

in the Management and Economics of Innovation Programme

Viktor Skargren

Department of Technology Management and Economics
Division of Innovation Engineering and Management
CHALMERS UNIVERSITY OF TECHNOLOGY
Göteborg, Sweden, 2013
Report No. E 2013:084

MASTER'S THESIS E 2013:084

Business model experimentation in established companies

Identifying new service business models at SCA Hygiene Products

PÄR JOHANSSON
VIKTOR SKARGREN

Tutor, Chalmers: Magnus Holmén
Tutor, company: Johan Feltner, Henrik Carlén &
Bengt Järrehult

Department of Technology Management and Economics
Division of Innovation Engineering and Management
CHALMERS UNIVERSITY OF TECHNOLOGY
Göteborg, Sweden 2013

Business model experimentation in established companies
Pär Johansson & Viktor Skargren

© Pär Johansson & Viktor Skargren, 2013

Master's Thesis E 2013: 084

Department of Technology Management and Economics
Division of Innovation Engineering and Management
Chalmers University of Technology
SE-412 96 Göteborg, Sweden
Telephone: + 46 (0)31-772 1000

Chalmers Reproservice
Göteborg, Sweden 2013

Abstract

The globalization has created a business environment where firms experience a significantly higher pace of change. Further, the increasing changes in the environment drive the need for continuous introduction of new innovations. Therefore, it is considered to be important for established firms to test and experiment efficiently with new business models in a structured way, to maintain a competitive advantage on the market.

The purpose of this master thesis is to identify and develop opportunities for innovative service business models, scalable and profitable, within the Global Incontinence Category at SCA Hygiene Products. These should be provided towards nursing homes in the market for professional elderly care. In addition, the aim is to develop a process model that allows established firms to test and experiment with new business models in an efficient and structured way. Finally, the intention is to contribute to the discussion about the role of capabilities and users in connection to the creation of new business models.

The developed process model is based on theory from the literature study. The first phase in the process model maps the internal conditions of the firm, the second phase is external and influenced by Blank and Dorf's (2012) customer development method, and the third final phase is an assessment phase where it is analyzed whether the firm can profit from the proposed business model. The process model is applied in a qualitative case study carried out at SCA Hygiene Products, where the data collection mainly involved 13 internal and 25 external interviews.

The findings led to the creation of a service business model for an education service, aimed towards nursing homes. The education service was customized according to the users' identified problems and needs, and the result was a suggested education program with a mix of e-learning and personal education.

The proposed business model has not yet been implemented, but based on present knowledge and the used theory, it is concluded to be innovative, profitable and scalable. The main benefit with the developed process model was concluded to be the combination of a cost-efficient method that consider the internal conditions, while also incorporating an external element where users are involved and creativity is spurred.

Acknowledgements

This master thesis was conducted during the spring of 2013 within the master program of Management and Economics of Innovation at Chalmers University of Technology. The thesis was conducted on behalf of SCA Hygiene Products AB, in Mölndal, Sweden.

We would like to thank our tutors Johan Feltner, Henrik Carlén and Doctor Bengt Järrehult for their help and support throughout the thesis. We especially thank Johan Feltner for sharing his ideas and knowledge on the area throughout the process, Henrik Carlén for his unwavering support in all matters, and Doctor Bengt for his good spirit and knowledge on the innovation area. We have learned a great deal from all of our tutors and consider ourselves lucky to have had the opportunity to get to know all three of them. Finally, we would also like to thank everyone at SCA that took part in our internal interviews.

Last but not least, we would like to thank our tutor at Chalmers, Professor Magnus Holmén, for his guidance and help during our thesis.

