frameworks summarise the ideas, elements, problems and the entire business model of a firm within one table, canvas or figure. They reduce complexity and provide a clear and brief summary of all relevant factors. Firm 10 describes: 'When using the Business Model Canvas in a meeting the team can easily follow and understand all important aspects we discuss. A business model, which is usually very conceptual, is transformed with the building blocks to a logical story.' Following this frameworks ensure that all information is converted orderly in a visual figure. Almost all firms indicate the business model frameworks they use provide a good visual overview. Only Firm 7, which is using the Sequoia Business Plan, declares the framework they use does not score points on this issue. This plan is a more narrative story, and hence not a visual overview of a business model. The third factor, creativity, seems not to be a relevant aspect of a business model framework. Most firms indicate the use of frameworks do not stimulate to be creative. Only Firm 3 and in lesser extent firm 10 see creativity as an important factor. Firms see frameworks especially as checklists, communicating tools and summarising tools. The others factors described: communicating effectiveness consisting of (1) acceptance of business and academics, (2) internal cohesion and (3) number concreteness, and capturing effectiveness consisting of (4)

explicit model method, (5) method efficacy and (6) absence of redundancy were identified in a slightly different way. These concepts were not only based on the interview results. Factors particular like acceptance and number concreteness were based on observation and literature review. The results regarding these two factors can be found in Table 20.

BM	(1)	(2)	(3)	(4)	(5)	(6) Absence
Framework	Acceptance	Internal	Number	Explicit	Method	of
		Cohesion	Concret	Model	efficacy	redundancy
			eness	Method		
Framework	-	+	+	+	+/-	+
Firm 1						
Business	+	+	-	+	+	+/-
Model						
Canvas						
Lean	+	+	-	+	+	+
Canvas						
Framework	-	+	+	+	+	+
Firm 5						
Value	+	+	-	+	+	+
Proposition						
Canvas						
Sequoia	+/-	+	+	+	+/-	-
Business						
Plan						
Balanced	+	+	+	+	+/-	+
Scorecard						

Table 20. Effectiveness Factors (2)

Theoretical business model frameworks like the Business Model Canvas, Value Proposition Canvas, Lean Canvas and Balanced Scorecard are in general accepted by researchers and businesses, and are used a lot in practice. The acceptance is doubtful for the Sequoia Business Plan which is developed by consultants. Both own frameworks are of course neither accepted by researchers nor businessmen because lack of awareness. All firms indicate the frameworks do have a strong internal cohesion, that means all elements are connected with each other. Some frameworks do show numbers (Framework Firm 1; Firm 5, Sequoia Business Plan and

Balanced Scorecard) where others do not. However numbers can be added to those frameworks in elements like revenues and costs. The firms indicate that instructions of all approaches are provided when a team or firm start using a framework. Most of them are translated easily into practice. Too much information or implementation difficulties can cause problems (Firm 1, 7 and 11). According to most firms the frameworks they use do not contain redundant information that is never used. As already described by Lucassen et al. (2009) 'standard' frameworks can contain elements that are not see as a necessary and important in eyes of researchers or businessmen. Firm 7 indicates that some steps in the Sequoia Business Plan like team and competition are not relevant while Firm 8 says that elements like key partners, resources and activities from the Business Model Canvas are irrelevant for a larger firm. Although this seems really to depend on what kind of firm, their activities and how the framework is used. In essence all elements and information does have their purposes.

4.6 Data Analysis: Conclusion

In this chapter the interview results of twelve different firms have been analysed. This was done on basis of different research questions. Therefore this section will briefly sum the results obtained from the data analysis before the beginning of the conclusion.

Business model frameworks

The first question covered highlighted the actual use of business model frameworks by firms. Different frameworks were used by firms. Some were theoretical (Business Model Canvas, Lean Canvas, Value Proposition Canvas, Sequoia Business Plan and Balanced Scorecard) while other were seen as 'own' frameworks consisting of selected aspects which were combined in a table or figure. Theoretical frameworks described in the second chapter were not used at all, mainly because firms saw these as to difficult and to scientific. Another relevant point is that most firms who make use of frameworks emphasise they see them especially as helpful tools, guides and checklists, and not as an essential step to create a business model. But all indicate they have their value in the process of business model creation. Concerning the use of frameworks in business model innovation not all firms agree. Most of them indicate they are still useful while others mention after implementation you do not return to your theory. All smaller and younger firms in this research make use of business model frameworks. While larger and older firms make less use of this kinds of tools. Although some larger firms confirm and show that using frameworks can be a good addition in the process of creating or innovating in business models. In terms of the content of the frameworks the firms indicate all elements are seen as important. The structure and lay-out

may differ but the main goal stays the same, using frameworks to design, test and implement viable business models.

