Business model development for NextSelect

How can NextSelect create and capture value by taking a customer-driven perspective?

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Management Summary

Small software development firms are struggling to stay in business. The economic crisis we are enduring makes it harder to find and attain customers and generate sustainable revenue streams for small software companies. In this thesis a business model was developed for the small business process software development company that allows it to remain in business and generate sustainable revenue streams. Customers are very important to be able to stay in business, grow and innovate. A customer-driven approach was taken to the business model. Customers are a very important part of the business model and also very important for the innovation and growth of a small company. For this small software development industry a case study was made for NextSelect.

NextSelect is a company providing fully customized software solutions for business processes. The software solutions are tailored according to the wishes and requirements of the customers. Every software solution has to be built from scratch, which is very time consuming. The customer base of NextSelect is rather small and the cash flow is unstable and irregular due to a payment system based on the hours worked. When a customer project is finished the cash flow stops essentially. If there was a larger client base this would not be a problem, however this is not the case. The financial unbalance has put the continuity of the firm at jeopardy. The financial unbalance and the time needed to develop the software solutions are the main reasons for developing the "software framework" which will allow NextSelect to build the software solutions at a faster rate and with a higher quality. To fully exploit this "software framework" in the most optimal way a business model is needed, technology on its own has no inherent value. NextSelect always had and has the focus on helping customers and by doing so making a profit. The relations kept with these customers are very important to NextSelect and should remain on a "friendly" basis.

The main research question in this thesis is:

"How can NextSelect create and capture value by taking a customer driven perspective?"

How the creation and capturing of value by NextSelect has to be organized is what the business model provides, since a business model has a comprehensive configuration and mediating role between technological innovation and strategic outcomes. The business model has been empirically tested and validated through the use of customer development; the empirical research had eighty-seven business-to-business respondents involved in the acquisition decision for business process software within their company.

To be able to create and capture value by taking a customer-driven perspective, NextSelect will have to change the revenue streams to recurring streams as much as possible; customers pay a monthly fee based on the number of users of the software and the user groups. Flexibility in the payment terms is however important to be able to serve as much customers as possible, negotiations are possible based on the attractiveness of the customer to NextSelect among other factors. The customers do not become owners of the software but simply own the right to use it for the duration of the contract. The price per user per month is set around €100-€ 150; NextSelect offers high-end solutions and this should also be reflected by the price. The price is including the support and maintenance, development costs and service costs. Depending on the level of service the customer requests the price per user per month will vary, different user categories and groups are used for pricing.

According to the relational marketing approach (and validated by the research), NextSelect should strive for long-term relationships with close involvement, but negotiations are possible, as already mentioned flexibility is important (especially when the customer base is still small). Diversity in clients requires diversity in offers to these diverse customers. This is very important for NextSelect to keep in mind. By having more options available and being flexible NextSelect is more open to different kinds of wishes and requirements from (potential) customers, making it able to reach a greater target group and generate more revenue streams than by just offering strict conditions. The use of partners will become more structured, the word-of-mouth effect is already a marketing technique that works well for NextSelect, however being present on exhibitions and the use of social media for advertisement and raising awareness are also found important. The importance of customers will be put more emphasis upon, by involving them more in the process, the perceived value by the customer will also be higher, which will make it more likely that the customer is willing to pay for the product and service NextSelect offers. From the empirical research evidence was found that in general companies value the relationship kept with the supplier and the functionality of the software higher than the price that has to be paid for the software solution. Incentive programs will also be put into place, discounts will be provided for customers that deliver new customers or request software modules to be developed that can be re-used for other customers. Customer interaction will find place through a customer portal (with an integrated customer relationship management module), involving the customer better in the whole process of NextSelect and making it able to gain more knowledge from the customer. With the growth of NextSelect and its customer base the hierarchy of the organization also needs to be more structured to handle projects efficiently and effectively.

A business model is not static, as the world, legislation and business processes are changing, so should business models. Therefore monitoring and evaluating the business model and the fit with the company and its environment should be done by NextSelect periodically.

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1. Introduction

Small software development firms are struggling to stay in business. The economic crisis we are enduring makes it harder to find customers; customers postpone investments in software due to the high investment costs involved with business process software. Therefore it is even harder to generate sustainable revenue streams. The workload is not evenly balanced and therefore the cash generated per month is fluctuating, presenting continuity problems, also the customer base is small making it hard to generate cash and remain in business. In this thesis we will develop a business model for the small business software development company that should make it able to remain in business and generate sustainable revenue streams. Customers are very important to be able to stay in business and competitive. A customer-driven approach will be taken to the business model and the problems found. Without customers buying the product/service, it does not matter what your business model looks like, the business will fail. Customers are a very important part of the business model and also very important for the innovation and growth of a small company.

We make a case study of one company that finds itself in the same problematic situation, it must be emphasized that this is not an individual case. NextSelect is a company with a core business in developing a wide variety of software enterprise applications, for example Enterprise Resource Planning (ERP) and Customer Relationship Management (CRM). Through customizing the software to the customer's company, the firm and the software solution have a perfect fit. The customer does not have to adapt the business processes to the software, which you see very often with standardized packages. Moreover the customer is only paying for those software tools and applications requested. The software solutions built for the customers are customized fully to the wishes and requirements of these customers. Not every month the same amount of hours are worked at NextSelect, giving variable revenue streams or no streams at all after completion of the project.

NextSelect focuses on providing tailored software solutions for business processes. This is however, very time consuming and for every client the process has to be started up from scratch. NextSelect has a small client base and the cash flow is unstable and irregular due to a payment system which uses the hours worked for billing. This would not be a problem if there were a lot of customers; however this is still limited at this time. Cash is king, without the required resources available the continuity of NextSelect is at stake. The time needed to develop software solutions and the continuity problems (cash flow) are the main reasons for developing a "software framework" and parallel to this, developing the customer-driven business model. The "software framework" is needed in order to be competitive. It will make it possible to develop and implement high quality software solutions for customers with less development time. Faster development results in lower costs for the customers and for NextSelect and provides the time to handle more customers. At the end of this research the objective is to have a fully developed business model for NextSelect.

The "software framework" and the business model should be ready approximately at the same time. The business model should give NextSelect a competitive advantage or 'edge'. Technology does not succeed by itself in the market place, the business model can function here as a mediating role between technological innovation and attaining to strategic outcomes. A consistent and effective setting and structure of the organization are needed in addition to technological architecture if the company wants a successful and useful technology. Business models come into play here since they have a comprehensive configuration (Al-Debei & Avison, 2010)

NextSelect always has had the mission that it wants to help companies and by doing so make some money, but the relations kept with the customers are very important and should remain on a friendly basis, especially since long-term relations are strived for. The main research question therefore is:

"How can NextSelect create and capture value by taking a customer-driven perspective?"

First the main research question is dissected into sub questions that need to be answered in order for the main research question to be clear and ready to be solved. In order to be able to answer the main research question the concepts that are used in this question need to be explained, value creation and capturing, what is it? What is a business model and what views are there on this concept? Also we want to know how we can validate and evaluate the business model. We want to be sure that the business model is a fit with NextSelect of course and the customers should be attracted to the product and service of NextSelect.

The following sub questions are used to get all the required information and this makes it possible to answer the main research question:

1. What is value creation and capturing?
2. What are business models?
3. Which views are there on the concept of business models?
4. What is the importance of customers?
5. How can business models be validated and evaluated while taking a customer perspective?

We have identified the continuity of the company or the cash flow as a problem and the time it takes to develop software solutions; we also know what is very important for the small company and its identity, the customer. In the next chapter the theoretical framework will be outlined through a literature study on business models, business model perspectives and the importance of customers. In chapter three the method for conducting the empirical research is described. Chapter four presents the results from the analysis of the current and the desired situation of NextSelect and the outcomes of the empirical research. Chapter five contains the discussion and conclusion of this master thesis, providing key findings, implications and future research directions.

2. Theoretical Framework

This chapter introduces the relevant literature that is used throughout this master thesis for developing a business model for NextSelect and validating/evaluating this business model. Each question is researched in a separate section; these sections each contain several topics related to the question. First an idea about the main research question is given, what information we need, to understand and answer the main question. Proceeding with an in- depth analysis of business models and the importance of customers in later sections and this thesis will end with validation and evaluation techniques for business models. When looking at business models a customer-driven perspective is taken, therefore putting more emphasis on customer needs, requirements and wishes about the company and its product/service.

2.1 What is value creation and capturing?

The terms value creation and value capturing reflect two fundamental functions that every company has to perform in order to sustain in the market. Successful firms create value by doing things in a

certain way that differentiates them from the competition. Organizations might develop their own core competencies, capabilities and positional advantages that are different from other companies in the same industry. They might have a unique way of securing capital that is needed to fund creation of their core competencies, capabilities and competitive advantages. Companies have to make money to survive; their viability is therefore linked with both the creation and capturing of value, which then generates profits for the company.

This theory is very applicable to the case of NextSelect, since the capabilities and competencies are the core of the company. Also NextSelect has the problem of generating revenue streams that are sustainable; being unique makes it possible to have different revenue streams than the competition and thus serves as a competitive advantage. Also partners come forward as being important, which we can see since partners provide customer acquisition opportunities to NextSelect for example. The logic behind value creation is the transformation of inputs into products or services (Osterwalder & Pigneur, 2003). Without offering the right value to customers, firms cannot create value and capture the value from the customers by selling their offering. Only sustainable value offerings will keep firms in the market. These two concepts are the core of business models. Value capture is determined by the perceived power relationships between economic actors. Although labor is the source of value, bargaining relationships determine the capture of this value. Profit is value captured by the firm (Bowman & Ambrosini, 2000). The general process of value creation and capturing is depicted below in Figure 1: The process of value creation and value capture, extracted from .
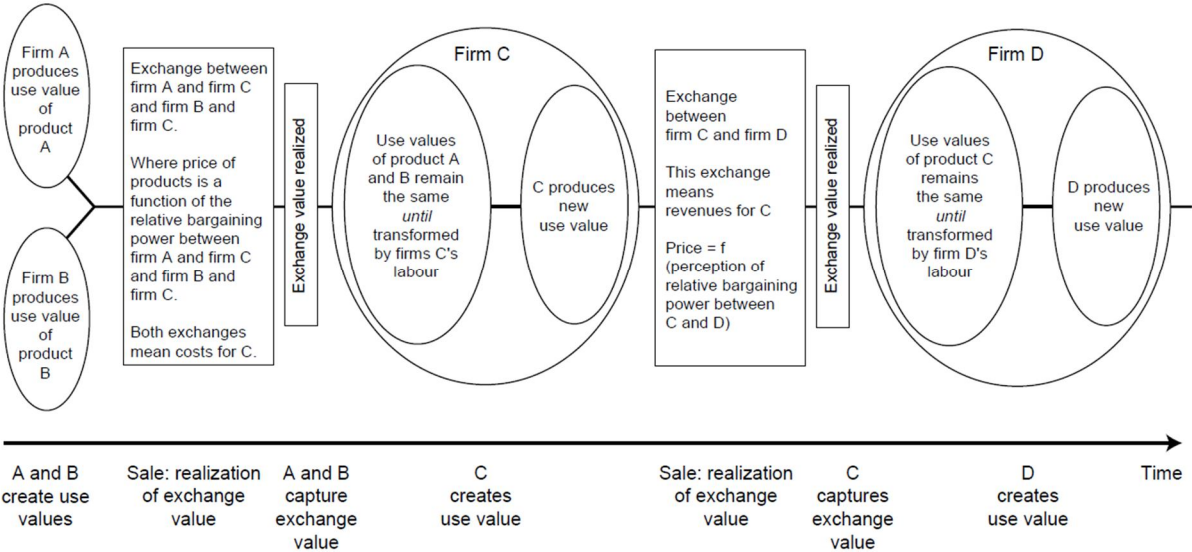
Figure 1: The process of value creation and value capture, extracted from (Bowman & Ambrosini, 2000)

This stresses the part that the offering made to the customer has to be attractive to this customer; just throwing a product on the market does not guarantee that it will be sold. Working with customers to find out their needs and wishes and the value they assign to this product is very crucial. This thesis will go into this in more detail in section 2.3.4.

With the rise of internet and the digital age of economy, firms have been provided the potential to experiment with new forms of value creation mechanisms, which are networked. Value is created in combination with partners (Shafer, Smith, & Linder, 2005) (Zott, Amit, & Massa, 2011). In the article by Zott et al. (2011) four sources of value creation through business models are proposed, novelty,

lock-in, complementarities and efficiency. These value drivers can reinforce each other. Each one of the value drivers enhances the effectiveness of any of the other value drivers (Zott, Amit, & Massa, 2011). This is useful for the value proposition of NextSelect, in order to build a strong and attractive offering for the customers along the four sources of value creation.

Value can also be created through revolutionary business models. To thrive in the "age of revolution", companies must develop new business models in which both value creation and value capture occur in a value network which can include suppliers, partners, distribution channels, and coalitions that extend the company's resources (Zott, Amit, & Massa, 2011). The mission of this thesis is to develop a business model for NextSelect that is unique and with the focus on customers. Value is created for the customer and captured by the company, if the business model is successful. By developing a unique model for NextSelect a competitive advantage can be gained by just having a different business model than most other parties in the industry. However, it does not only need to be unique, it has to work and be attractive to the customer, which is discussed in more detail in section 2.3.4.

2.2   What are business models?

Articulated or not, every company has a business model. Business models perform two very important functions: value creation and value capture, as discussed in the previous section. The creation of value is very important for the final customer and the capturing of this value is very important for the firm, in order to remain in business. If there is no creation of value, other parties will not be involved in this process and if there is not enough value to capture, there is not a sustaining revenue model, in this case the company would go out of business (Chesbrough, 2007). It is already concluded that more is needed than just having a product.

A lot of the fuzziness and confusion about business models stems from the fact that when different authors write about business models they do not necessarily mean the same thing (Osterwalder, Pigneur, & Tucci, 2005). A closer look is taken at this phenomenon in the following section.

2.2.1   What is the definition of a business model?

In literature there is not a general consensus on the definition of a business model (Shafer, Smith, & Linder, 2005) (Zott, Amit, & Massa, 2011). The business model concept is still considered an ill-defined 'buzzword' (Osterwalder, Pigneur, & Tucci, 2005)(Al-Debei & Avison, 2010). The reason for not having a general consensus yet stems from the late emergence of the term 'business models' in the 1990's and the research on this topic is not very evolved yet, however attempts have been made to find holistic and comprehensive definitions.

In the 2011 article by Zott et al. the authors give a representation of what business models have been referred to through recent years in literature. "At a general level, the business model has been referred to as a *statement* (Stewart & Zhao, 2000), a *description* (Applegate, 2000; Weill & Vitale, 2001), a *representation* (Morris, Schindehutte, & Allen, 2005; Shafer, Smith, & Linder, 2005), an *architecture* (Dubosson-Torbay, Osterwalder, & Pigneur, 2002; Timmers, 1998), a *conceptual tool or model* (George & Bock, 2009; Osterwalder, 2004; Osterwalder, Pigneur, & Tucci, 2005), a *structural template* (Amit & Zott, 2001), a *method* (Afuah & Tucci, 2001), a *framework* (Afuah, 2004), a *pattern* (Brousseau & Penard, 2006), and a *set* (Seelos & Mair, 2007)." However all these definitions apart do not represent what a business model really is, only parts of it (Al-Debei & Avison, 2010).

In Al-Debei (2010) a general definition is put together, finding different definitions of the business model concept and then combining these to one unified definition of the business model concept. It is a comprehensive definition by combining authors from recent literature and capturing the views on the concept in a general way. To come up with the comprehensive definition several inference criteria have been used: the definition should be comprehensive and general, it should define more than just the components and it should synthesize the different points of view presented in earlier literature research (Al-Debei & Avison, 2010). In Appendix B – The taxonomy of the business model concept the different definitions used by the authors can be found, this is a combination of the literature reviews as provided in (Al-Debei & Avison, 2010) (Korsaa & Jensen, 2010) and (Teece, 2010) also an addition has been made by the literature review of (Zott, Amit, & Massa, 2011) to give an even more extensive literature review on the subject of business models. Al-Debei & Avison (2010) define the business model concept as:

"an abstract representation of an organization, be it conceptual, textual, and/or graphical, of all core interrelated architectural, co-operational, and financial arrangements designed and developed by an organization presently and in the future, as well all core products and/or services the organization offers, or will offer, based on these arrangements that are needed to achieve its strategic goals and objectives."