Göteborg, 2013-06-17

Pär Johansson & Viktor Skargren

Table of Contents

1. Introduction	1
1.1 Purpose & aim	3
1.2 Academic contribution	3
1.3 Report outline	4
2. Theory	5
2.1 Business model canvas	5
2.1.1 Right-hand side	6
2.1.2 Left-hand side	7
2.1.3 Financial aspect	8
2.2 Customer development	8
2.2.1 Phase 1: State hypotheses	10
2.2.2 Phase 2: Test the problem hypothesis	11
2.2.3 Phase 3: Test the solution hypothesis	13
2.2.4 Phase 4: Verify or pivot	14
2.3 Innovation and innovativeness	15
2.3.1 Source of innovations	16
2.4 Profiting from innovation	16
2.5 Core capabilities and resource based theory	17
2.5.1 Resource based theory	18
2.6 Resource dependency theory	19
2.7 Services	19
2.8 Creation of business models	21
2.9 Summary	22
3. Methodology	23
3.1 The research design/strategy	23
3.2 Research process	23
3.3 Research method and data collection	25
3.3.1 Internal semi-structured interviews	25
3.3.2 External Semi-structured interviews	26
3.3.3 External structured interviews	26
3.4 Research validity	27
3.5 Delimitations	28

4. The case company: SCA Hygiene Products.....	29
4.1 TENA Solutions	29
4.1.1 Content of TENA Solutions program	30
4.1.2 Purchase process	30
5. The process model.....	32
5.1 Step 1: Internal conditions mapping	32
5.1.1 Resources & activities	33
5.1.2 Capabilities	34
5.1.3 Resource dependency.....	34
5.1.4 Service opportunities	35
5.2 Step 2: External experimentation and testing	35
5.3 Step 3: Business model assessment	36
5.3.1 Potential to profit from the business model	37
5.3.2 Consequences of resources and capabilities.....	37
5.3.3 Implications for current business and customer	38
6. The study: applying the process model	39
6.1 Step 1: Internal conditions mapping	39
6.1.1 Interview insights on TENA Solutions	39
6.1.2 Internal conditions.....	40
6.2 Step 2: External experimentation and testing	45
6.2.1 State hypotheses	45
6.2.2 Test problem hypotheses.....	46
6.2.3 Test the solution	55
6.2.4 Verify or pivot.....	62
6.3 Step 3: Business model assessment	64
6.3.1 Potential to profit from the business model.....	65
6.3.2 Consequences of resources and capabilities.....	66
6.3.3 Implications for current business and customers.....	67
7. Analysis	68
8. Discussion.....	72
9. Conclusions	78
10. References.....	80
Appendix A.....	83
Appendix B.....	84

Appendix C	86
Appendix D.....	88
Appendix E	89

1. Introduction

The globalization has created a business environment where firms experience a significantly higher pace of change. Grant argue that the increasingly volatile environment effect customers' needs and desires, resulting in more rapid changes in customer preferences (Grant, 1991). The increasing changes in the environment drive the need for continuous introduction of new innovations with a mix of different character such as radical and incremental, in order for companies to sustain their competitive advantage and continue to capture value (Garcia & Calantone, 2002). A common area of interest where many companies aim to develop their business today is within service innovation and business model innovation. Some of the reasons are that the pure service sector represents three quarters of the developed world's economy and it has been identified that some "traditional" manufacturing firms have managed to generate over fifty percent of their revenues from services (Neely and Visnjic, 2011).

Another effect of the changing environment is that companies often are presented with shorter lifecycles for innovations. This creates a higher pressure for managers and entrepreneurs to assess and identify new opportunities faster than before, which has led to an increasingly complex environment with higher time constraints and faster technology changes. The complexity is a result of an increasing set of choices and opportunities. As a result, managers might struggle with understanding how business models work and creates value (Osterwalder, 2004). However, it is not always a problem for the entrepreneur or manager to grasp the overall understanding of a potential business opportunity. Instead it can be an issue of how to share insights and interdependence of a business opportunity with stakeholders (Linder & Cantrell, 2000). A response to this is the concept of business models that has become very popular among academics and widely applied as a tool in firms (Osterwalder, 2004).