Business model process

Based on five phases: mobilize, understand, design, implement and manage this section has tried to answer the second sub question of this research: 'How do firms make use of business models?'. A few interesting points in this process appeared. As indicated by literature firms told that phases intertwined and were not always handled in the same order, especially in the first three phases. As already mentioned in the previous section the results confirm that frameworks were used in different phases. Some were used in all phases, and helped with the creation and innovation of business models. Others were just used for creation, and were not used in the manage phase. A few firms indicated they were just helpful checklists in the understanding and design phase while others described that completion of the framework was the main purpose. Thus, frameworks could be relevant in a few or all phases, and have different purposes; checklist / guideline or main tool to analyse a business model.

Stakeholders and roles

Different internal and external stakeholders were involved in the process of business model development. The internal stakeholders were in smaller firms mostly all employees while in larger firms a team was formed. Employees in these teams were from different departments and specialities in the organisation, and had different roles: top managers, middle managers and regular employees. External stakeholders were especially partners and (indirect) customers. During the process internal and external stakeholders participated in different phases. Also different roles were fulfilled. Internal stakeholders were actively involved in the entire process and quite often took the lead. External stakeholders like customers performed a more passive role while partners participated in the meetings where business models were created and tested.

Effectiveness

Most firms were very satisfied with the use of their frameworks, and saw the process as very effective. Overall using frameworks seems to make the business model development process more easy. The frameworks reduces complexity and improves communication. Next to this they also stimulate the understanding, fostering of knowledge and visualizing of a firm's business model. Another factor, creativity was often not stimulated when using frameworks. Most frameworks also score good regarding to the capturing and communication effectiveness. Firms indicated the frameworks score positive on most factors.

5. Conclusion

This study tried to analyse the use of business model frameworks within firms. Understanding which, to what extent, how and by who frameworks are used and how effective this entire process is, formed the core in this research. In this last chapter the results will be discussed, practical and theoretical implications will be described, limitations of the study will be given and suggestions for future research will be defined.

5.1 Results and Discussion

The research question was: 'In what extent and how use firms frameworks for creating and innovating in their business model and what is the effectiveness of this process?' To answer this question three related sub questions were formulated based on the theory of Strategy as Practice (Whittington, 1996; 2006; Jarzabkowski, 2004). The questions were translated into interview topics which were submitted to different firms. In this section the sub questions will be individually answered before their results are combined to answer the research question.

Which frameworks are used by firms to create and innovate their business models?

The results showed that different kinds of business model frameworks are used by firms. A distinction can be made between different types of frameworks. Most firms used frameworks developed by researchers and/or consultants (Business Model Canvas, Lean Canvas, Value Proposition Canvas, Sequoia Business Plan and Balanced Scorecard). While others used 'own frameworks' which were designed by firms themselves. They select relevant elements and combine them into a table or figure. Subsequently they use them in the business model development process. This view of 'own frameworks' corresponds with the beliefs of researchers regarding the content and purpose of a business model framework (Hoffmann, 2013; Fielt, 2014; Gassmann et al., 2014). Only two out of twelve firms, which declared they participate actively in the business model process did not use any kind of framework. Other scientific frameworks (Hamel, 2000; Morris, Schindehutte & Allen, 2005; Johnson et al., 2008; Gassmann et al., 2014) as described in the second chapter or other different types were not used at all. Firms saw these frameworks not as a strong addition to their current process.

Other relevant results regarding the use of frameworks concerned the size and age of the firms. All smaller and younger firms made actively use of business model frameworks, while larger and therefore often older firms worked less with frameworks. However some larger firms showed that frameworks could also be nicely used in larger organisations. This matches with the beliefs of Osterwalder & Pigneur (2010) who see business model frameworks not

especially for small firms but also as highly relevant for larger ones. Other results that were obtained indicated that frameworks were used in different ways, in different phases and have the same goal but the content can vary per firm. These insights are used as a stepping stone to the next question.

How do firms make use of business models?

The process to come from a business idea or concept to a viable business model with the help of frameworks is the core to answer this question. The five phases: mobilize, understand, design, implement and mobilize as described by Osterwalder & Pigneur (2010) helped herewith. The interview results showed these phases are often intertwined and are not linear. The mobilize, understand and design steps are strongly connected and continuously alternate with each other. When business model ideas are tested, objectives are formulated and the team composition is made the understanding phase is already started. The firm tries to understand the customers, market and competitors, and meanwhile refines its ideas and objectives. This is the same for the design phase. When firms are designing new business models they quite often switch back to a previous phase to gather more information or refine their objectives. The last phase, manage, is a recurring phase which captures all previous phases and is therefore also strongly connected. These results corresponds with the conceptions of Osterwalder & Pigneur (2010) who emphasise phases are not a linear process and they often intertwine. This matches also with the lean theory of Blank (2013) who see the business model process as an iterative process.