This definition shows that value proposition, value architecture, value finance and value network articulate the primary constructs or dimensions of business models (Al-Debei & Avison, 2010) (Teece, 2010). To give a few examples on other definitions used by authors, Osterwalder, Tucci and Pigneur (2005) define the business model concept in their paper as: "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.

Some overlap between the two definitions is found; however the definition as provided by Al-Debei & Avison (2010) is more holistic and overarching, supported by a lot of literature, also it is one of the more recent definitions having the older views and perspectives integrated into it. The definition by Al-Debei & Avison (2010) is used throughout this master thesis when we refer to business models, it covers all the views presented by authors in the last decade and thus gives the best definition possible at this time. In literature many different and non-comprehensive parts of business models have been proposed. Business models are for example not the same as strategy or a revenue model or a network structure, which some authors have proposed at earlier times (Zott, Amit, & Massa, 2011).

2.2.2 What is a business model used for?
The significance of business models for companies in the current day and age is widely spoken of in literature (Osterwalder, Pigneur, & Tucci, 2005). Every company has a business model, whether it is documented or not. The more knowledge there is about the phenomenon of business models, the better corporations can make use of it to their advantage. A business model provides a holistic view

of a particular business (Chesbrough, 2007) (Al-Debei & Avison, 2010). This is exactly what NextSelect wants, a clear view and understanding of the business and a method for exploiting the service that NextSelect provides.

According to (Osterwalder, Pigneur, & Tucci, 2005) business models have several useful functions: to understand and share (business models help capturing, visualizing, understanding and communicating and sharing the business logic of the company), secondly to analyze (the business model concept can contribute in analyzing the business logic of an organization. The business model is a new unit of analysis; it can improve measuring, observing and comparing the business logics of companies). Thirdly, it can help manage (Having the model can make it easier to identify points of improvements and the measures needed). Furthermore business models can be used to show prospect (business models describe possible futures for a company; it can help innovation and increase readiness for the future through business model portfolio, business model innovation and simulation). Last but not least, business models or parts of it can be patented. This can ensure a competitive advantage for a certain company. A business model can have many functions and strings a company together to form a whole. A business does not consist of parts; it should work as one entity. It can be seen that the functions the business model has, give a clear view, help analyzing and measuring and therefore evaluations and improvements can be made. It is exactly what NextSelect requires, insights into how they their product/service should be marketed.

According to the 2010 article by Teece, the essence of a business model is defining the way of delivering value to customers, entices customers to pay for the value and convert these payments as to profit from it. It reflects the management's idea about what customers want; how they want it and how the firm can organize to best meet those demands and in the process of doing so making a profit. This can be seen as a customer-driven approach to business models, which in the case of NextSelect is the same, although in a later stage this thesis goes more into detail on the importance of customers for companies in general and for NextSelect specifically.

The useful roles of the business model and the benefits that firms can achieve by appropriately employing the concept are highly significant. The business model is derived directly from the business strategy of which the business processes and the required information systems are derived. The business model is a multi-purpose concept, the utility is diverse and the concept could be used for three main functions within digital organizations. The business model has risen to the position of a conceptual tool of alignment to fill the gap between strategy and business processes (including information systems) and to provide a harmonization among these organization layers. Secondly, it performs as a mediating construct (interceding framework) between technological artifacts and the fulfillment of strategic goals and objectives. The business model portrays a sound translating method essential to obtain and capture value (Al-Debei & Avison, 2010). Business models have been perceived as the main reason behind the success or failure of technologies. It can prove as a backbone, providing a consistent and systematic approach for designing, evaluating and managing technologies and their connected products and services. Thirdly the business model can function as strategic-oriented knowledge capital; it portrays the logic of a business system. It is considered as strategic-functional algorithms demonstrating high-level business rules and practices. It answers to questions relating to value creation and capturing (Al-Debei & Avison, 2010) which is the most important for companies to sustain in the marketplace. In Al-Debei et al. (2010) a portrait of the business model as an intermediate layer between strategy and business processes is made, it fills the

gap between these two. In the case of NextSelect this is very important, the owner of the company is not experienced in this field and the business model can step in to support in making measurements, decisions, attainment of strategic goals and control more user-friendly and insightful. Information becomes more readily available to managers, as to NextSelect as well.

Explicit business models help business managers control their businesses and enable them to compete better, due to the appropriate levels of information that the business model provides. This also extends the knowledge of how the business organization will adapt their strategy, business domains; business processes and information systems to cope with the complex, uncertain and rapidly changing digitalized environment. Thus, there are potential improvements in the organizations abilities in achieving their strategic outcomes given that the information that the business model offers is neither highly aggregated, which is in the case of business strategy, nor highly detailed, which is the case of the operational business process model (Al-Debei & Avison, 2010).

Business models have great power, the functions of business models are numerous and help the manager or owner of a company with a clear understanding, communications, alignment, measurement and evaluation of business opportunities. Also control and decision making are supported by the business model. The value creation and capturing process is known, structured and draws the whole logic of the business processes into an understandable framework.

2.2.3 When is a business model successful/viable?

There is virtually a consensus that, to remain competitive, firms must continuously develop and adapt their business models (Wirtz, Schilke, & Ullrich, 2010). A well-designed business model that ensures harmonization among strategy, business processes and information systems is crucial. In the digital business it should even be reviewed continuously to ensure the fit with the complex, uncertain and rapidly changing environment (Osterwalder, 2004)(Morris, Schindehutte, & Allen, 2005) (Al-Debei & Avison, 2010). Firms do not execute their business models in a competitive vacuum, companies can compete with their business models, the business model itself represents a source of potential competitive advantage, novelty presented by new models can result in better value creation or value capturing than before (Morris, Schindehutte, & Allen, 2005) (Zott, Amit, & Massa, 2011). To guarantee firm success a unique business model is needed to fully realize the commercial potential of the product or service (Zott, Amit, & Massa, 2011). Technology on its own has no inherent value (Chesbrough, 2007) (Al-Debei & Avison, 2010), it is the business model behind the technological artifacts that makes the success and allows companies to achieve their strategic goals and objectives (Al-Debei & Avison, 2010). If a business model is to be a source of competitive advantage it must be more than just a logical way of doing business, it should meet certain customer needs, be hard to imitate or replicate (Teece, 2010). In the 2002 article by Margretta, it is argued that "When a new model changes the economics of an industry and is difficult to replicate, it can by itself create a strong competitive advantage". The empirical results from a study in 2007 by Zott and Amit show that novelty-centered business model design matters to the performance of entrepreneurial firms, however by trying to incorporate both efficiency- and novelty-centered design elements in the business model may be counterproductive (Zott & Amit, 2007). Zott and Amit argue in their 2008 article that the novelty-centered business model combined with differentiation, cost leadership, or early market entry enhances firm performance. In the case of NextSelect differentiation is aimed for.

According to Linder & Cantrell (2000) a company succeeds when it has an effective business model which is executed superbly and the business model is renewed when competitors threaten the uniqueness of this business model, they also argue that mastering the ability to change can enhance success (Osterwalder, 2004)(Korsaa & Jensen, 2010). There is no guarantee for financial success (business success) according to Linder & Cantrell (2001). There are however three characteristics of a successful business model: It offers unique value, it is hard to imitate, and it is grounded in reality. These are however business model charachteristics and do not define the successfulness of the firm with this (successful) business model.

"A good business model yields value propositions that are compelling to customers, achieves advantageous cost and risk structures, and enables significant value capture by the business that generates and delivers products and services. 'Designing' a business correctly, and figuring out, then implementing - and then refining - commercially viable architectures for revenues and for costs are critical to enterprise success. It is essential when the company is first created; but keeping the model viable is also likely to be a continuing task" (Teece, 2010).

It becomes clear from the mentioned authors that there is a general consensus on what a successful business model constitutes: It should be dynamic, change with the environment or make the change of the environment (business processes and the environment are not static). A compelling value proposition is necessary to attract customers and capture value from them, which is researched in more detail in chapter 3. A strong business model is unique, hard to replicate/ imitate and provides compelling offers to customers while being grounded in reality. Technology on its own has no inherent value; it is the business model behind the technology that determines the success of this technology and the attainment of the strategic objectives. For NextSelect it will be important to keep track of the business model(s) being used and continuously be open to changing the business model when the opportunity or the necessity presents itself. Scanning the environment continuously is therefore an important task. A business model can be viable on its characteristics, but the success cannot be sure until it has been proven in practice.

2.3 Which views are there on the concept of business models?

Due to the differing ideas on what a business model is, what its use is and what a successful business model constitutes, there are also different views on the concept of business models, the framework that authors use to give the business model meaning and structure. This section discusses these different views and the theories used in the remainder of this thesis are selected. Also the customer importance is discussed, we took a customer-driven approach in this thesis and the reasons for this will become apparent.

2.3.1 What is the difference between business models and strategy?

"Today, 'business model' and 'strategy' are among the most sloppily used terms in business; they are often stretched to mean everything and end up meaning nothing." (Magretta, 2002)

In literature there have been many views on business strategy and business models; however there are differing ideas about what the difference or the similarity is between business models and strategy, therefore this section will shed some light on this topic. As mentioned in section 2.2.2 we see strategy and business models as separate parts of the company but still connected to each other.

Magretta (2002) points out that the business strategy explains how companies hope to do better than their rivals, while the business model describes how the pieces of a business all fit together. Strategy also includes competition, where the business model does not. The business model concept has been mistaken in recent years as a substitute for corporate strategy, business process or business case. Al-Debei et al. (2010) give three main reasons for these phenomena. The youthfulness of the concept and its associated research, only since the 1990's the business model concept has gained recognition (Osterwalder, Pigneur, & Tucci, 2005). Secondly, the fact that it comes from different disciplines such as e-business and e-commerce, information systems, strategy, business management, economics and technology (Pateli & Giaglis, 2003) (Shafer, Smith, & Linder, 2005).

Figure 2: The business model as intermediate layer, extracted from (Pateli & Giaglis, 2003)

Thirdly the newness of sectors within which the business model concept is being investigated is a reason for these phenomena. According to Petrovic et al. (2001) the business model concept functions as an intermediate layer between corporate strategies and business processes (including information systems), as displayed in Figure 2.

The business model also encompasses information helpful in translating strategic objectives into implementation tasks and functions (Al-Debei & Avison, 2010). Some researchers argue that the business model is not the same as strategy, but do incorporate strategy, or parts of it, in their business model concepts (Shafer, Smith, & Linder, 2005) (Al-Debei & Avison, 2010). Researchers that take an alternative view on the concept of business models seems more helpful, they argue that although both concepts are related, they represent different levels of information, useful for different purposes. They see the business model as the intermediate layer between business strategy and the business processes including information systems (Morris, Schindehutte, & Allen, 2005) (Osterwalder, Pigneur, & Tucci, 2005) (Al-Debei & Avison, 2010) (Zott, Amit, & Massa, 2011). The business model and strategy are complementary. The business model is a new concept within the strategy literature and has significant effects on firm performance when interacting with strategy (Zott & Amit, 2007) (Korsaa & Jensen, 2010).

Osterwalder et al. (2005) propose the following understanding of the business model concept's place in the firm. Firstly, the business model can be seen as the conceptual link between strategy, business organization, and systems. The business model as a system shows how the pieces of a business concept fit together, while strategy also includes competition and implementation. Secondly, business model implementation contains its translation into concrete things, such as a business structure (e.g. departments, units, human resources), business processes (e.g. workflows,

responsibilities) and infrastructure and systems (e.g. buildings, ICT) (Korsaa & Jensen, 2010). Business models are subject to external pressure and thus constantly subject to change (Osterwalder, 2004) (Al-Debei & Avison, 2010) (Zott, Amit, & Massa, 2011).

Strategy is not included in the business model; they are related but not the same. Competition is very important for strategy and does not exist in the business model configuration. A connection between the business model and the strategy of NextSelect is important though. Therefore in this thesis a business model with the customer-driven approach is developed to align the business model with the strategic objectives of NextSelect. From an interview with the owner of NextSelect it became apparent that NextSelect wants to approach the market with a differentiation strategy, delivering high end customized software for a competing price (not too low, since the image of the product needs to be of a high value). Making NextSelect able to compete with suppliers of standardized packages and delivering a better fit between the customer's company and the business process software. Customers and the long term relationships on a friendly basis kept with the customers are very important in striving for these strategic goals. This approach is intended to give NextSelect a competitive advantage over other software suppliers for business processes.

2.3.2 Which views are there on the concept of business model frameworks?

In literature many frameworks for the business model concept are available; however most of these frameworks only contain a part of what constitutes a business model and therefore do not cover the complete business model (Osterwalder, 2004). In Al-Debei & Avison (2010) a conceptual and holistic framework for the business model concept is constructed, through synthesizing extracted definitions and descriptions of the concept, provided by literature in recent years. The taxonomy classifies the different points of view into thirteen mutually exclusive classes. These classes complement each other and can be considered subclasses of a higher level of abstraction. The author suggests a framework consisting of the four value dimensions of business models, modeling principles, business model reach and the business model functions (Al-Debei & Avison, 2010). This framework is supported by all the different views, definitions and descriptions used in literature from 1998 to 2008. In Appendix B, the complete taxonomy of the framework is illustrated.

These business model facets and classes are then configured into a unified framework of the business model concept, graphically displayed in Figure 3.
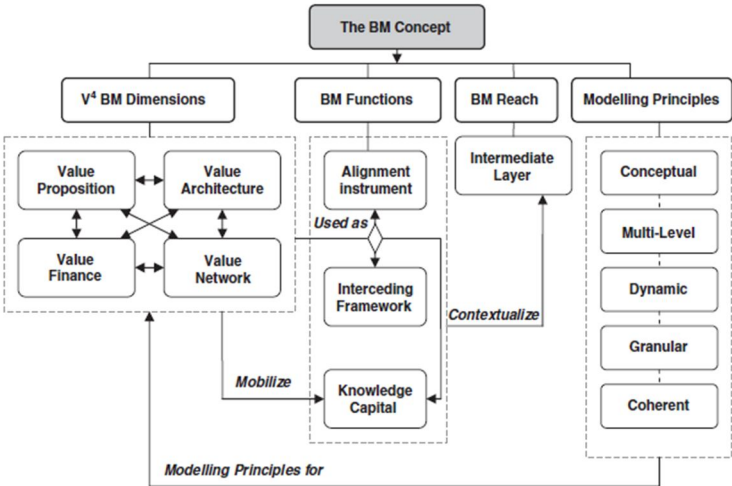

Figure 3: The unified framework of the business model concept, extracted from (Al-Debei & Avison, 2010)

All elements are interrelated and interdependent; designing a business model requires a balance of different and often conflicting design requirements (Al-Debei & Avison, 2010). For the design of the business model the focus will be on the V^4 business model dimensions: value proposition, value architecture, value network and value finance. These classes can be further split up into the topics they contain, which is displayed in Figure 4. These topics constitute the design part of the business model.
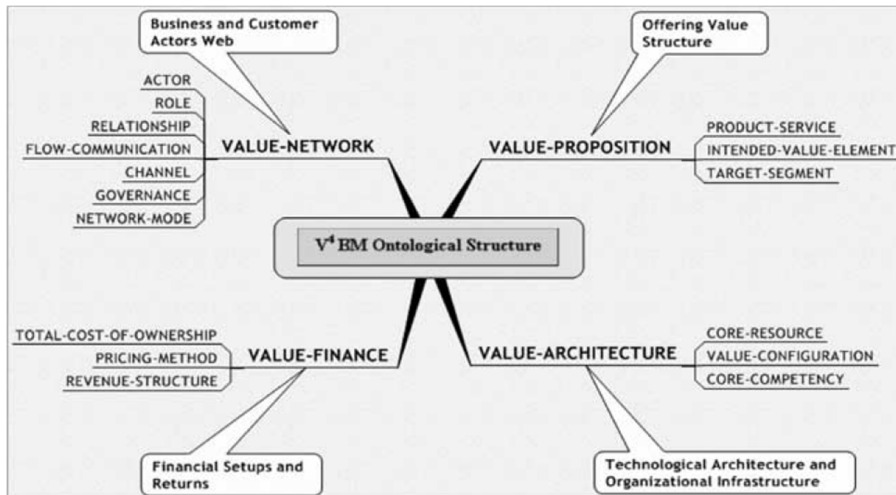

Figure 4: The V^4 ontological structure of business models, extracted from (Al-Debei & Avison, 2010).