Business models allow managers to gain a better overview of existing opportunities, the value they can create for customers and how much value the firm can capture. In order to do so it presents key components of a business model, their relation and the overall logic of earnings. Thereby, the business model concept enables the user to structure and share the understanding of the key elements of business ideas (Osterwalder, 2004). An important observation, made by Chesbrough & Rosenbloom (2002), is that the acts of identifying and executing new business models are of an entrepreneurial character. In line with this, a broad understanding among many authors is that the creation of new business models require both experimentation and testing (Gunther & McGrath, 2009; Brink & Holmén, 2009; Neely and Visnjic, 2011, Chesbrough & Rosenbloom, 2002; Björkdahl & Holmén 2013; Murray & Tripsas, 2004). Harper (2003) and Gunther & McGrath (2009) argue that this is best done via hypothesis driven theory testing. This comprehends stating hypothesis on potential problems, needs and solutions based on the present knowledge (Harper, 2003). The reason is that even if trends and problems are known in advance, it is hard to foresee the best way to capture value from these (Gunther McGrath, 2009).

The customer development method is a method that uses hypothesis driven theory testing as a basis for testing and experimenting with new business ideas. The method was developed by Blank & Dorf to provide a structured approach that allows entrepreneurs to experiment and test with business models by using the business model canvas created by Alexander Osterwalder (Blank & Dorf, 2012). Utilizing a structured approach has been identified by several authors to be of great importance

when experimenting with business models. Moreover, an important perspective in the customer development method is that it includes customers in the testing and experimentation process. This approach is supported by Gunther & McGrath (2009) along with other authors, whom state that customers have to be part of business model development (Drucker, 1985; Sawney et al., 2004; Neely and Visnjic, 2011). The reason is that the customer perspective is perceived to be left out too often, leading to that companies fail to capture value with new business models (Gunther & McGrath, 2009). Additionally, it is not only important to understand the customer needs but also to gain an understanding of the business environment of the customer (Neely and Visnjic, 2011). Once the business environment is understood, it is easier to identify who the benefiter is, who often is the originator of many innovations (von Hippel, 1988; Peter Drucker, 1985; Schilling, 2010).

Even though the customer development method presents a good model for entrepreneurs to test and experiment with new business ideas, established companies have different preconditions. While entrepreneurs often start from a blank sheet of paper, established companies have to consider existing business. The resource based view argues that the resources and capabilities that exist within a company are the foundation of its competitive advantage. Continuing, it states that the competitive advantage create the foundation of the strategy firms' pursue (Grant, 1991). In line with this Prahalad & Hamel (1990) argue that firms' core competences are what enable the firms to perform and profit from its innovations. Brink & Holmén (2009) goes further and identifies that the creation of new business models are dependent upon existing resources and capabilities. As an effect existing resources and capabilities needs to be taken into consideration when testing and experimenting with new business models. However, as recognized by Moran & Ghoshal (1999), established companies do not have abundant resources and the capabilities are often underused. As a result firms have to be careful in how resources are allocated, which opportunities are acted upon and the extent of experimentation.

To summarize, there is a need for established companies to test and experiment with business models in a structured manner that both consider internal conditions and external customer preferences. This is of interest since Björkdahl & Holmén (2013) has recognized that there is a shortage of research concerning how to test and experiment efficiently. Moreover, they conclude that the role of customers and capabilities is unclear in relation to development of new business models.

This thesis is carried out at SCA Hygiene Products, one of the world's largest manufacturers of hygiene products such as incontinence products (TENA), baby diapers (Libero), tissues (Tork) and feminine care products (Libresse). SCA has managed to gain a leading position within the area of incontinence products and the company is in many senses driving the development of new products. However, in the last ten years the market for elderly care has experienced a shift where customer have become more price concerned and less quality oriented. One major contributing factor to this trend is that many products are becoming more commoditized. For example, for TENA incontinence products, within the elderly care market, many producers have reached similar absorption ability and offer products with a good fit. Even though TENA still has a higher product quality, competitors are catching up as some areas have reached a good enough level regarding what customers are willing to pay for. This led to the creation of the "free" service offer, TENA Solutions, which has been a mean to create more value for customers in relation to the products. Although SCA has always been a customer and service focused company TENA Solution was the first service offer created. The TENA

Solutions offer has been successful in helping TENA keep their customers and buy TENA products, and as a consequence it has grown over the years. The problem is that SCA are only able to charge the customers for the products they deliver; not the large value they create through service. With this background, SCA's aim with this master thesis was to investigate the possibilities to start charging for the existing services they provide towards nursing homes in the elderly care industry today, or find new profitable service offers. A more detailed description of the scope is given in the purpose paragraph below.