When looking especially to the use of frameworks in the process a few things can be outlined. First, the role of a framework differs per firm. Some see them as checklists, guidelines or helpful tools but not as the main purpose of creating or innovating a business model. Others however see completing a framework as a crucial step and describe it as very essential in the process of creating a business model.

Second, business model frameworks main purpose is to help in the process of creating or innovating a business model (Osterwalder & Pigneur, 2010). Firms seems to have different opinions about this purpose. All confirm they help with the creation, but some do not use them when innovating a business model. According to several firms going back to a theoretical framework for innovating is not ideal. More practical options work better in such a situation.

Third, a distinction can be made between firms that use frameworks in most phases and firms who use frameworks in only just one phase. Some firms indicate frameworks like the

Business Model Canvas and the Balanced Scorecard are just relevant in the design phase, where the business idea is translated into a framework. Other firms use their own frameworks in just the understanding phase to see if the business ideas will fit with external factors. Most firms use their frameworks in almost all phases: mobilize; to formulate objectives and business model ideas, understand; to translate external factors to internal ideas or elements, design; to actually create the business model and manage; to innovate in their business model. Except in the implementation phase where no firm uses a business model framework. This does not correspond with the beliefs of Osterwalder & Pigneur (2010) who argues that the Business Model Canvas can be used in all phases.

Who is involved in the business model process and what is their role?

The interview results revealed that a lot of internal and external stakeholders can be involved in the business model process. From inside the firm these involved stakeholders can have different positions, come from different departments, have different characteristics and hold various specialities. This corresponds with the literature (Freeman & Mceva, 2001; Collier et al., 2004; Whittington, 2006; Osterwalder & Pigneur, 2010). External stakeholders are mainly the partners and (potential) customers of a firm. In large firms teams are formed which consist particularly of internal stakeholders with different functions and specialties, but also external stakeholders can participate. In general in smaller firms all employees are involved. During this process internal stakeholders work especially with business model frameworks. However external stakeholders like partners can also attend meetings or sessions to work on a framework.

Looking at the roles and participation of stakeholders some things can be outlined. First, in the beginning phase there are roles for internal and external stakeholders in almost every firm. When designing and testing starts a few firms declare this is an entirely internal process while others say external stakeholders like customers and partners are strongly involved in the process.

Second, there are no specific roles highlighted by the firms. They spoke a lot about a 'leading role' which consist of who takes the lead in a business model project and starts working on an idea. This can both be internal and external stakeholders. For external stakeholders like customers or partners there can be active or passive roles. Where most firms declare customers perform a passive role, some say they can help in the business model process.

To what extent and how do firms use frameworks for creating and innovating their business model(s) and what is the effectiveness of this process?

Most firms seem to use business model frameworks. In this study ten out of twelve firms used some kind of framework to help in the business model process. The Business Model Canvas (Osterwalder & Pigneur, 2010), and the related Value Proposition Canvas (Osterwalder & Pigneur, 2010) and Lean Canvas (Maurya, 2010) can especially be seen as very popular. Because of their well-developed structure, clear content and strong visual aspects a lot of firms seem to use them. Firm size and age is also a relevant aspect. In this research frameworks were especially used by smaller and hence often younger firms. While larger and older firms made less use of them.

Regarding the use of frameworks in the process some important conclusions can be described. First, frameworks can be used in different ways. Some firms use them just as checklists or guidelines while others see them as the 'central' method of constructing a business model. Second, they can be used for creating business models and for innovating in business models. Some firms do both while others use them just for creating.

Third, firms can use them in different phases during the business model process, from the most conceptual idea in the beginning till the reviewing of existing business models. During the entire process a lot of different internal and external stakeholders can be involved. They can play different roles and participate in several phases.

Overall, using frameworks seems to make the business model development process more easy. In general firms were very satisfied about the frameworks and the business model process. They describe the frameworks as helpful communication and structuring tools in the business model process. Firms who did not use frameworks indicated using them can make the process easier and better structured. A more scientific approach, due to using frameworks, can certainly help to improve their current process. Using frameworks is seen as very effective. A framework reduces complexity, improves communication, fosters knowledge, ensures good visualizing and stimulates understanding a firm's business model. When frameworks consist of concrete numbers, formulated instructions, internal cohesion and there is no redundant information this will have a positive effect on the effectiveness of the process.