Several authors have attempted to represent business models through a mixture of informal textual, verbal, and ad hoc graphical representations (e.g., Amit & Zott, 2002). Weill and Vitale (2001) introduce a set of simple schematics intended to provide tools for the analysis and design of e-business initiatives. Their 'e-business model schematics' are based on three classes of objects: participants (firm of interest, customers, suppliers, and allies), relationships, and flows (money, information, product, or service) (Zott, Amit, & Massa, 2011). Other researchers have provided business model ontologies, which are a conceptualization and formalization of the elements, relationships, vocabulary, and semantics of a business model (Osterwalder, 2004) and which is structured into several levels of decomposition (Zott, Amit, & Massa, 2011). However this is not a holistic view on the concept of business models and thus lacking comprehensiveness, therefore also not applicable in this thesis or in the case of NextSelect.

This thesis, supported by many authors, takes the view on business model frameworks as being a conceptual and holistic tool. The unified framework proposed in this section will be used as the highest level of abstraction. In the next section The V^4 value dimensions proposed by Al-Debei et al. (2010) and the four pillars of Osterwalder et al. (2005) will be merged together to form one unified structure with thus even more evidence from other authors to support it, and thus forms a more powerful entity.

2.3.3 What does a business model consist of?

The topics found for the V^4 ontological structure are also found in the business model framework proposed by (Osterwalder & Pigneur, 2010), although under different names. The business model concept proposed by Osterwalder et al. (2010) consists of nine building blocks, where the one by (Al-Debei & Avison, 2010) consists of 16 blocks. Some of the blocks proposed in Al-Debei et al. (2010) are merged to form one block, identical to the one in the concept by (Osterwalder & Pigneur, 2010).

A common confusion related to what a business model consists of is that many people speak of business models, when they actually only mean a part or parts of a business model. A pricing mechanism is a part of a business model, not the whole model (Osterwalder, Pigneur, & Tucci, 2005). Shafer et al. (2005) propose for the components of a business model the following building blocks, strategic choices, value network, create value, capture value. Earlier it was already argued that strategy is not something that belongs in the business model. Many authors have had many ideas about what the components of the business model should be. This thesis makes the combination between (Al-Debei & Avison, 2010) and the building blocks as proposed by (Osterwalder, Pigneur, & Tucci, 2005).

Osterwalder et al. (2005) use four pillars as well as (Al-Debei & Avison, 2010) in their concept; however the configuration of the concepts is slightly different and both use different terms and definitions. We can however make a comparison of the two concepts and integrate them into one unified concept, see Table 1. We can see from this table that both concepts contain the same elements, only the names and positions of the pillars and building blocks are differing. This can however be merged into one unified business model concept.

Pilars from Al-Debei et al. (2010)	Building blocks from Al-Debei et al. (2010)	Pilars from Osterwalder et al. (2005)	Building blocks from Osterwalder et al. (2005)
Value Network	Actor	Infrastructure Management / Customer Interface	Key Resources / Key Activities
	Role		
	Relationship		Customer Relationships
	Flow-communication		Channels
	Channel		
	Governance		Channels / Key Partners
	Network-mode		
Value Proposition	Product / Service	Product / Customer Interface	Value Proposition
	Intended Value Element		
	Target Segment		Customer Segments
Value Architecture	Core-resource	Product / Infrastructure Management	Key Resources
	Value Configuration		Value Proposition
	Core-competency		Key Activities
Value Finance	Total Cost Of Ownership	Financial Aspects	Cost Structure
	Pricing Method		Revenue Streams
	Revenue Structure		

Table 1: Comparison/integration of the frameworks proposed by Al-Debei et al. (2010) and Osterwalder et al. (2005).

Since the framework by Osterwalder et al. (2005) explains the building blocks in full detail and the terms and definitions used in their article are preferred and match with the use of the business model canvas that is used in this thesis (see Figure 5), the names as proposed by this concept of Osterwalder et al. (2005) are used. All building blocks will be described below according to the definitions provided by Osterwalder et al. (2010); these contain the more recent developments and adjustments on the front of the nine building blocks that were introduced in the 2005 article.

Key Partners: Describes the network of suppliers and partners of a company. Partnerships are useful for reducing the risk a company has, using the channels of the partner and therefore having a bigger scope and market.
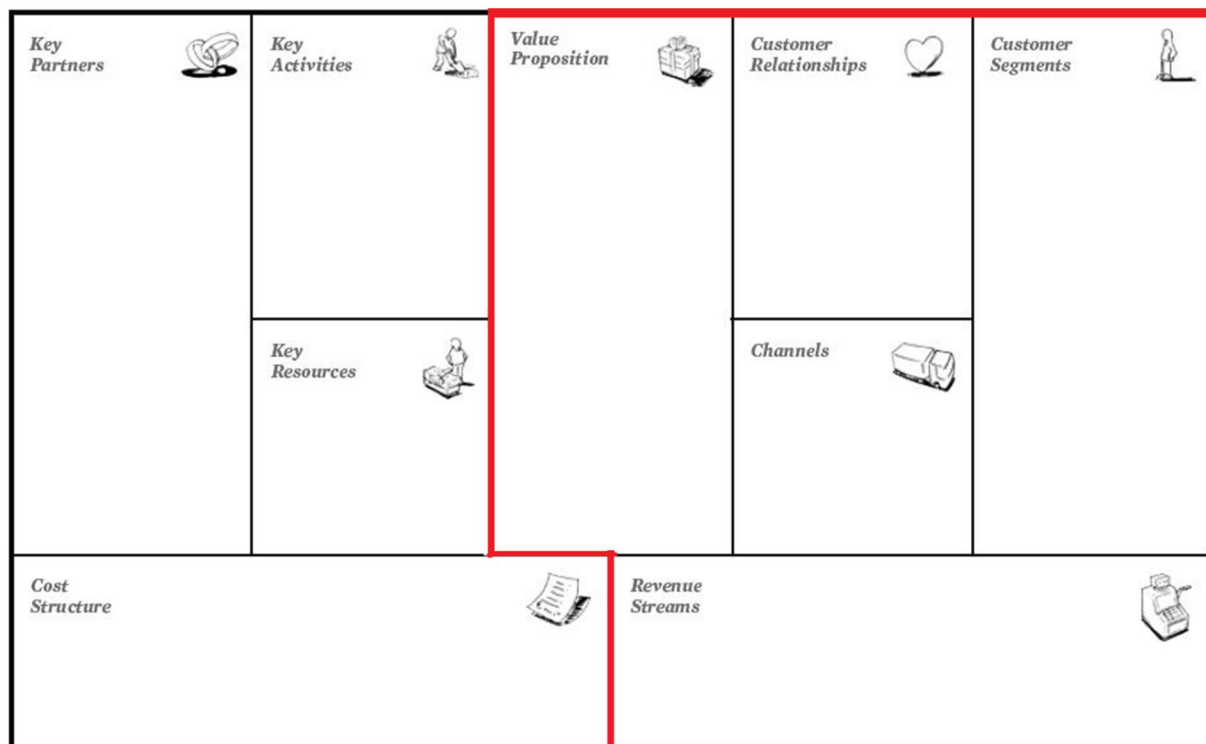
Key Activities: Comprises the activities a company must perform in order to make its business model work. For different kinds of companies there are different kinds of key activities that need to be performed.

Key Resources: These are the assets that are required for delivering the value proposition to the customer segments. These can be of a physical, financial, intellectual or human nature.

Channels: This part describes how a company communicates with and reaches its customer segments to deliver a value proposition. Communication, distribution and sales channels comprise a company's interface with customers. The channels are an important role in the customer experience. The functions that channels serve are raising awareness among customers about a company's products and services, helping customers evaluate a company's value proposition, allowing customers to purchase specific products and services, delivering a value proposition to customers and providing post-purchase customer support. How customers perceive this will be researched in chapter 3.

Value Proposition: This building block describes the bundle of products and services that create value for a specific customer segment (see building block customer segments). The value proposition is the reason why customers turn to one company over another. It solves a customer problem or satisfies a customer need. Each value proposition consists of a selected bundle of products and/or services that caters to the requirements of a specific customer segment. The value proposition is an aggregation, or bundle, of benefits that a company offers customers. Some of these may be innovative while others may be similar to existing offers, but with added features and/or attributes. Questions companies should ask themselves are; what value do we deliver to the customer? Which one of our customer's problems are we helping to solve? Which customer needs are we satisfying? What bundles of products and services are we offering to each customer segment?

How well a value proposition works, can be contributed to by the following elements, the newness of the proposition, the performance of the product/service being sold, customization of this product or service, "getting the job done", the design of the product/service, the brand or status of this product/service. The price, cost reduction (helping customers reduce their costs), risk reduction (service level agreements, maintenance), accessibility of the product or service and the convenience/usability that the product or service provides. These elements will be reviewed when we go into the customer importance and research product and service elements in chapter 3. The following product measurements are used in the empirical research: functionality, usability and security. For the service measurements we used the reliability of the supplier, the fast responsiveness of the supplier and the assurance of the supplier. These product and service indicators were extracted from (Offutt, 2002) and (Li, Tan, & Xie, 2002).

Customer Relationships: The types of the relationships with each of the customers required are very important for doing business. The relationships depend on the customer segments; different target groups can have different expectations and requirements from the company. Customer relationships are also very important in the evaluation of the company and its business model (Blank, 2005). This block is also of great importance in the next chapter, where we performed an empirical research and since we took a customer-driven approach, this is reflected in the research. Customer relationships are tested in chapter 3 on the indicators: the nature of the relationship and the term of the relationship, these indicators have been chosen through a discussion with NextSelect.

Customer Segments: This block describes the different groups of people or companies a firm aims to reach and serve. Since not all groups or companies have the same needs, segments can be formed with the same needs, behavior or other attributes. Whether customer segments can be treated in the same way is depending on the following. Are the needs of the customer segments identical? Is the profit gained from each of the segments equal? Are the relationships kept with each segment the same? Is the willingness to pay for the value proposition by each of the customer segments the same?

Cost Structure: Describes the most important costs the company has and which should be covered by the cash generated from each of the customer segments. Business models can move in between two different kinds of extreme cost structures, the cost-driven and the value-driven structure.

Revenue Streams: This block represents the cash a company generates from each customer segment. For what value are customers willing to pay? By answering this question for all customer segments a revenue stream with a pricing strategy can be made. Each stream can have a different pricing strategy. There are two kinds of revenue streams, recurring streams and the non-recurring streams. Revenue streams are very important to NextSelect since the model that is used now is insufficient. This thesis produces a better model for the business model's revenue streams, with a customer-driven perspective. Looking at value to a customer has too often failed to take the customers' perspective into account. The business model construct offers opportunities to capture better how a given set of resources or capabilities translates into something a customer is willing to pay for (McGrath, 2010). Revenue streams are depending on customers and are therefore also included in the empirical research; the indicators used are the price level and the price mechanism. These are the only revenue stream indicators required for the business model of NextSelect.

We have unified the two frameworks and business model concepts of Osterwalder et al. (2005) and Al-Debei et al. (2010) into a stronger framework and business model concept, the building blocks of both are present in the framework, although I will use the building block definitions of Osterwalder et al. (2010), these are insightful and have my personal preference. However the information that the framework of Al-Debei et al. (2010) requires is still present under the definitions used by Osterwalder et al. (2010).

2.3.4   What is the importance of customers?

Small European software producers generally do business in the tailored software segment in their own home country within established customer relationships, without performing activities that resemble those described as marketing in well-known, traditionally oriented textbooks. However, many small software companies nowadays intend to enter the international packaged software market, which naturally functions in accordance with a business logic very different from the familiar local context (Alajoutsijarvi, Mannermaa, & Tikkanen, 2000). The objective of many small companies to enter the more transactional product business can be seen as paradoxical from the marketing theory point of view that currently puts emphasis on the development of intensive long-term customer relationships. (Alajoutsijarvi, Mannermaa, & Tikkanen, 2000). This point of view is also something NextSelect sees and thus prefers staying in the tailored software market and holding on to long-term relationships with the customers.

2.3.4.1 The relational marketing approach

In the 2001 article by Lee two marketing approaches are introduced, the marketing mix approach and the relational marketing approach, their characteristics are depicted in Table 3. The relational marketing approach, which is applicable in the case of NextSelect, puts a great emphasis of importance on customers and the relationships kept with customers.

	The relational marketing approach	The marketing mix approach
Project business	(1) The typical situation faced by most small software companies: unique tailored projects within long-term customer relationships	(3) An impossible situation. Tailoring is not currently possible without cooperation with the customer
Product business	(2) Product business within long-term -oriented customer relationships. Productization of learning from projects.	(4) Traditional mass marketer functioning in atomistic, competitive markets. Product development mainly through formal market research and immediate sales response.

Table 2: Comparison of the major theoretical approaches to marketing, extracted from Alajoutsijarvi et al. (2000)

According to the article by Lee (2001) there are four positions. Along the X-axis we have the two approaches: marketing and relational and on the Y-axis we have the project- and product business (See Table 2) in which a software business can be located. Projects and product business is the difference between unique jobs that are fully customized or the standardized approach, based on mass marketing and selling standard products. This thesis makes use of the relational marketing approach, since this matches the wishes and demands of NextSelect. NextSelect is a small software company and this theoretical approach validates the idea of the importance of customers in this case. Holding long-term relationships and managing a customer portfolio are examples that support the idea of customer importance for the company and having sustainable revenue streams.

	The marketing mix approach	The relational marketing approach
World view	Managing a company's product portfolio, setting and modifying marketing mix-parameters to achieve optimal 4P configuration	Managing a company's customer portfolio, building long-term business relationships
Key concepts	4 Ps, segmentation, branding etc.	Interaction, relationships and networks
Foreign market entry	The choice of a product/market, defining the goals in the target market, the choice of entry mode, developing the marketing plan for penetration, the creation of control systems for monitoring	Focuses on the character and number of business relationships developed with other firms in the foreign network as well as with the actors that are active in the development of these relationships
Market interaction	One-way communication, formal market studies, the seller is the active counterpart	Interactive communication, mutual learning and adaptations, all interaction parties active
Differentiation	Product differentiation	Relationship differentiation
Negotiations	Not seen as important	Crucial
Promotion	Non-personal advertising, brand and image management	Through personal interaction, developing identity as a reliable supplier in a network
Mutuality	Not seen as important, own short-term goals and market opportunism are the central focus	Seen as very important, own long-term goals are achieved through concessions in short-term goals

Table 3: A framework for identifying major managerial challenges in the software business, extracted from (Alajoutsijarvi, Mannermaa, & Tikkanen, 2000)

2.3.4.2 The importance of the upcoming of internet in customer interaction

The changes brought by the internet affect every company's relationships with its customers. Loyalty-enhancing relationships should be kept with the most profitable customers. To achieve this, producers/developers of software must create products or services that have the knowledge, requirements and tastes of individual customers, since the internet has involved the end-customer in the design process. To stay in the game, companies need to involve their customers in the development process through initiating technology-facilitated dialogue, the willingness to give consumers access to the company and to view their actions and feedback as integral to the development and improvement of products and services. Gathering knowledge about customers by building and managing a comprehensive customer database is very important since recent years to be able to serve the customer and keep the relationship intact (Lee C. , 2001). From observations it was found that NextSelect has always put the emphasis on relationships with customers, but now there are more ways to build strong relations, for example by introducing the customer deeper into the development of his own software. This is also called co-creation (Menon, Homburg, & Beutin, 2005)(Chesbrough, 2007). More on the involvement of customers in the development process is discussed in section 2.3.4.3.