1.1 Purpose & aim

The purpose of this master thesis is to identify opportunities for innovative service business models within the Global Incontinence Category at SCA Hygiene Products, provided towards nursing homes in the market for professional elderly care. Moreover, the proposed service business model should also be characterized by its ability to be profitable and scalable.

In addition, the aim is to develop a process model that allow established firms to test and experiment with new business models in an efficient and structured way, including both the internal perspective and the customer perspective. The development of the process model aims to draw on the customer development method presented by Blank & Dorf (2012) together with literature that concern how established companies are effected by its internal conditions and how to profit from innovation. Finally, the thesis intends to contribute to the discussion concerning the role of resources, capabilities and customers in the testing and experimentation with new business models.

1.2 Academic contribution

As described earlier, the concept of business models has become increasingly popular due to a number of reasons. The work of developing new business models requires experimentation and testing, but it exist little research concerning how established companies can do this in an efficient manner. As mentioned earlier, the customer development method is a commonly used method among entrepreneurs since it offers a structure for testing and experimenting with new business models. However, the method is built for startups and has not been applied within established firms to a large extent. Therefore it is believed to be of interest to modify and adapt the method so it can be used as a tool in established firms for testing and experimenting with new business models. In contrast to startups, established firms have considerable investments in capabilities, resources and existing customers. Therefore it is of academic interest to develop a process model based on theory that enable firms to efficiently test and experiment with new business models, yet consider the internal conditions. Björkdahl & Holmén (2013) has pointed out that, how existing capabilities and resources affect the creation of new business models, especially in connection to business model innovation, is relatively unknown. Further, how to test and experiment with business models efficiently in established companies, as well as users' role in this process, has not been investigated thoroughly. Therefore, this is identified as an interesting area to discuss, in relation to the outcome and experiences from using the developed process model in our study.

1.3 Report outline

To orientate the reader, a brief outline of the report is presented here. In chapter 5, a process model will be built that allow established firms to experiment with business models. The developed process model consists of three different phases; the first phase maps the internal conditions of the firm, the second phase is external and influenced by Blank and Dorf's (2012) customer development method, and the third final phase is an assessment phase where it is analyzed whether the proposed business model is aligned with the firm's strategy or not. In chapter 6, the process model is applied in a qualitative case study carried out at SCA Hygiene Products, with the purpose of finding an innovative, profitable and scalable business model. The resulting business model is a modern education program that consists of a mix of e-learning and personal education. The resulting business model will then be analyzed in chapter 7 and a discussion about the insights from applying the process model is held in chapter 8. Finally, the conclusions are presented in chapter 9.

2. Theory

This chapter will present the main literature which this thesis has been based on. First, literature within the areas of the Osterwalder business model canvas is introduced followed by the customer development method. The intention is to introduce the reader to the business model canvas since it is used as a fundamental tool in this thesis for the development of business models. Further, the customer development method has been applied as a part of the developed process model, described more thoroughly later on in the report. In addition, literature from a variety of areas is introduced for the development of the process model and to act as a basis for the analysis.

2.1 Business model canvas

According to Osterwalder (2004) the business model concept has grown popular due to changes in the business environment inferred by globalization and information technology. He stresses that this has resulted in faster technology changes with the effect of higher uncertainty, time constraints and complexity. Further Linder and Cantrell (2000) point out that even though many entrepreneurs can manage to maintain an understanding of their business they are rarely able to communicate this in a clear and simple way. Osterwalder (2004) point out that the increasing amount of choices has made the task of managers significantly harder. The business model enables managers to gain a better overview of different choices concerning the demands they create and the opportunities they present. Further, he describes the business model as a means to create a blueprint for the implementation of strategy within an enterprise. Below, the definition for business models, according to Osterwalder (2004, s.15), is introduced in order to give the reader an initial overall understanding.