Summed up firms make active use of business model frameworks, use them for different purposes and when frameworks are used this creates an effective business model process.

5.2 Practical Implications

This research showed that the use of business model frameworks has a positive effect on a firm's business model development process. During different phases of this process frameworks reduce complexity, improve communication, foster knowledge, ensure good visualizing and stimulate understanding a firm's business model. They can be used for different purposes, in several phases and by different stakeholders.

For managers in different types of firms these results can be of great value. Using them in terms of creating or innovating a business model implies a better structured and working process. Theory explains that firms who put emphasis on business model innovation can benefit of revenue growth (Johnson et al., 2008), reduction of costs (Chesbrough & Schwartz, 2007; Chesbrough, 2010) and possibilities to enter new markets for mature firms (Markides, 2006; Chesbrough & Schwartz, 2007; Johnson et al., 2008). Also business models are currently seen as equally or even more valuable for a firm's competitive advantage than new products and services (The Economist Intelligence Unit, 2010). Using business model frameworks can be beneficial for both small and large firms. They can for instance create an entire new business model for a start-up or help with the implementation of innovations, product development or formulating new value propositions for larger firms.

5.3 Theoretical Implications

In the last decades the term business model has gained a lot of popularity. A lot of articles have been written about business models and a lot of researchers emphasise the relevance of the concept. To see business models as frameworks, consisting of different elements, with certain relations and with a particular structure has been first extensively introduced by Osterwalder (2004). Since then a lot different studies have proposed different kinds of frameworks to help identify a firm's business model (For instance: Morris, Schindehutte & Allen, 2005; Johnsson et al., 2008; Maurya, 2010; Osterwalder & Pigneur, 2010; Gassmann et al., 2014). But it did not stop there. Books to help creating and innovating business models in practice with the use of frameworks have been published. The most famous one is 'Business Model Generation' of Osterwalder & Pigneur (2010). This study confirms that frameworks like the Business Model Canvas, Lean Canvas and Value Proposition Canvas which have been translated from theory to practice are very useful in a business model development process. It confirms strongly the beliefs of several researchers who have developed business model frameworks as a helpful tool to create and innovate your business models. Regarding the already existing beliefs this study also highlights some additional implications.

First, firms see not all frameworks as an addition to their business model process. Frameworks which are 'too scientific' are not suitable for real business cases. Firms want to

work with simple, clear and structured frameworks which stimulate understanding,

communication, fostering of knowledge and are visually very clear.

Second, frameworks are not only a main instrument to create or innovate a business model but can also work as a checklist. When a business idea is conceived and everybody in the team/firm understands the idea a framework can be used to check if the idea is feasible.

5.4 Limitations and Suggestions for Future Research

Several limitations according to this research have been identified. The first limitation is the size of the research population. Twelve firms have been interviewed for this study. Although, according to literature this amount is enough the research can be extended by the participation of more firms. This will improve the quality of the research. The second limitation is related to the proposed criteria. These criteria were: active participation in business model development, a private firm and a Dutch firm. The active participation criterion is maybe too general. A firm can participate actively in business model development and not use frameworks. Also the interviewed firms were only Dutch firms, hence other beliefs from different countries, cultures and firms is not included in this study. The third limitation is the method used. This study only uses a qualitative method in the form of interviews. Where other methods could have been used.

Future research in this field can learn from the limitations and results of this study. Making use of a quantitative method like a survey beside a qualitative method ensures triangulation, whereby reliability is improved. Also the number of interviews can increase, which will lead to higher validity. Selecting firms from different countries instead of only Dutch firms can ensure you will have a broader view regarding the results. Another suggestion for future research can be to test if firms that make use of business model frameworks perform better than firms that do not use them. Now the firms have indicated there is a use of frameworks, they are used in the business model process, there are several stakeholders involved and the entire process can be formulated as effectively. But what this means for results like overall performance, turnover, costs, revenues, number of innovations, growth or market share is still unclear. Subsequently, an interesting question for future research is; 'does the use of business model frameworks have a positive effect on business performance?' Another relevant insight is in what way firms used a framework. In this study frameworks were seen as a main instrument or just as a checklist. An interesting question for future research can then be: 'for

which purpose can business model frameworks be used by firms and which way is the most effective for the business model process?' Also this study showed the involvement of different stakeholders when creating or innovating a business model. Several groups of stakeholders where involved in different phases and performed various roles. Important was that stakeholders were divided into two groups namely; internal and external. Results showed involvement of both groups during different phases and during meetings where business model were created with the help of frameworks. However which group need to be involved during which phase in the entire business model process can be a topic for future research. A question that can arise is: 'which stakeholders need to be involved and during which phase to make the business model process as effective as possible?'.

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