With the upcoming nature of ICT and the internet a whole range of new opportunities arises to exploit customer relationships by: getting a feel for the customer's desires, serving him and developing an enduring relationship with him, the notion of branding has also evolved from product and company marketing to include relationships capital which emphasizes the interaction between the company and the customer (see section 2.3.4.4), this is also used in the empirical research that is conducted in the chapter 3. Getting a feel for the customer refers to all customer information and knowledge that can be gathered and exploited to discover new and profitable business opportunities, customer segments and to improve the relationships with their customers. This can prove to be especially helpful in customer relationship management (CRM) (Torbay, Osterwalder, & Pigneur, 2001). A firm with a large base of users and a way of rapidly extracting feedback and information from users may be able to improve its products and services faster than the competition. Better knowledge of customers also allows for personalized relationships focused to the needs of each individual customer. Serving the customer includes fulfilling and supporting the customer wishes. Fulfillment and support reflect upon the way the firm goes to market and how it reaches its

customers. The internet plays a vital role for businesses today, it complements the business and plays an important role in customer support and relationship management, it can offer real-time data on products and services for example (Torbay, Osterwalder, & Pigneur, 2001). This in the case of NextSelect is very important, since they place the emphasis on customers and long term relationships, a well-organized CRM (customer relationships management) and portfolio can help NextSelect in creating and developing even better relationships with its customers.

Developments in the global economy have changed the traditional balance between customer and supplier. New communications and computing technology and the establishment of reasonably open global trading regimes mean that customers have more choices, variegated customer needs can find expression, and supply alternatives are more transparent. Businesses therefore need to be more customer-centric, especially since technology has evolved to allow the lower cost provision of information and customer solutions (Teece, 2010). This is a very important thought, since the value assigned to the product/service of NextSelect is thus depending on customers and their willingness to pay. The main problem is however, how much do they value this product or service and how much would they be willing to pay for the offering of NextSelect. This is further investigated in section 2.4 where the validation method for business models is introduced. The use and importance of customers is crucial. As for NextSelect customers have always been placed highly in importance, this is of course the main issue in this thesis; therefore the relational marketing approach is used to support this. The needs, wishes and requirements of the customers and how they perceive the service NextSelect offers and the pricing mechanism and price level are of importance for the business model, to name a few. If there is not a consensus between customer and company about the value proposition, this hurts the business model (value proposition) and if implemented could also hurt the company itself. Therefore a clear understanding is necessary; a business model will first have to be tested before put into practice.

2.3.4.3 Customer involvement in the development process

The DART model (discussion, access, risk assessment and transparency) are the building blocks of co-creation with customers. Co-creation with customers enhances the value perceived by the customer; the interaction and experience build a stronger perceived value than when the customer is not involved in the process (Prahalad & Ramaswamy, 2004). The consumer-company interaction has become the 'locus of value creation'; the process of this value creation can be understood by the DART-model. Dialogue (D) is about the interactivity, engagement and a propensity to act. It is not just about listening to customers it is about shared learning and communication between two parties. Dialogue creates and supports a loyal community. Access (A) starts with information and tools' sharing with the customer; the customer has the knowledge or ability to understand the processes of the company if this is being shared. Risk assessment (R) refers to the chances a consumer has on having an accident. Customers will demand full awareness of risks associated with the products or services they are co-creating on. Transparency (T) is all about openness and sharing. Combining the building blocks helps companies to better engage with customers as collaborators. The DART-model can be configured in different ways, many companies experiment with this model due to the evidence of the changing nature of value creation (Prahalad & Ramaswamy, 2004).

From an interview with the owner of NextSelect it was found that NextSelect already uses customers in the development process but there are always more ways of interacting as to increase (perceived)

value. Customer value is defined as 'a business customer's overall assessment of the utility of a relationship with a vendor based on perceptions of benefits received and sacrifices made' (Menon et al., 2005). Customer value consists of core benefits, add-on benefits and sacrifices. Core benefits are those that are a must for the relationship to exist, add-on benefits are those that are not required but assist the customer in selecting a supplier, add-on's differentiate the suppliers from each other. Sacrifices made are the price the customer has to pay for the product/service (acquisition costs, operations costs, purchase price) (Menon et al., 2005). In the business-to-business relationships the article of Menon et al. (2005) provides validated hypotheses on the impact of product, relational and supplier characteristics on perceived benefits and sacrifices. This can be used by NextSelect in the relations and development with customers to increase customer value. Customer value has a positive effect on customer satisfaction; customer satisfaction has a positive effect on customer loyalty. Therefore: the greater the customer value, the greater the customer satisfaction, the greater the customer loyalty (Ulaga, 2003)(Menon et al., 2005). The greater the perceived benefits, the greater the customer value. Trust in the supplier, joint working, the flexibility of the supplier and its commitment and the quality of the product enhance these perceived benefits. NextSelect therefore needs a distinctive value proposition which is provided in the discussion of the business model's building blocks for NextSelect in section 0.

We see the great importance of customers and the customer-driven approach on the right hand side of the business model canvas in Figure 5 provided in section 2.3.3. The building blocks that customers and the customer-driven approach mainly influence are: the value proposition, the customer relationships, the channels, the customer segments and the revenue streams involved with these customer segments.

2.3.4.4 Branding as a relationship management tool

Branding has not lost its importance in the internet era; it has only changed its definition. Branding shifts more towards relationship dynamics where emotional, as well as transactional elements between company and customers form the image of the organization. A company should be able to engage its customers, suppliers and other partners in beneficial value exchanges that determine its relationship capital. Measures that evaluate the relationships of the organization with its customers (retention, acquisition, satisfaction, profitability, etc.) and the appreciation of the value proposition by the customers (functionality, quality, price, timeliness, brand image, availability, shopping experience), are essential to the business (Torbay, Osterwalder, & Pigneur, 2001). In the case of NextSelect branding is a very important part; as already stated, brand status has shifted more towards the relationships kept between customer and seller. Since NextSelect has always believed in this, there are only more additions towards this goal of having long-term intensive relationships with their customers, with more ways to increase the value and perception of this relationship kept between customer and firm.

We can conclude that since a customer-driven approach is taken on the business model of NextSelect, the customers have impact on more than just one building block of the business model. The blocks value proposition, channels, customer relationships, customer segments and the revenue streams are mainly influenced by this customer-driven approach to the business model (see Figure 5 in section 2.3.3, the red marked blocks are those affected directly by the customer-driven approach), the most important part for the business model is validating these building blocks through potential

customers in order to see if the business model is viable or not for the customer segment NextSelect is trying to reach.

2.4 How can business models be validated/evaluated while taking a customer perspective?

In literature only in recent years there has been attention for the evaluation and validation of business models, although still very limited. This section presents a model for validation, furthermore it presents several evaluation models which can be used for business model evaluation and choose one to work with when the business model is in place. The evaluation of the business model is not in the scope of this thesis, since the business model will be taken into use after the finalization of the "software framework". Validation is the assessment of an action, decision, plan or transaction to establish that it is correct, complete, being implemented (and/or recorded) as intended and delivers the intended outcome (businessdictionary). Evaluation is a rigorous analysis of ongoing or finished activities that determine or support management accountability, effectiveness and efficiency (businessdictionary). Since a business model has to do what it intends to, but also should be evaluated to see the fit with the environment, market place and customers, validation and continuous evaluation are both necessary and important for a feasible and sustainable business model.

2.4.1 How can business models be validated?

Business model validation is a topic that has not received much attention in literature. Some authors describe measurements and indicators that can be used to measure the performance of the business model, however, is that validating? Through an extensive search one interesting method for the validation of business models has been found, the customer development method. Customer development is based on a trial-and-error method, iteratively searching for a viable business model. The Customer Development methodology is rooted on startups "getting out of the building," talking to customers and using that feedback to develop and refine their product (Blank, 2005). When the desired business model is proposed it is of course important to know if customers will be interested in the value proposition, the relationships kept, channels used etc. If customers reject some part(s) of the business model in the validation process, this will have to be modified in such a way that both customers accept the decision and that the company can also be content with the configuration and has a viable business model. A consensus between the customers and the firm is necessary to make a business model into a feasible and successful one.

The customer development process consists of four steps: customer discovery, customer validation (feedback loop to discovery), customer creation and company building (see Table 4). Customer development is useful in the learning and discovery before executing the business model (Blank, 2005). Trial-and-error experimentation involves organizational members retaining actions that produce desired results and discarding those that don't. Trying organizational actions out, and detecting and correcting errors during the process, generates learning. The iterative nature of the trial-and-error process allows the organization to introduce variations that produce results that converge with goals, and also fosters collective/organizational learning about exploration and exploitation streams, promoting organizational change or stability at different times (Sosna, Trevinyo-Rodriguez, & Ramakrishna Velamuri, 2010). In highly uncertain, complex and fast-moving environments, strategies are about insight, rapid experimentation and evolutionary learning as much as the traditional skills of planning and rock-ribbed execution (McGrath, 2010). Experimentation is

very important for new business models. The experimentation itself can form a source of competitive advantage, as some firms develop superior capabilities at experimentation and therefore can build better business models and quicker than the competition (McGrath, 2010) (Teece, 2010).

Due to the customer-driven approach taken in this thesis using the customer development method is a very interesting and applicable approach, useful and takes the customer-perspective fully in consideration. Therefore not only the building blocks are affected by the customers, the whole business model stands or falls with customers. Who can better validate the business model than the companies or customers that are going to make use of it or buy it?

Steps:	Main Question:	Sub-questions:
Customer Discovery	What are your customers' top problems?	How much will they pay to solve them?
	Does your product concept solve them?	Do customers agree
		How much will they pay?
	Draw a day-in-the-life of a customer	Before and after the product
	Draw the organization chart of users and buyers	
Customer Validation	Develop a repeatable sales process	
	Do you have a proven sales roadmap?	Org chart? Influence map?
	Do you understand the sales cycle?	ASP, LTV, ROI, etc.
	Do you have a set of orders validating the roadmap?	
	Does the financial model make sens?	
Customer Creation	Creation comes after proof of sales	
	Creation is where you "cross the chasm"	
	It is a strategy not a tactic	
	Grow customers from few too many	Year one objectives
		Positioning
		Launch
		Demand creation
	Creation is different for each type of startup	
Business Creation	Build your company's organization and management	
	Check the mission statement for appropriateness	

Table 4: The customer development approach and Blank's four step method, from (Blank, 2005)

It is our strong believe that using the customers for validating the business model is the best way of validation in this case (Blank, 2005). This thesis uses customer development for the validation of the business model, in chapter 3 the empirical research method is described in more detail. Customer development has four steps of which only the first two are used in this thesis, since the last two steps are about growing customers and creating the business, and this is out of the scope of this thesis, due to time limitations regarding the development of the "software framework". The combination between the business model canvas (Osterwalder et al., 2005) and customer development (Blank, 2005) has been made many times with success, giving more empirical proof of applicability.

2.4.2   How can business models be evaluated?

In literature we find that there are more authors that write about evaluation of business models than about the validation of these models. The majority of the criteria proposed in literature is derived from generic theory and are mostly driven by financial indicators (for example, profitability and profit margins) that are very difficult, if possible at all, to measure in advance. However, this result is not surprising. The business model evaluation domain is inherently complex and to some extent dependent on other domains such as change methodologies. It is therefore expected that knowledge generation will proceed at a slower pace, following prerequisite developments of understanding and maturation of other domains (Pateli & Giaglis, 2003). In this thesis the business model cannot be evaluated since it will not be in practice yet at the end of this thesis. When implemented it should be

evaluated however, therefore we discuss evaluation methods in this section and choose a suitable method for NextSelect to be used in the future.

Hamel (2000) proposed an evaluation framework with a focus on the wealth potential of a business model that covers four factors. Firstly, it looks at the efficiency of delivering benefits to customers; secondly the uniqueness of the business model is evaluated. Thirdly it analyzes the degree of fit of the business model's components; finally it questions the exploitation of profit boosters that can generate above-average returns. Profit boosters are: increasing returns, competitor lock-out, strategic economies and strategic flexibility. Afuah and Tucci (2003) evaluate the business model on three levels, profitability measures, profitability predictor measures and business model component attribute measures. The first level comprises earnings and cash flow, two popular indicators. The second level embraces profit margins, revenue market share and revenue growth. The third and last level provides benchmark questions for each of the business model components proposed by Afuah and Tucci (Osterwalder, 2004). In Gordijn's 2002 article a proposition for evaluating business models is outlined and called the e^3-value method. The economic feasibility of an idea is measured in quantitative terms by creating a profit sheet and assessing the value of objects for all actors involved. The method is highly actor-, network- and value-centered, putting the focus on value exchanges among participants of the value network. Exact calculations are not possible, but it does give an estimation of the economic viability. Gordijn (2002) also proposed an extra confidence building step, by creating "what-if" scenarios. Sensitivity of the business model can be tested through its parameters (for example financial, future trends, customer behavior) (Osterwalder, 2004). This method seems highly unlikely to be useful in our case, since profit estimations or any quantitative terms for that matter cannot be made with enough confidence. After implementation of the business model it could be worthwhile to look at quantitative evaluation methods.

In (Torbay, Osterwalder, & Pigneur, 2001) a method for evaluating business models is proposed based on using a balanced scorecard approach. A balanced view of the organization's objectives in four areas was introduced by Kaplan and Norton in 1996; these four areas correspond precisely with the four components that are proposed by Torbay et al. (2001). The areas are unified in an integrated and global strategy, expressed by a cause and effect relationship. The first area is product measures; these assess the originality of the value proposition and identify what the organization has to build for learning, long term growth and innovation (creativity, employee capabilities, motivation, turnover, stock option, etc.). According to Hagel in his 1999 article, measuring human talents and the speed to market seem crucial. The second area is customer measures that evaluate the relationships of the firm with the customers (retention, acquisition, satisfaction, profitability, etc.) and the appreciation of the value proposition by the customers (functionality, quality, price, timeliness, brand image, availability, shopping experience, etc.). In Hagel (1999) it is argued that measuring economy of scope and customer satisfaction is essential. Infrastructure measures are the third area and identify internal and outsourced activities of the value chain and processes with the greatest impact on customer satisfaction and financial objectives (design, build, delivery, service, etc.). Measuring economies of scale and efficiency is crucial for this aspect according to Hagel (1999). The last area are the financial measures that serve as the focus for the objectives and the measures for all other perspectives and concern revenue growth, cost management, asset utilization and market capitalization (Torbay, Osterwalder, & Pigneur, 2001). The four areas or pillars are identical to the ones used in our business model framework. In this thesis it is suggested to use the evaluation

framework as proposed by (Torbay, Osterwalder, & Pigneur, 2001) for evaluating business model's that are based on the framework of (Osterwalder, Pigneur, & Tucci, 2005) and/or (Al-Debei & Avison, 2010). Also it has a broader scope of evaluation than other evaluation frameworks that have been introduced. Again, evaluation of the business model is not in the scope of this thesis, the evaluation method recommended is to be used after the implementation of the "software framework" and the business model.

Along all pillars the business model can now be evaluated, the financial part will be hard and not exact, due to its complicated nature. The total of this method will contribute to a proper evaluation of the whole business model for NextSelect.

Since we still needed to know a lot about the business model for NextSelect, an empirical research was required to find out: the customer wishes, needs, and willingness to pay a certain amount, the payment method, the wishes, relationship preference and more. After this was found and the "software framework" development is done, the business model can be put to use and for the first time evaluated. In this thesis the evaluation of the business model cannot take place yet, since the "software framework" was not ready at the completion of this thesis. After the "software framework" has been implemented, so can the business model. Evaluation can then take place periodically based on the balanced scorecard approach. The business model will keep being evaluated from that point on periodically since the world, business processes and legislation are dynamic and ever changing. Changes to the business model might then be required to ensure the fit between all factors and the viability/success of the business model.

3. Method

In section 2.4.1 the validation of business models has been introduced with the concept of customer development. This chapter describes the customer development in detail for the empirical research that has been conducted. The design that has been used, how participants were selected and how large the sample size was are presented. The steps of customer development (Blank, 2005) are depicted in Table 4 in section 2.4.1.