“A business model is a conceptual tool that contains a set of elements and their relationships and allow expressing a company's logic of earning money. It is a description of the value a company offers to one or several segments of customers and the architecture of the firm and its network of partners for creating, marketing and delivering this value and relationship capital, in order to generate profitable and sustainable revenue streams.”

The business model canvas is compilation of what Osterwalder (2004) found to be the key components in the generation of a general business model. The model is the result of a comprehensive comparative study with the aim to create a general and simple model for generating and sharing business models as a result of the trends mentioned earlier. The model consists of 9 elements that are interlinked among each other consisting of Customer segment, Customer relationship, Channels, Value proposition, Key activities, Key resources, Key partners, cost structure and revenue stream. These can then be grouped together into an internal, external and financial aspect of interest for the purpose of this report. The canvas is illustrated in figure 1 below, while the content and characteristics of each element is described more in detail further on.

with segmenting in order to determine a distinct customer group that allows the business to effectively focus its resources. By displaying the different options it enables the user to create an overview of customers and make conscious choices of whom to serve. When this choice is made a more thorough understanding of the needs and problems can be created. Further, it enables the user to identify which group of customers that is most attracted by the value proposition. (Osterwalder, 2004). Osterwalder (2010) mention that different types of segments that can be considered are mass markets and niche markets.

The Channels element describes how an enterprise interacts and delivers the value proposition to its clients. As the channel is a major means of communication to the client and where interaction occurs it is imperative that a suitable channel is selected. The channel should respond to the way customers prefer to be reached, deliver the value proposition without constraints while done in a cost-effective manner. This opens up for several designs by using either direct or indirect channels or a combination. Apart from that, there are many aspects that need to be considered. Awareness has to be raised meaning that the customer is aware of the offer provided and where it can be purchased. The customer has to be able to evaluate the form an understanding of the value proposition and its benefits. Further purchase, form of delivery and aftersales has to be considered. (Osterwalder, 2010)

The Customer Relationships element characterizes the relationship that the company aims to build with the customer. Considering the customer preference is central to the design of this element, combined with the aim of the value proposition. Additionally costs have to be considered as well as if it exist previous channels that can yield synergies for the business. Types of relationships can vary from active personal interaction with intense communication such as co-creation and personal assistance, in business where it is required. In other segments it can be made up of scarce contact through self-service or automated service (Osterwalder 2010).

2.1.2 Left-hand side

The Left hand side of the canvas is referred to as Infrastructure Management by Osterwalder (2004) and concerns the internal aspects of the business model. It describes how the company a company can create value through the value proposition and what activities that are needed to serve the right hand side of the canvas in a business model. The channels and relationships that aim to connect and communicate with the customer create a demand for internal activities that enables these actions. The left hand side of the canvas is therefore made up out of key activities needed and key resources needed to serve the client. Moreover, consists of key partners that identify partners in terms of suppliers, wholesalers etc. needed to complete the internal capabilities to provide the value proposition. As a whole the left hand side of the canvas specifies capabilities needed their owners, who perform them and how they are interconnected to each other.

The Key resources element outline the assets needed to be able to carry out the activities demanded by the value proposition. Therefore the activities on the right hand side of the canvas forms the resources needed. However it can also map the existing resources in the company and thereby help create an overview of present resources. This knowledge make is possible to identify potential synergies from present resources that can influence the choice of activities on the right hand side of the canvas. The key resources is made up of arrange of different categorize consisting of physical, intellectual, human and financial (Osterwalder 2010).

The Key activities element identifies the actions that have to occur within the company in order to deliver the value proposition. Similar to the key resources the key activities are highly dependent on the relationship and channels. However focus also concerns the composition of the value propositions and the activities it requires such as production, problem solving or platform. By mapping existing activities within the company it can create an overview of potential synergies from existing activities that can be used in the design of channels, relationships and value proposition (Osterwalder 2010).

The Key partnerships element describes partners and suppliers that make up the network needed for your business model. As some of the activities and resources needed to be acquired outside the company it is important to map those whom provide vital part of your business model. This might be the result of different reasons such as non-internal capability, risk reduction or strengthening of position. Osterwalder (2010) divide these into 4 categories consisting of strategic alliances between non competitors, strategic alliance with competitors, joint ventures and buyer supplier relationships.