3.1 Research design

In the previous chapter customer development has been described. In this chapter it is explained how customer development is used in this research to validate our business model. According to (Blank, 2005) the customers should be discovered first. Since NextSelect is already an existing company with customers, this part is not completely new and not all information from this first step was needed. The problems of the customers are known, they need software solutions for their business processes. The service NextSelect delivers solves their problems (tailored software solutions). What we needed to know was how much the customers are willing to pay for these solutions, based on a new revenue model. "Draw a day-in-the-life of a customer" and "draw the organization chart" do not seem relevant in this case, since there have already been projects before, moreover it is client-specific and NextSelect does not focus on just one group of customers. The most important parts were the pricing strategy and the value the customers would pay for the product. However customer development is not just asking about prices, other factors are also very important. Product or service characteristics, the relationship customers would prefer; what they really need in the service and more. In step 2: customer validation starts with a repeatable sales process development. The process has been designed but had to be validated (the revenue model); it had not been proven to work until this research had been conducted. NextSelect still receives customer orders and is trying to take these new customers to the new "software framework" which is under development. The financial model looked feasible but needed to be validated. Step three continues with the creation of customers, this and step four are the steps that will follow as soon as the "software framework" is implemented together with the business model. In this thesis the focus was on step one and two. The research form is a digital questionnaire that was made available online (through a URL-link). To find out if our value proposition was compelling, the respondents were asked about their current software provider, how they experienced this and what kind of value they would assign to customized software.

The cross-sectional design was employed for gathering the information with the use of trade-off and multiple-choice questions. This gave insight in the feasibility of the new business model. It was a descriptive research as used in qualitative evaluations (de Vaus, 2001). Also it is based on theory testing; the research started with a theory about what the business model should comprise and tested it against the potential customers. Customer validation is the second step in the customer development process and can be visited more than once in the case of a rejection of the business model (Blank, 2005). An extra round of customer validation was not required however, since the business model was validated in the first round.

3.1.1 Internal validity

We used a cross-sectional design, the issues with internal validity in this case are relevant but in most cases not very dramatic. We have performed this study on a sample of potential customers to see if the new business model as an attractive and sustainable one, as mentioned before finding

respondents was outsourced to a company specialized in finding the right target group (NovioData). The business model was tested indirectly since the product is not ready yet and could therefore not be tested against current customers. Therefore we asked the respondents about their current software, what they missed, needed or required and asked in general about value, relationships and more. The method of questioning and the words and sentences used in the questionnaire could also have an influence on the outcome of the study. All participants were exposed to the same words and sentences, since they all received the same questionnaire, therefore this did not influence the results. There were two versions in use, a Dutch and English version; this was required by the sampling company. Due to the fact that there is not a time dimension, drop-outs/attrition were not problems. The only thing that could happen was that potential customers would not fill in the questionnaire, however this was outsourced to a company that checked for finalizing the questionnaire and how it was filled in, giving us more insight on the reliability of the data. Most internal validity problems are related to the over-time element of designs (history, maturation, instrument decay, statistical regression, mortality and testing effects). With the cross-sectional design these problems were not a threat, since the time dimension was not present (de Vaus, 2001).

3.1.2 External validity

Further extrapolation of the findings from the cross-sectional research was not what we needed, just generalization over the population of customers and potential customers (where we see all companies as potential companies). External validity was therefore not an issue in this case. We just needed to know if the business model is an attractive one for the current and potential future customers.

3.1.3 Feasibility of the research

The costs involved with this research consisted of paying the sampling company for the respondents and the programming of the questionnaire was done in-house by one of NextSelect's programmers (in-house costs). For all the participants of the study a digital questionnaire was made available online. The time involved with making the questionnaire was during the master thesis time so this was not an issue. The positive results on the business model mend validation among these respondents. If the results were negative the feedback would have been used for adjustments and another round of customer validation would have followed. Luckily this was not necessary. Convincing NextSelect to perform this study was not an issue since the owner is a 100% behind the idea. Since the time needed to fill in the form and to send it back was small, we expected that the response rate would be high enough for the results to be significant in a qualitative/quantitative study. Ethical issues were not found in this research. Companies were only asked if they would be willing to help with a research for the university of Twente (no direct questions for/about NextSelect were posed). It was an online questionnaire and if they would not like to share this kind of information, they could refuse to participate in the research. To ensure confidentiality the companies could send the answers back anonymously; this was of course not required. Companies participated voluntarily and no harmful information was being transferred or shared with other parties (de Vaus, 2001).

3.2 Selection & Sample

This study made use of potential customers in the business-to-business sector that are involved in the acquisition of business process software. Eighty-seven respondents filled in the questionnaire. The selection of potential customers was outsourced to NovioData (a specialized company in this

field) and therefore we paid for each finalized questionnaire. These clients were targeted and pre-screened by NovioData, for reliability and relevance. NovioData had good reviews and a student program, which is why in discussion with NextSelect the choice was made for this company.

The companies that submitted the questionnaire already have business process software; this is the target group that was required, companies without business process software are not used in this research, since they do not have experience with business process software in their firm which we required in this research. This had a consequence (companies that already have BPS mostly do not require new software, due to investment costs for example) for the research and must be kept in mind during the analysis of the results. The need for new business process software can be underestimated under the general population, including companies that do not have software for their business processes yet. Forty-five percent of the companies that participated in this research have zero to ten employees (excluding the owner) and twenty-nine percent of the companies have more than fifty employees. We have many respondents in the 0-10 group and the 50+ group, and less of the two groups in between (10-25; 25-50) which are therefore less reliable. However, this made it possible for us to see the results for each of these categories of firm size in cross tabulations. The assumption made by NextSelect before the empirical research was that the 0-10 group is not attractive to NextSelect due to the relatively high capital investment required for customized software, we do not hold services from them, but they are not our target group.

3.3   Measurement

The following indicators have been used for measurements along the four dimensions of the business model: Product (the value proposition needed to be tested), customer relationships and financial aspects (the pricing mechanism and the price level needed to be tested). The infrastructure management (one of the four pillars) did not need any testing or validation, since this was already determined from theory, practice and discussions with NextSelect. The indicators were measured using a five-point likert-scale. A summary of the indicators is presented below:

Product indicators (functionality):

1. *Reliability:* The correctness and well-functioning of the software, up-time, etc.
2. *Usability:* the ease of use and of training the end users of the system, sub qualities: learnability, efficiency, helpfulness and control.
3. *Security:* a measure of system's ability to resist unauthorized attempts at usage or behavior modification, while still providing service to legitimate users.

Customer relationship indicators:
4. *Nature of relationship:* The nature of the relationship (intense or not intense)
5. *Term of relationship:* The length of the relationship held (short or long)

Financial indicators:
6. *Price mechanism:* The revenue model used for gaining profits
7. *Price:* The price coupled to the product or service being sold

Service indicators:
8. *Assurance*: Knowledge and courtesy of employees and their ability to convey trust and confidence
9. *Responsiveness:* Willingness to help customers and provide prompt services
10. *Reliability*: Ability to perform the promised service dependably and accurately.

The questionnaire employed can be found in Appendix A.

3.4 Data collection and analysis

The potential customers received an invite for the online questionnaire NovioData. Advantages of sending an online questionnaire compared to face-to-face and telephone were that social influences were not present in this way also distortion from the interviewer or other people was not present. The speed and costs with which it could be done were better than those of face-to-face or telephone contact (de Vaus, 2001). In the cross-sectional design the answers to the questions imposed led into a positive validation of the business model. The scores on the concepts were gathered and aggregated for all respondents to perform statistics (basic statistics, correlations and cross tabulations) and analysis on the results. The questionnaire had to be translated in Dutch since the English version would not suffice for all respondents involved in the research. The meaning of the questions and sentences had been kept the same. All data was imported into Excel for statistical analysis. The next chapter will present the analysis and results found from the empirical study.

On certain topics the owner of NextSelect was interviewed or discussions were held to find a suitable configuration that represents the vision of the owner. This was primarily on the relationships held with customers and the pricing strategy / revenue stream to be used. Other topics have also been discussed, but had less impact than the two major topics of customer relationships and revenue streams.

4. Results & analysis

The analysis of the current business model of NextSelect is presented in section 4.1 including the problems and challenges found in this state. Section 4.2 discusses the desired business model of NextSelect, based on the problems found in the current situation, theory, interviews/discussions with NextSelect and the results of the empirical study, which have been integrated in the desired situation. The current and desired situations have been analyzed based on the nine building blocks that have been proposed by Osterwalder et al. (2005) in chapter 2.

4.1   The current business model of NextSelect

This section starts by looking at the situation at the time this research was started. We start by looking at the nine building blocks in the current state and point out the problems and issues found in the current business model.

Value proposition: NextSelect offers the customers fully customized software solutions for their business processes. Customized software is usually very expensive, however NextSelect is able to perform these tasks for a relatively low price to be paid per hour worked (65 to 75 euro's per hour). This is a strategic choice, to be able to compete with suppliers of standardized software. Customized software still is not cheap, if customers think otherwise awareness must be raised on the topic of customized software and the reason and level of the price. From an interview with the owner the following became apparent about the current value proposition: the services or products are bundled, NextSelect has their own server-park and most of the customer software solutions run on these servers. Customers become the owner of the software; in theory restricting the revenue stream after the project has been finished to a non-recurring stream. This has been experienced in several cases.

The functionality, reliability and usability of the software fulfills to the customers wishes, NextSelect has experienced so far. The software of NextSelect always performs as required/intended since it is tailored to the customers' wishes, each solution is different. The service or product gets the job done, has a clear interface and for a reasonable price. Cost reductions for clients are possible due to the automation of business processes that the software provides. The care or maintenance of the software is in the hands of NextSelect if requested, making sure that it always runs as per customer requirements and wishes, which often change over time. Customers do not have to worry about their software, NextSelect does this for them. The software NextSelect delivers is very intuitive and user-friendly; customers always can receive training in the use of the software when required.

Key Resources: For the tailored software solutions to be delivered to the customers many hours for developing this type of software are required. NextSelect's staff helps and thinks with the customer to find the best solution to their problem, since the friendly and long-term relationship with customers is the focus. The location and machinery expenses are low compared to the costs of personnel. The only thing an employee requires to be able to perform is a workstation and a desk. The human factor is very important, NextSelect requires a high standard from its personnel; the workforce consists of skilled and highly educated personnel only, mostly for programming/development purposes. All programmers are university graduates or in the process of graduating, with a problem-solving attitude towards complex programming issues. The slogan of NextSelect is to not think in problems but solutions according to the owner. The work experience at NextSelect has been developing from 2002 and onwards with satisfied clients as prove of

NextSelect's abilities. The knowledge base incorporated in NextSelect is a key resource, due to the years of experience in the field, the company built up intelligence and knowledge that is used every day. The combination of human capital with years of experience, a friendly perspective on the business and the customer focus form the core capabilities of NextSelect.

Key Activities: The most important activities at NextSelect are the mapping of the business processes, finding the customer wishes and requirements and the development of the business process software. A problem solving attitude is very important in this whole process. All instances of customer wishes are not always that easily implemented and smart ways need to be found in these cases. Since the software is client specific there is regular contact with the customer about the needs and requirements that need to be fulfilled by the software and after the implementation phase to evaluate if the solution functions according to expectations.

Another very important activity is the adaptations and the support/maintenance delivered to the customers. If a customer wants an application to be changed to fulfill to its expectations, it is very important that NextSelect can make these adaptions and/or support the client in using this software. Support after the implementation of the system generates money on a continuing basis, if the project is not stopped. This is a possibility in the current situation. The support is not only necessary because the customers want more applications or new functionality. Also business processes change over time or regulations can change, these changes need to be reflected in the software as well. Therefore the relationships NextSelect keeps with its customers are very important and preferably long term. This is however not a consistent matter at this point in time. Companies do not switch all of a sudden between software solutions for their business processes, due to high switching costs, but can stop the investments in the software.

Customer acquisition is another very important activity, but NextSelect is not very active on this topic, this is mostly done through the word-of-mouth effect by satisfied customers and partners, also the capacity is not high enough to take in new customers at this moment, due to the long development times of the software. The focus now is on developing the "software framework" instead of serving customers with the "old-way" of developing software. NextSelect prefers to serve all new customers with the support of the new "software framework".

Key Partners: NextSelect has customers that also prove to be very useful partners. MASER Engineering B.V. is one of these companies, at this time NextSelect is located in the office building of MASER and a lot of work is done for them. MASER already proved to be a good partner due to the word-of-mouth effect. Through MASER, NextSelect has been able to get new customers, due to the enthusiasm they have for the software solution and show the system to their customer base. NextSelect considers all customers as partners, due to the long term relationships NextSelect tries to forge with them. Also customers mostly want to have these kinds of relationships due to the high costs of software solutions and the lock-in effect, switching over to another software solution provider is very expensive.

NextSelect "uses" its partners mostly for customer acquisition, which will be very important after the completion of the first version of the "software framework". Other options like co-development or cooperation were not considered, since NextSelect wanted to keep the information, intelligence and owner rights in house. Partnerships are on basis of oral agreement at this point, at this point that is a problem, since formally there are no contracts with partners. Customers are only involved in the

development of their own software, so co-creation is applicable but not on a general level (framework development will be purely in-house, although suggestions will always be considered).

Cost Structure: The most important costs made at NextSelect for providing the value proposition are those of labor (business process mapping and development). NextSelect is a service company, with the primary resource of human capital. The office space and the computers are not that expensive compared to the costs made for personnel. Costs are being kept to a minimum to be able to offer customers a relatively low price for very high quality customized software (65-75 euro's per hour). However the value NextSelect delivers outweighs the importance of the costs, therefore NextSelect has a value-driven cost structure, according to the owner. Fixed costs include the rent of the servers, but this is forwarded to customers and the rent for the office space. Variable costs are those for personnel. Not every employee works the same amount of hours every month. Economies of scale and scope are not in the picture at this point in time; NextSelect is too small to be able to benefit from these.

Channel: Communications with the customer, distribution and sales all make use of certain channels to reach the customers. Since NextSelect is a rather small company the channels in use are limited, telephone, email and face-to-face contact are the regular channels used. NextSelect uses the channels of partners; the word-of-mouth effect from customers to potential customers is very helpful in the growth of the company and still proves to be a successful marketing technique. The servers used for the software to run on, are property of NextSelect and located in a server park. NextSelect is paid for the development of the software and the rent for the servers required is transferred to the customers. Therefore we could say that although the channels that are used are limited, they are effective. At this time customers become the owner of the software, resulting in non-recurring revenue streams. NextSelect only uses direct channels and partners, where intermediaries such as resellers and cybermediaries are also in play in the market. NextSelect does not participate in this business. The channel concept covers the customer's entire customer buying cycle (CBC). This is divided into four phases, customer awareness, evaluation of the value proposition, the moment of purchase and after sales. In this stage customer awareness and acquisition come mostly from partners and the word-of-mouth effect, in the first meeting with the customer the value proposition is delivered and can be evaluated. Based on this the customer can decide to go on, or stop the project (based on the cost estimation provided by NextSelect). When the first version is ready and live, support will start for the customer, unless they stop the project after completion. For the support we should think of maintenance, small additions, and updates. The support is only for the software requirements agreed upon in the contract, for other software solutions or additions a new contract needs to be made and signed.

Customer segments: There is only one customer segment, this is the segment of companies that require software solutions, whether tailored (customized) or standard packages. The companies that are in this segment should be reviewed if they can be seen as one identical group. Customer segments are identical when they have the same needs, profitability, relationship and willingness to pay for the value proposition. In this case the needs can be very different, since one company may want a customized software solution, where the other wants a standardized package; however, they both require software solutions. The profitability is only depending on the characteristics of the company and the required software solution. Therefore the profitability is linked with the specifications of the software and the customer. The need and profitability are the same; the

relationship is the same as well, therefore the customer segment can be seen as one. As mentioned earlier, NextSelect only wishes to have long term relationships, although being picky is not an option at this time due to the small client base and the nature of the software deliverance to the customers in the current situation. This is an issue to be addressed in the desired situation of NextSelect.

Customer Relationships: The customer relationship block covers all customer related aspects. This comprises the choice of a firm's customer segments, the channels through which it gets in touch with them and the kind of relationships the company wants to establish with its customers. The customer relationship describes how and to whom it delivers its value proposition, the firm's bundle of products and services. NextSelect has not really been active on this part. The few things that they find important and put effort in, is having a "friendly" relationship with customers and on a long term basis. This is due to the lock-in effect with very expensive software and trying to establish future revenue streams. This is a problem in the current situation, since the customers become owner of the software and can choose to stop the project after completion. Withholding NextSelect future revenue streams. Fairness to customers is very important, helping customers with their business processes is the main mission for NextSelect and making some profit along the way is necessary to remain in business. The forgery of long-term relationships and the transfer of ownership are a problem and these are addressed in the desired situation.

Customers primarily have contact with the owner of NextSelect, whom then divides the work over the employees; work related contact with the customer is also done by the staff of NextSelect, this is mostly related to the software programming and development and customer wishes or requirements. Finding customers is not a concern NextSelect focuses on at this point in time, since the "software framework" will first have to be fully developed, from there on customers need to be acquired, so they can be served with the new and faster way of working.

Revenue Streams: In the current situation NextSelect has no real pricing mechanism, they bill the customer on the hours they have worked on the software solution for the customer (65 to 75 euro's per hour). First an estimation of the costs is made for the customer, so they can choose whether their budget is sufficient or not. From there on the development starts and the hours will be billed, it is possible that the total amount payable is lower than the estimated amount, in that case the customer is given a discount on the original offer. The revenue streams here are non-recurring; it is a one-time deal without a contract for a certain term. This does put the continuity of the firm at risk and establishes variable cash flows which can be very dramatic. Support/service after the development of the software is a recurring revenue stream, but not a requirement, customers can stop the project when the development is done and they are owner of the software. The non-recurring revenue-streams, the transfer of ownership and the uncertainty on the support/service revenue streams are a problem. At certain points in time the existence of NextSelect has been in danger due to these variable and uncertain revenue streams.

A summary of the configuration of the current business model is provided in the business model canvas (see Figure 6), which was introduced in section 2.3.3. The problems found in this business model have led to the construction of a desired business model, which is presented in section 4.2

Key Partners

Used for:
- Customer acquistion
- Word-of-mouth advertisement

No formal contracts for partnerships

Key Activities

Mapping of the business processes

Programming/development of the software

Support/maintenance on customer software

Development of the "software framework"

Key Resources

Human capital (skilled/experienced workforce)

Knowledge base (experience in the field from 2002 and onwards)

Value Proposition

Functional, reliable and easy to use customized software

Software runs on servers owned by NextSelect in most cases

Customers become owner of the software (A current problem)

Training with the software is available for customers if required

Not obligated for service/maintenance contracts (another problem, no recurring revenue stream)

Customer Relationships

Strive for relations based on a "friendly" level and intended as long-term relationships.

Customers become owner of the software (This provides a problem, after completion of the project customers do not have to keep a relationship with NextSelect)

Not a focus on acquiring customers at this point in time

Channels

Channels used:
-Telephone
-Email
-Face-to-face contact

The channels of partners are used for customer acquisition and word-of-mouth advertisement

Customer Segments

One customer segment:
Customers that require business process software (either customized or standard packages)

Cost Structure

Most important costs are labor costs (mapping / development / programming)

A value-driven cost-structure is employed

Revenue Streams

Pricing strategy based on hours worked (65-75 euro's per hour) therefore non-recurring revenue stream

Service/maintenance contracts are not required, but do provide recurring revenue streams if requested

Variable revenue streams due to the transfer of ownership and non-recurring revenue streams endanger the continuity of NextSelect

Figure 6: Current business model of NextSelect

4.2   The desired business model of NextSelect

This section provides the changes and adaptations towards the current business model of NextSelect; it can be seen as a delta analysis. The desired situation has been constructed through theory, discussions and interviews with NextSelect and empirical results from the research conducted in chapter 3.

Value Proposition: The value proposition in the desired situation is based on the use of the "software framework", which reduces the time to develop and increases the quality and time to market. To offer an attractive value proposition the DART-model (introduced in 2.3.4) is used. Dialogue with the customers, access to information and tools (through a customer portal which is being developed), risk assessment and transparency of the business process are applied in the new business model of NextSelect and important for the customers to perceive the value of the proposition made. The risk clients have at NextSelect are low, since the software can always be adjusted/modified to the wishes of the customer, the transparency in the process is obviously there, and there is contact between NextSelect and the customer regularly on the progress, development and deliverables.

From the results of the empirical study it became apparent that there is a market for customized software (the results are evenly spread between customized software and standard packages).

NextSelect will focus in the development of the software for the customer on co-creation with the customer, this to reduce errors and stay in the direction the customer wants, to create a high perceived value by the customer and to create and maintain a long and collaborative relationship with these customers. This will allow NextSelect to ask for a high-end product price, since the product/service is of a high-end quality. NextSelect wants to be considered and is a high-end software supplier. Meaning that the price cannot be too low; the image of the company and its software should be represented by the price (The image of Albert Heijn versus the image of Aldi).

Product measure:	Very important	Important	Neutral	Unimportant	Very unimportant
Reliability	57%	29%	11%	1%	1%
Usability	46%	43%	11%		
Security	56%	30%	14%		

Table 5: Product measure results from the empirical study

From the empirical study it followed that the functionality, reliability and usability of the product are all considered to be important to very important (see Table 5). 86% of the respondents valued the reliability important to very important, respectively 89% for usability and 86% for security. This provides empirical evidence that there is demand for the high-quality software solutions that NextSelect provides. Respondents also valued the functionality of the software (reliability, usability and security) higher than the price that has to be paid for it (74% agree to strongly agree), giving more evidence for high quality and thus high valued software, see Figure 7 (Torbay, Osterwalder, & Pigneur, 2001).

Receiving high quality service is considered important according to the results of the empirical study, (79% of the respondents (strongly) agreed). The service indicators (reliability, fast responsiveness and

assurance) are also deemed to be important (82% for reliability agreed to strongly agreed, respectively 85% and 82% for fast responsiveness and assurance).
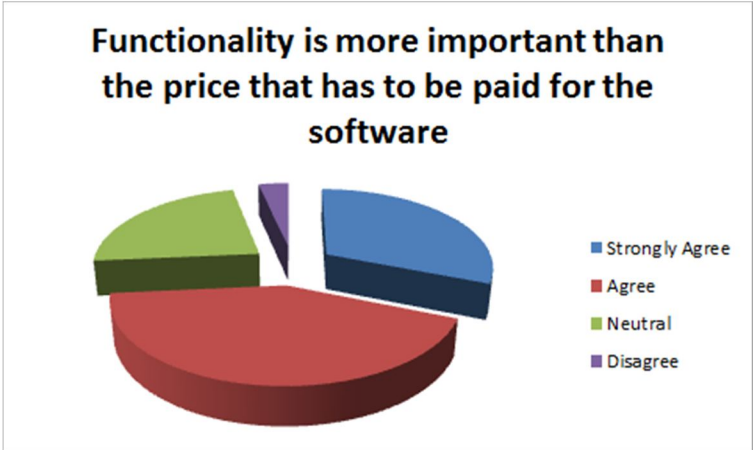
Figure 7: The valuation of functionality of the product versus the price of the product, from the empirical research

In the empirical results positive correlations between the product indicators and positive correlations between the service indicators are found. The indicators positively reinforce each other, providing empirical evidence for the demand for high quality software and service. This is the market NextSelect is targeting with their product and service.

For the use of the software customers may require training / consultancy and also for the business processes themselves. Besides making software NextSelect can help in making the business processes as efficient and effective as possible. NextSelect stated that they want to offer a more comprehensive value proposition to the customer, involving themselves in the optimization of the customer's business process software and if requested also the business processes themselves.

Key Resources: In the desired situation the key resources do not change much from the current situation, however there is one addition to these and future options that have to be kept in mind. The "software framework" that is under development will be one of the core resources. Based on this framework, the company will be able to perform the development and implementation of the software solutions faster and with a higher quality. The development of this "software framework" is on continuous bases. NextSelect strives to keep the personnel on the highest level of standard; offering the customers experience and up-to-date systems, by personnel with a problem solving attitude where the customer always has the number one priority for NextSelect. With the growth intentions at NextSelect, more programmers will be acquired in the future and more projects will be handled. This workload will then have to be managed and not just by the owner, teams will be constructed with project managers that are responsible for the whole process for a group of customers. More layers of hierarchy will need to be added to structure and handle the increased workload and the number of projects. This is important and will be necessary to be able to handle and manage the workload effectively; the owner cannot manage this all by himself with a larger customer base.

Key Activities: The activities will remain the same in their essence, programming and coding will still be necessary as are the support and maintenance for the software and the customers. An extra activity now however is the development of the "software framework", this is on a continuing base, the world is ever changing, and so should technology. NextSelect will also start to focus on the

training and consultancy for customers and their software solutions, since software is not always self-explanatory and a more comprehensive value proposition is what NextSelect wants to offer to the customer. Another focus point will be consultancy in business processes, NextSelect cannot only map, but also advice in the future and is therefore one of the upcoming activities in order to provide the customer the full package of optimization of their business processes and matching software.

Customer acquisition, retention and fostering are of course very important activities that in the future will be put more emphasis on, since the "software framework" will allow for faster development, more projects can be handled. Customer relationship management is therefore a very useful tool to organize the relationships and nourish them. In a discussion with NextSelect it was found that being present at exhibits to promote the software solutions, contacting potential customers through partners and the use of social media for marketing can be useful activities to be added to the key activities to grow the client base and the revenue streams in a fast manner after the implementation of the "software framework". Contests, referrals and newsletters can help NextSelect benefit from the social media, as many other companies are already using. Communication skills are therefore also very important, to gain and keep customers.

Another key activity is the monitoring of the environment and the business model, as to keep the business model up-to-date and representative for the business, the industry and environment. Evaluations and modifications to the business model are inevitable, due to the ever changing nature of business processes, legislation and the (social) environment.

Key Partners: The partnerships NextSelect has or wants to establish will be managed in a different way; formal contracts will be used to seal partnerships. More focus and steering on creating and fostering partnerships will be very important, since the word-of-mouth effect is still the strongest marketing mechanism for NextSelect and has already proven to be successful, broadening the marketing techniques is one of the goals to be able to reach a greater range of customers with differing methods (such as social media).

Also just recently MASER Engineering B.V. pointed NextSelect to a segment of its own customers. This provided the company with a very big business opportunity. The idea is to contact this industry segment and try to build their software requirements as the first software solution built on the new "software framework". This will make it a parallel process of framework and software solution development. Using more partners is only attractive for customer acquisition, developmental support and that NextSelect can handle the workload. Partner programs should therefore grow with the capacity of NextSelect in order to maintain structured. Other activities NextSelect does not want to outsource at this moment, but options will always be reviewed for attractiveness.

Cost Structure: The cost structure will not change dramatically; NextSelect will still try to keep the costs as low as possible and personnel will still have the highest proportion in the cost structure. The costs will rise, when more personnel is needed and at this time already being appointed. Also a bigger office space is looked at for the near future, due to the growth NextSelect is making and is supposed to make. This will add in the fixed monthly costs by then. However, the revenues should also rise by having more employees and thus more work being able to be done. Also the work can be done faster with the use of the "software framework". The faster development time also means that the costs will go down for customers and NextSelect, due to less labor hours required for

development. Costs for development and evaluation of the "software framework" and the business model are added to the current costs.

Channel: The way NextSelect uses channels does not change much from the way it is done already. Customer acquisition will be put more emphasis upon to grow the customer base. NextSelect chooses to do so by presenting the product on expositions with software solutions as topic, contact potential customers with offerings and the use of social media. The website will be fully developed and put into use in the desired situation. Social media will be one of the added marketing techniques (word-of-mouth is still the most important one, but broadening the techniques is what NextSelect strives for). Using linked-in; Facebook and more social media like these can help raise awareness about the brand and the products, increasing the client base and the word-of-mouth, advertising of the products and providing incentives / discounts against relatively low to no costs at all. Using the channels of partners will still be one of the main ways of finding/attracting customers, and spreading the name. Also, NextSelect will develop a customer-portal from which contact between NextSelect and the customers is more direct and easy to manage. It is also handy for the customers so they can monitor and manage all their affairs with NextSelect, giving the customer also more insight in the whole process with their product and NextSelect.

Customer Segments: The customer segments do not change at all, this remains identical to the situation in the current state. The demand for standardized or customized software is nearly evenly spread and therefore there is a market for the product we want to offer.

Customer Relationships: The relationship kept with customers is valued highly, in the desired situation the relationships kept with customers is still on a long-term basis, as already explained for the revenue streams and the lock-in effect, negotiations are possible however as long as NextSelect gets the value for the product and service. From the empirical research it was found that long term contracts (three to five years) with close involvement are preferred by the majority, short term contracts (zero to two years) with close involvement are also considered, if the customer is attractive to NextSelect. 71% of the customers prefer a collaborative and intense relationship over a 'just-business' relationship, providing more evidence for the close involvement relationship strategy NextSelect aims for. The flexibility of NextSelect is important, especially in the start where the customer base is still small and thus the bargaining power of NextSelect is smaller than when the customer base would be large.

Company size	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
0-10 employees	7,7%	48,7%	33,3%	7,7%	2,6%
10-25 employees	10%	30%	50%	10%	0%
25-50 employees	0%	46,2%	53,8%	0%	0%
50+ employees	12%	56%	24%	4%	4%

Table 6: Relationships are valued higher than price, from the empirical results

Respondents value the relationship kept with their supplier higher than the price that has to be paid for this software (see Table 6), giving more proof for the importance of the customer-driven perspective.

Customer interaction and its importance for NextSelect

Contact with customers will be mostly on software related issues: new versions, updates, patches, new modules for example. In relationships NextSelect wants and already has a "friendly" focus. The way customers are being served is on a (dedicated) personal assistance basis, customers are linked to a group of programmers that serve this customer group. This way it is more decentralized and contact can be more efficient, effective and faster. The customers are also being used for feedback upon the processes of NextSelect and the product/service delivered. This way NextSelect can learn from the customers and get better insight into their wishes (customer development on continuing bases). Customers will be more involved in the development and creation; this improves the perception of value for customers and gives NextSelect more insight into the needs of the customers. This helps in the development and the growth of the company and keeping track of the most current wishes, requirements and trends.

From an interview with NextSelect it became apparent that they choose to introduce special programs for customers to entice/attract them. The discount voucher when a part of the software solution of a customer can be re-used for another customer is an example for one of the programs. Also bringing on new customers will be rewarded by an incentive program, more on incentive programs can be found in the section on revenue streams.

The importance of the upcoming of internet

Maximizing customer equity must be one of the main goals of a company. In other words a firm must understand how it can get most out of its customers by optimizing its strategy in acquiring and retaining customers and selling them additional value propositions. The internet has further increased the possibilities of interaction with customers. The improving performance and falling prices for ICT has contributed to the facilitation of customer-related information gathering and customer- and product-related information diffusion. Data warehousing, data mining and business intelligence are just some of the ways that allowed managers to gain insight in their customer buying behavior and improve the relationships. Using customer information can help in discovering new profitable business opportunities and to get customer satisfaction on a higher level. Mobile phone apps is something new in the market and also something NextSelect will focus upon in order to stay up-to-date in the ICT field and not fall behind. This also provides the customers more mobility and access to the software.

The three relationship building mechanisms

It's very straightforward to say that companies must acquire customers to do business. Even firms with high retention rates lose customers and thus must continuously acquire new customers to stay in business. Because customer acquisition is a very expensive affair and because the relationship developed during the acquisition phase strongly influences retention and add-on selling it must be carefully managed and evaluated. The goal of customer retention is to leverage customer acquisition investments. Because customer acquisition is normally more expensive than retention it makes sense to find ways and mechanisms to extend the duration of the relationship between firm and customer, such as incentive programs. Of course the focus must be set mainly on the most profitable customers. A set of mechanisms characterizes the nature of the relationship. Each mechanism has a function in the relationship building with a company's customers. It can personalize a relationship,

contribute to customer trust, or contribute to brand building. These will be implemented in the customer portal as an information/data gathering method for NextSelect.

Personalization of relationships
Personalization through ICT is possible at a reasonable cost. Customer profiles with historical buying behavior, tastes and needs and the contact history with the firm can be stored in large databases. This data can be used to simulate a "personal relationship". An important field of personalized mechanisms is one-to-one marketing. This is nothing else than tailoring marketing activities to specific customers, their needs, behavior and their particular transaction history. Another field of one-to-one marketing is so-called personalized product recommending systems, which are based on attributes, item-to-item correlation or user-to-user correlation (Schafer et al. 2000). The first technique is based on a set of rules that makes recommendations derived from a customer's profile of attributes. The second technique identifies items frequently found in association with items in which a customer has expressed interest. The third technique, also known as collaborative filtering and to date the most powerful method, recommends products to a customer based on the correlation between that customer and other customers who have a similar purchase behavior. NextSelect can incorporate ideas like these with the development of the business model into the customer portal/CRM and will be helpful in providing the value proposition to (potential) customers.

Customer trust contribution
The trust of one party in another for a service X is the measurable belief of company one in that company two will behave dependably for a specified period within a specified context (supported by the results from the empirical study). Expectation is central to the trust concept. New trust mechanisms are necessary because of the globalization and virtualization. ICT offers some advanced trust-building techniques. Reputation received a boost in its contribution to trust, it is based on independent user communities, dedicated reputation systems or third parties. Labeling services, certificates (for example VeriSign) or authorization and verification services are some of the third party offerings. Rating companies also have some impact on the trust issues between companies and customers. Technology and the perception of this also play a vital role in the trust issue between companies, trust also positively influences the add-on benefits and thus perceived value.

Brand building
Brands constitute a critical resource for generating and sustaining competitive advantage, they help creating a distinction between entities that may satisfy similar customer needs and help communication programs to not send conflicting or confusing messages to customers. The brand NextSelect does not reflect much on the industry it is in or what they do, therefore it is worthwhile to look into another name that is more catchy and reflective for the business they are in, however the name has been around for some time and the word-of-mouth effect has had positive results, therefore the name does represent a certain way of working, quality and proven success. This must be kept in mind if a name change is being considered. Also for branding, social-media is very effective, Linked-in, Facebook and other media can be used to the benefit of NextSelect and reaches a greater population at low costs; advertisement, discounts and promotions can be spread to customers and potential customers in a very effective manner.

Revenue Streams: Revenue streams can be divided into recurring and non-recurring streams. Each revenue stream can have one or more pricing strategies. For customers it is very important that they know what they are paying for (the value), how much they have to pay for this and what financial plan they are able to use. Also very important here are the incentives programs NextSelect wants to offer to its customers. The first one is based on bringing in new customers, for which the customer will receive 5% of the total profit generated from this new client in the first year. The second program is based on re-usability of software from a customer, if this is possible the customer will receive a discount voucher, which gives the customer a discount on the next purchase of software (10% discount). More alternatives for incentives have been looked at by NextSelect but the final choice was made for the presented two options. Contests on social media and newsletters will also be used to get customers involved in providing feedback, customer referrals and spreading the word-of-mouth.
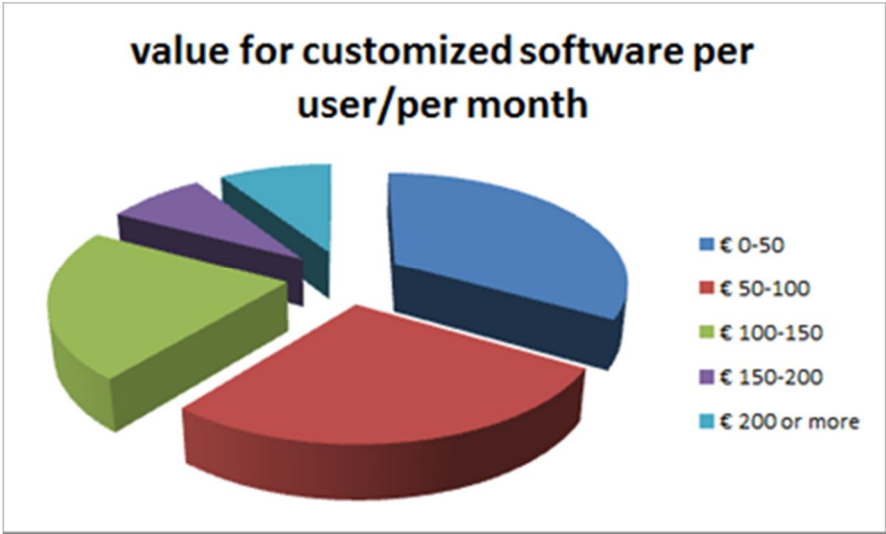

Figure 8: value for customized software per user per month, from the empirical results

The price level to be used by NextSelect will be in between the 100 to 150 euro's per user per month (The product cannot be seen as too cheap, recall the Albert Heijn versus Aldi image example in the value proposition building block). See Figure 8 for the graphical display of evidence for this price level, 39% of the respondents value the price for customized software to be equal to 100 to 150 euro's per user per month, or higher. This price level makes NextSelect able to compete with companies providing standardized packages on the price (standard business process software packages are mostly more expensive than 100 euro's per user per month when this pricing strategy is employed) and NextSelect can offer a better fit with the business processes of the customer.

Pricing strategies

From the empirical results it was found that there is no preference for user based pricing over usage based pricing or the other way around. User based pricing was chosen for by NextSelect, since it is better implementable than usage based pricing in the software of NextSelect.

The pricing strategy to be used according to our respondents should be flexible (lump-sum payment, per user per month payment and license and service payment) are the options that are most suitable and requested, according to the empirical results (see Figure 9). For NextSelect the per user per month payment is the best option. NextSelect aims more for the installment based payment strategy instead of the one-time fixed payment. However as mentioned before the flexibility NextSelect can and wants to offer provides incentives for most customers to be able to work out a contract. The cash flow of NextSelect must be safeguarded and therefore not always installment based strategies can be used. In a later stage when the customer base is larger, it is easier to demand this.
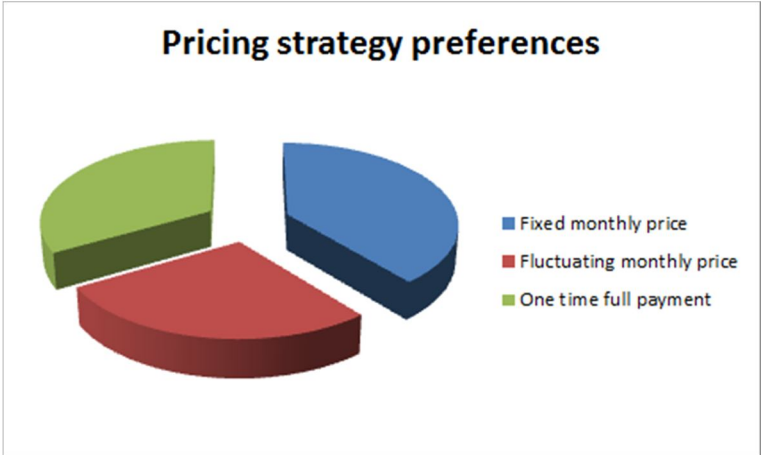

Figure 9: Pricing strategy preferences, from the empirical research

For the payments in installments the choice is between fluctuating or pre-determined prices, the pre-determined price is preferred (found in the empirical results). Since NextSelect wants to be a high-end provider the flexibility it can offer determines its image and the access to clients. Therefore full payment at once and payment in installments should both be considered as financial plans for the customers, also a combination of the two is a possibility. Negotiations on the payment terms are possible if the customer is attractive to NextSelect.

The pricing strategy for the customized software will be as such: client's pay for the whole development costs for their software solution. How the development costs are split up over time is flexible and negotiable. Whenever a client requests new work to be done, they have to pay for this. However, if NextSelect is able to re-use this "module", the client will receive a discount voucher (10 percent), to be used on the next purchase, up to a maximum cash amount of the discount of ten percent times the cost of the module being reused. Every customer can get only one voucher per module. If a second customer requests this module (NextSelect re-uses it) the first customer will receive the voucher and the second customer will have to pay 50% of the development costs of client number one plus its own development costs if modifications/adjustments to the module are needed. This goes on into perpetuity. In this way customers are given the push to order a new module or application and they get a discount, while NextSelect generates more revenues. This is a win-win situation with a positive incentive for customers to participate.

The per user per month payment strategy

From discussions with NextSelect the following has been determined for the per user per month payment strategy: it will make use of different user groups. For example the employees of the company itself are a category but can have different privileges; this will influence the price per user. Also customers might log in to their system to check upon delivery dates, this would be another user-group that only makes small use of the software and therefore the price for this group will be much lower than the price for employees. The price a company will have to pay for a user depends on several factors that cannot be forecasted in advance. The size of the software solution, the complexity, the use of the software by the users, the development time necessary to produce the software all affect the price. In advance a price-range can be given and a more detailed price can be produced after the wishes and requirements of the customers are known. Since NextSelect wants to keep the prices flexible but also robust for the customers, so that they are enticed to become a customer of NextSelect, a price for a certain range of users is used. For example a company will pay for the first zero to twenty-five users a 125 euro's per month (price depends on several factors), although at this moment they only have twenty users. The company can add another five users without a price change per user. When the company exceeds this number of users, the price for each added user will increase. Think of it as a mobile phone subscription, you have a certain number of minutes per month you are allowed to use (if you use less minutes you still pay the same amount of money). When you exceed this amount of minutes, you have to pay extra for the minutes you used extra. The same technique is used by NextSelect, up to a certain amount of users the customer remains paying the same amount per month. For the users that exceed the determined limit, the company will start to pay extra per month. At the end of the contract term or the end of the year, a new deal can be negotiated.

Financing of the product/service

The financing of the product and service NextSelect delivers can be in several ways, NextSelect wants to stay flexible here, to make the software solutions available for as many customers as possible. The installment based fees are split up into: framework license costs (framework development), service costs (maintenance and support) and costs for the development of the specific software solution. The duration of the contract is negotiable; however NextSelect prefers to keep the minimum contract term on three to five years (preferably five). Since long-term relations are what NextSelect strives for and this also contributes to a stable revenue stream. The financial planning for customers is of course very important, the costs involved with buying this kind of software are high. A few examples of financial plans that customers could make use of are:

Option one: pay 25% of the development costs now, 25% during development time and 50% during the contract duration and the monthly fees per user. Option two: pay 100% of the development costs now and just the monthly fees per user during the contract duration. Due to the changing nature that the software will have during the contract term the prices per month can fluctuate over time.

These are just two examples of financial planning that can be used, NextSelect will always engage in helping the customers pay for the software. Depending on attractiveness of the customer negotiations on the financial plans are possible. This gives the customers more flexibility to choose how, what and when to pay. As long as NextSelect gets enough money up front to start the development, many options can be used. If a company would prefer to pay off the whole contract at

once, NextSelect will review it (depending on customer attractiveness, the size of the client base and the stability of the revenue streams). Cash flow problems are not allowed in the desired business model.

Framework license costs are put in place to pay for the general development of the "software framework", the service costs are for updating / minor adjustments or additions. Development costs are simply the costs made to develop the requested software. This can be paid in several ways as well. Negotiations are possible as long as the value delivered at the end of the contract remains the same. For standardized packages NextSelect will not be using the same pricing strategy. Packaged software will be paid for by customers through fixed monthly fees per user. These models are simple, easy to understand, robust and easy to work with. These are all very important characteristics for a model.

The service contract NextSelect has with a customer can be on different levels, there are three service plans: silver, gold and platinum. The costs involved with these plans are depending on the service level agreement made with NextSelect. These service contracts can be of a standard form or if requested more personal plans can be negotiated. This will be reviewed for each customer separately if requested, since every customer is a different case than the other. Flexibility is the key in doing business for NextSelect; customers are diverse in their needs, wishes and requirements. To be able to make use of this, different plans, service contracts and flexibility of the supplier are required. As long as NextSelect receives the required money, they will not very strict in the way this is achieved. For standard packages there are only monthly fees, also based on per user per month payments with the same user-subscription idea as for customized software. However it incorporates fewer costs, since the development costs can be split over all the users of this package and no modifications/adjustments are required for the individual customer, but for the whole group of customers.

Upcoming / starting business program
For businesses that are growing but are not able to directly pay full price, NextSelect offers specialized deals, only if the risk and growth potential are in a positive favor to NextSelect. NextSelect can offer the business a discount on the use of the software until a certain time from where on they will be paying more to make up for their discount in the start of the contract. For certain industries NextSelect considers producing standard start-up packages as well that can be used generically in this industry for a compelling price. This is based on the relational marketing approach.

The changes required from the current business model towards the desired business model are summarized graphically in Figure 10 on the next page, the changes required are marked with a (*) and written in bold. In chapter 5 these changes will be discussed in more detail.

The business model in its current and desired state (according to decisions made by NextSelect, the results from the empirical study and theory) has been presented, tested and validated. After implementation of the "software framework" the business model can also be implemented and from there on periodically evaluated. Chapter 5 presents the discussion and conclusion of this thesis in which the key findings, limitation, directions for future research, practical implications and recommendations for NextSelect are presented.

Business Model Canvas

Key Partners
Used for:
- Customer acquistion
- Word-of-mouth advertisement

* Formal contracts for partnerships

Key Activities
Mapping of the business processes
Programming/development of the software
Support/maintenance on customer software

* Continuous development of the "software framework"

* More focus on customer acquisition
* More marketing (exhibitions/social media)
* Training and consultancy for customers
* Relationship management

* Business model monitoring/evaluation and development

Key Resources
Human capital (skilled/experienced workforce)
Knowledge base (experience in the field from 2002 and onwards)

* "Software framework" for high quality and fast development

Value Proposition
Functional, reliable and easy to use customized software

Software runs on servers owned by NextSelect in most cases

Training with the software is available for customers if required

* Customers no longer owner of the software

* More comprehensive value proposition (training/consultancy, business process optimization)

* More customer involvement in the development

Customer Relationships
Strive for relations based on a "friendly" level and intended as long-term relationships.

* Flexibility is very important in the relationships
* Customer is involved in the creation, co-creation

* Incentive programms for customers are employed

Channels
Channels used:
- Telephone
- Email
- Face-to-face contact

The channels of partners are used for customer acquisition and word-of-mouth advertisement

* Website, social media, customer portal are added to the used channels

Customer Segments
One customer segment:
Customers that require business process software (either customized or standard packages)

Cost Structure
Most important costs are labor costs (mapping / development / programming)

A value-driven cost-structure is employed

* Development costs for the "software framework"
* Development/evaluation costs for the business model

Revenue Streams
* Focus on recurring revenue streams (per user per month is primary strategy)
* Flexibility and negotiations are important to help customers being able to use the software and pay for it
* Price per user per month within 100-150 euro's, different user groups and user ranges are used

Figure 10: Current business model and the required changes (* and bold) towards the desired business model

5. Discussion & conclusion

This chapter concludes this research with the most important findings from the empirical research, the answer to the main research question, the practical implications, recommendations and future research directions.

5.1 Key findings

The main research question presented in this master thesis was:

"How can NextSelect create and capture value by taking a customer-driven perspective?"

NextSelect can do this by changing their current business model towards the presented desired business model. These changes are primarily in the customer relationships block, the revenue streams block and the value proposition, which affect some other blocks as well. The customer driven approach has been useful to find a business model from the customers' point of view, and should therefore be attractive since it has mostly been constructed to their needs/requirements and wishes.

The most interesting findings from the empirical research (87 respondents) were the price level (100-150 euro's per user per month). The price level could not represent a too low image (Albert Heijn versus Aldi) but also not be too high. In order to compete with standardized packaged software suppliers the price had to be leveled. Furthermore the found pricing strategies (installment based payments and lump sum payments) that were considered to be most suitable were uncovered. It was found from the empirical results that the flexibility NextSelect can offer is very important. Every customer is different, therefore offering several installment based payment policies is important. Monthly payments based on the per user per month terms, increasing monthly payments and decreasing monthly payments are also available options. In some cases a one-time full payment or combinations of payment terms will also be considered, depending on for example the attractiveness of the customer and the size of NextSelect's customer base. Negotiations on payment terms are possible since NextSelect wants to help customers in financing for the use of the software. However recurring / non-variable revenue streams are important to ensure the continuity of NextSelect, in the desired business model the continuity of the firm may never be at stake. For the relationships kept with customers it was found that the assumption for the need of long-term contracts was validated with close involvement of the customer in the development process of the software solution. The value proposition should be attractive as well; therefore the product has to be of a high quality, usability and security, which will be ensured by the use of the "software framework", also making the development faster. More focus will have to be on customer acquisition and making formal contracts with partners. The customer portal should also be developed for interaction with the customer and knowledge gathering. The website and social media should be put more into play for raising awareness and attracting customers. To attract and keep customers and the word of mouth effect incentive programs should be used for the customers (discounts for example). If NextSelect can incorporate these changes in their current business model, they can better create and capture value in theory. Practice will show if it works in the real world. A continuous monitoring/evaluation of the business model is a very important activity for NextSelect too, to ensure the fit between the company and its environment.

Customers had a specific and important role in this research; potential customers were used to find out how the business model configuration should be according to them. Integrated with the views that NextSelect has a decision on the final configuration that best serves the customer and NextSelect could be made. How the business model will work in practice is what has to be found out after implementation. The evaluation of the business model was out of the scope of this research, due to the fact that the "software framework", which is essential to be fully developed first, is not finished yet.

The main research question has been answered by providing the changes and additions required to the current business model configuration to come to the desired business model for NextSelect. In practice NextSelect will find out if the business model is a good fit or that changes are required, this can never be predicted in advance. However, monitoring and evaluating the business model is at all times important and will be done periodically. The world is an ever changing place and therefore so should business models.

5.2   Limitations

The empirical research consisted only of companies that already have business process software in use and therefore does not give information about the wishes and requirements of companies that do not have business process software. For this research it was important knowing how companies experience their current software, what they pay, how they pay and what business model part they would prefer in a different way. Also almost fifty percent of the respondents are small companies (0-10 employees) which must also be considered in the analysis of the results. Due to the fact that high capital investment is required for customized business process software, the assumption was taken that small companies are in general less attractive. Medium and large firms were a minority compared to the small and extra-large firms and are therefore less reliable. Also we took a certain perspective to the business model framework and the building blocks of business models, there are other models available that could have had a different context and configuration. Moreover, there is no consensus on the topic of business models yet, providing different ways and paths of looking at it. In some models for example strategy is included in the business model, in this research we pleated for a difference between strategy and business models. The customer development method was proven to have success with the business model components/framework of Osterwalder et al (2005) which was the main reason for using it, other ways of validating or performing customer research could have had a different outcome.

5.3   Future research

In the future it could be interesting for NextSelect, to adapt the used interview to also find out from companies that do not have business process software what their needs and requirements are, if they already know those. Since for companies that do not have software for their business processes yet, it could be hard to identify their wishes and needs on their own without the required knowledge. This could give biased results; therefore only used respondents that have knowledge and experience with business process software were used in this research, which was needed for the business model to be validated. Also for a future research the number of respondents might be increased and preferably a more leveled spread of firm size.

5.4 Practical implications

For the business model to work and keep working, NextSelect must keep track of changes in the environment, industry and customer wishes. A business model has to be adjusted and updated periodically in order to remain a good representation of the 'reality'. For the partnerships formal contracts must be created by NextSelect. The customer driven approach means that NextSelect should involve the customer (or the customer's view) in its decisions and choices to best fit to their needs/wishes and requirements, to do so the customer portal with CRM should be implemented. The empirical research used the customer driven perspective in this thesis, by using the customer in the development of the business model. Feedback and recommendations from customers can and should be used in the future by NextSelect as to best stay connected to the customer wishes and keep the customer focus in their business affairs.

5.5 Recommendations

It is recommended that NextSelect will implement the business model as soon as the "software framework" is completed and that it is evaluated periodically to ensure its attractiveness to customers and the fit with their needs and wishes and keep a competitive advantage compared to the other parties in this industry of business process software. As NextSelect grows a team hierarchy is advised to be used, as to divide the workload, the owner cannot handle all projects in the future with a large customer base. Formal contracts are recommended to be produced to best manage the partnerships with companies such as MASER. A customer portal is recommended to be used for the interaction with customers; also it gives customers an overview / clear insight in the actions and processes with NextSelect and their own software solution. Customer relationship management (can be integrated with the customer portal) is useful especially when the customer base is growing out from the few customer relations that can now be handled without ICT support. Customers can and are useful in the future for more than just selling software, feedback, recommendations, word-of-mouth effect and using their channels are some examples of their usefulness, which also became apparent from the customer-driven approach taken in this thesis.

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Appendix A – The Questionnaire

For the University of Twente, I am conducting a research focusing on Business to Business customer perspectives on several topics concerning software solutions supporting business processes (excluding financial software packages). It would be great if you are willing to help me with my research. I am trying to find the differences between customized (tailored) software solutions and standard (configurable) packages (Like SAP) and how well they fulfill to the customer needs. If you are willing to participate in my research please fill in the questions as honest as possible.

The information gathered from this questionnaire will be handled with care and confidentiality. If you can fill in this questionnaire, it would help my research a lot. Thanks in advance for your time.

Software product/service:

3) How many employees are working at your company?
   a. 0-10
   b. 10-25
   c. 25-50
   d. 50+
4) How many standard (sometimes configurable) software solutions does your company have in use?
   a. 0
   b. 1
   c. 2-5
   d. 5+
5) How many customized (tailored) software solutions does your company have in use?
   a. 0
   b. 1
   c. 2-5
   d. 5+

For the next questions please choose the largest and most influential software solution for the core-processes of your company, if there are more that co-operate as one, please see this as one package.

6) What kind of software solution did you choose for the remaining questions?
   a. Customized (tailored) software solution
   b. Standard (sometimes configurable) software solution
   c. A mix between customized (tailored) and standard (sometimes configurable) software solutions.
7) The software solution matches your business processes
   a. Strongly agree
   b. Agree
   c. Neutral
   d. Disagree
   e. Strongly disagree
8) How much does this software solution support the core processes?
   a. 0-20%
   b. 20-50%
   c. 50-80%
   d. 80-100%
9) How many other software solutions support the remaining percentages of support for the core processes?

 a. 0

 b. 1

 c. 2

 d. 3+

10) Is the software solution for the whole company or just a part / department?

 a. Whole company

 b. A part/department

11) How many users does the software solution have?

 a. 0-10

 b. 10-25

 c. 25-50

 d. 50+

12) Did your company have to change/adapt business processes to the software solution?

 a. Yes (continue to question 12)

 b. No (continue to question 13)

13) These changes resulted in a positive effect on the business processes

 a. Strongly agree

 b. Agree

 c. Neutral

 d. Disagree

 e. Strongly disagree

14) The software solution that is currently in use satisfies the business process needs

 a. Strongly agree

 b. Agree

 c. Neutral

 d. Disagree

 e. Strongly disagree

15) Is there a need for (new) business process software within your company?

 a. Yes

 b. No

16) What kind of business process software do you prefer?

 a. Customized software solution

 b. Standard software package

 c. No preference

17) How would you rate the following attributes of business process software in importance?

 a. Reliability (The correctness and well-functioning of the software, up-time)

  i. Very important

  ii. Important

  iii. Neutral

  iv. Not important

  v. Very unimportant

 b. Usability (the ease of use and of training the end users of the system, sub qualities: learnability, efficiency, helpfulness, control)

  a. Very important

  b. Important

  c. Neutral

  d. Not important

      e.   Very unimportant

  c.   Security (a measure of system's ability to resist unauthorized attempts at usage or behavior modification, while still providing service to legitimate users)

      a.   Very important
      b.   Important
      c.   Neutral
      d.   Not important
      e.   Very unimportant

  d.   Price

      a.   Very important
      b.   Important
      c.   Neutral
      d.   Not important
      e.   Very unimportant

18) The functionality (reliability, usability, security) of the software solution is more important than the price

  a.   Strongly agree
  b.   Agree
  c.   Neutral
  d.   Disagree
  e.   Strongly disagree

19) The company's current software solution satisfies the following attributes:

  a.   Reliability (The correctness and well-functioning of the software, up-time)

      a.   Strongly agree
      b.   Agree
      c.   Neutral
      d.   Disagree
      e.   Strongly disagree

  b.   Usability (the ease of use and of training the end users of the system, sub qualities: learnability, efficiency, helpfulness, control)

      a.   Strongly agree
      b.   Agree
      c.   Neutral
      d.   Disagree
      e.   Strongly disagree

  c.   Security (a measure of system's ability to resist unauthorized attempts at usage or behavior modification, while still providing service to legitimate users)

      a.   Strongly agree
      b.   Agree
      c.   Neutral
      d.   Disagree
      e.   Strongly disagree

  d.   Price

      a.   Strongly agree
      b.   Agree
      c.   Neutral
      d.   Disagree

e.   Strongly disagree

Buyer-supplier relationships:

20) What kind of relationship do you have with your current software supplier?
    a.   3-5 years with close involvement in the software development
    b.   3-5 years with as less involvement in the software development as possible
    c.   0-2 years with close involvement in the software development
    d.   0-2 years with as less involvement in the software development as possible
    e.   Other, namely ....
21) You are satisfied by the relationship kept with the current software supplier
    a.   Strongly agree
    b.   Agree
    c.   Neutral
    d.   Disagree
    e.   Strongly disagree
22) What is the reason for dissatisfaction?
    a.   The term of the relationship
    b.   No involvement in the development
    c.   Too much involvement in the development
    d.   The price for the software
    e.   The quality of the software
    f.   Other, namely ....
23) What kind of relationship do you prefer?
    a.   3-5 years with close involvement in the software development
    b.   3-5 years with as less involvement in the software development as possible
    c.   0-2 years with close involvement in the software development
    d.   0-2 years with as less involvement in the software development as possible
    e.   Other, namely ....
24) You prefer a collaborative and intensive relationship over a just business and distant relationship
    a.   Strongly agree
    b.   Agree
    c.   Neutral
    d.   Disagree
    e.   Strongly disagree
25) Receiving high-quality customer service from the software supplier is important
    a.   Strongly agree
    b.   Agree
    c.   Neutral
    d.   Disagree
    e.   Strongly disagree
26) A strong reliability (Ability to perform the promised service dependably and accurately) of a software
    supplier is very important
    a.   Strongly agree
    b.   Agree
    c.   Neutral
    d.   Disagree
    e.   Strongly disagree

27) The fast responsiveness (Willingness to help customers and provide prompt services) of a software supplier is very important
    a. Strongly agree
    b. Agree
    c. Neutral
    d. Disagree
    e. Strongly disagree

28) The assurance (Knowledge and courtesy of employees and their ability to convey trust and confidence) of a software supplier is very important
    a. Strongly agree
    b. Agree
    c. Neutral
    d. Disagree
    e. Strongly disagree

29) The reliability of the software supplier is more important than their fast responsiveness
    a. Strongly agree
    b. Agree
    c. Neutral
    d. Disagree
    e. Strongly disagree

30) The assurance of the software supplier is more important than their fast responsiveness
    a. Strongly agree
    b. Agree
    c. Neutral
    d. Disagree
    e. Strongly disagree

31) The reliability of the software supplier is more important than the assurance of the software supplier
    a. Strongly agree
    b. Agree
    c. Neutral
    d. Disagree
    e. Strongly disagree

Financial aspects: please answer the following mix of trade-off and closed questions.

32) What pricing strategy is used by the current software supplier? (more than one answer is allowed)
    a. Fixed sum (one-time payment for the software solution)
    b. Per user per month payment
    c. License and service costs
    d. Usage based pricing (pay for the real usage of the software)
    e. Periodic fixed price (spread payments for the software solution)
    f. Other, namely ......

33) What does the current business process software cost per year?
    a. 0-5.000 euro's per year
    b. 5.000-10.000 euro's per year
    c. 10.000-30.000 euro's per year
    d. 30.000-50.000 euro's per year
    e. 50.000-100.000 euro's per year

f.   100.000 euro's per year or more

34) What kind of pricing mechanisms do you prefer if you had the following options?
   a.   A pre-calculated fixed price per month (every month the same amount is paid)
   b.   A per month calculated fluctuating priced (every month the amount is calculated based on usage)
   c.   A one-time full payment

35) Would you prefer a price per user per month over a usage based price (pay for what you use)?
   a.   Yes
   b.   No

36) How much would you value customized software per user per month in Euro's approximately? (Including maintenance and support)?
   a.   0-50
   b.   50-100
   c.   100-150
   d.   150-200
   e.   200+
   f.   Other, namely...

37) A good functioning relationship with the software supplier is valued higher than the price that has to be paid for the business process software
   a.   Strongly agree
   b.   Agree
   c.   Neutral
   d.   Disagree
   e.   Strongly disagree

Appendix B – The taxonomy of the business model concept

BM facets	BM classes	Brief description	Representative literature
V⁴ BM dimensions	(1) Value proposition	A way that demonstrates the business logic of creating value for customers and/or to each party involved through offering products and services that satisfy the needs of their target segments.	Amit & Zott (2001), Petrovic et al. (2001), Magretta (2002), Osterwalder et al. (2005).
	(2) Value architecture	An architecture for the organization including its technological architecture and organizational infrastructure that allows the provisioning of products and services in addition to information flows.	Timmers (1998), Venkatraman & Henderson (1998).
	(3) Value network	A way in which an organization enables transactions through coordination and collaboration among parties and multiple companies.	Amit & Zott (2001), Gordijn & Akkermans (2001), Bouwman (2002).
	(4) Value finance	A way in which organizations manage issues related to costing, pricing, and revenue breakdown to sustain and improve its creation of revenue.	Timmers (1998), Linder & Cantrell (2000), Rappa (2008).
Modeling principles	(5) Conceptual	A conceptual tool, an abstraction and a blueprint of the existing business and/or the future planned business.	Stähler (2002), Osterwalder et al. (2005), Haaker et al. (2006).
	(6) Multi-level	A way of designing, analyzing and evaluating different units or levels within organizations such as products and services, business unit, an organization, or even a network of organizations.	Magretta (2002), Kallio et al. (2006), Al-Debei et al. (2008a, b), Bouwman et al. (2008).
	(7) Dynamic	A dynamic concept as the BM configurations and design change over time reflecting internal and external variations.	Hedman & Kalling (2003), MacInnes (2005), Al-Debei et al. (2008a).
	(8) Granular	A grainy controllable way of designing and evaluating business as the concept is subdivided into manageable elements.	Gordijn & Akkermans (2001), Osterwalder et al. (2005), Shafer et al. (2005).
	(9) Coherent	A comprehensive way of depicting a particular business entirely taking into consideration the interlinks between its different aspects.	Chesbrough & Rosenbloom (2002), Al-Debei & Fitzgerald (2010).
BM reach	(10) Intermediate layer	An interface or a theoretical intermediate layer between the business strategy and the ICT-enabled business processes. Nevertheless, it intersects with both: strategy and ICT-enabled business processes. The BM intersection with strategy represents a set of organization's strategic-oriented choices for business establishment and management, while its intersection with processes signifies a set of business implementation practices and functions.	Leem et al. (2004), Morris et al. (2005), Shafer et al. (2005), Kallio et al. (2006), Rajala & Westerlund (2007), Al-Debei et al. (2008a).
BM Functions	(11) Alignment instrument	A theoretical tool of alignment providing a crucial instrument (i.e. bridge) for improving harmonization and consistency among strategy and business process including their supportive information systems.	Campanovo & Pigneur (2003), Osterwalder et al. (2005), Al-Debei et al. (2008a).
	(12) Interceding framework	A mediating construct or framework that connects technological potentials and innovations with the realization of economic value and the achievement of strategic outcomes.	Chesbrough & Rosenbloom (2002), Kamoun (2008), Al-Debei & Fitzgerald (2010).
	(13) Knowledge capital	An intangible and tactical information/knowledge asset useful in supporting strategic decision-making functions, and thus valuable in providing the organization with an enduring competitive advantage.	Venkatraman & Henderson (1998), Al-Debei et al. (2008a, b).

Table 6: The hierarchical taxonomy of the business model concept, extracted from (Al-Debei & Avison, 2010)