2.1.3 Financial aspect

The financial aspect is made up of the cost structure and revenue streams and the last of the 9 elements of the business model canvas. They connect to all other elements within the canvas and are therefore formed based on the configuration of the rest of the canvas. The financial aspect concludes the loss and profit-making logic which determines the strength of the business model in comparison to competitors (Osterwalder, 2004).

The cost structure identifies the main cost drivers that the business model results in and the character of these costs, meaning whether they are fixed or variable. Additionally it identifies important aspects as possible economies of scope and scale within the model. The role of the cost structure varies depending on the characteristics of the business model where for example cost focused operation might take great considerations to the cost associated with the value proposition, as value based services focus more on delivering a premium product with as much value possible within reasonable cost (Osterwalder, 2010).

The element of revenue streams embodies the cash flow generated by the business model and therefore highly connected the customer problems or needs met as well as the value created. Pricing mechanisms are central within this element meaning whether it is based on fixed prices, auctioning, market fluctuations or bargaining. Moreover, the character of the transactions is critical, in terms of whether they are reoccurring or non-reoccurring transactions. Together this opens up for a variety of different possible characteristics of the revenue stream that can be based on asset sales, usage fee, subscription licensing etc. (Osterwalder, 2010).

2.2 Customer development

Customer development is a method that was created by Steve Blank and he himself describes it as *“the process to organize the search for a business model”*. The core of the method is that entrepreneurs *“need to get out of the office”* and meet customers in order to understand what they actually want; there are no facts inside the building (Blank and Dorf, 2012). Acquiring a good understanding of what the customer actually wants, combined with an iterative and incremental product development is the key to creating a profitable, scalable and repeatable business model according to Blank and Dorf (2012). For a startup to find this business model, it is a relentless search where its vision and idea are refined along the way together with changes in every aspect of the

business model. The customer development method suggests that the entrepreneur should seek to test a series of hypotheses regarding the potential business model, e.g. who are the customers, product features, scalability etc. (Blank and Dorf, 2012). In summary, the method should therefore be considered as a tool for the entrepreneur to use on his path towards a successful business model, with elements including a lot of customer contact, iterative work with guesses and validation based on formulated hypothesis.

In figure 2 below, an overview of the customer development method is presented. The theory used in this master thesis is mainly related to step 1: Customer Discovery, and therefore this chapter will be mainly focused on that step.

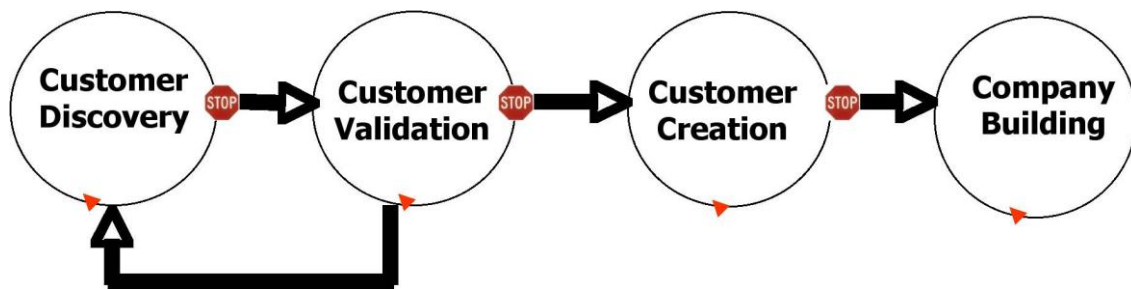


Figure 2: The customer development process

Simply put, the Customer Discovery phase is where the founder's vision is transferred in to a series of business model hypothesis; such as who are the customers, what value should we deliver, what price and cost structure should be used etc. These hypotheses should then be tested on customers in order to either discard them or turn them in to facts (Blank and Dorf, 2012).

The Customer discovery phase is divided in to four different steps; state hypotheses, test problem hypothesis, test the solution and verify or pivot. The different steps are illustrated in figure 3 and further described in the following paragraphs.

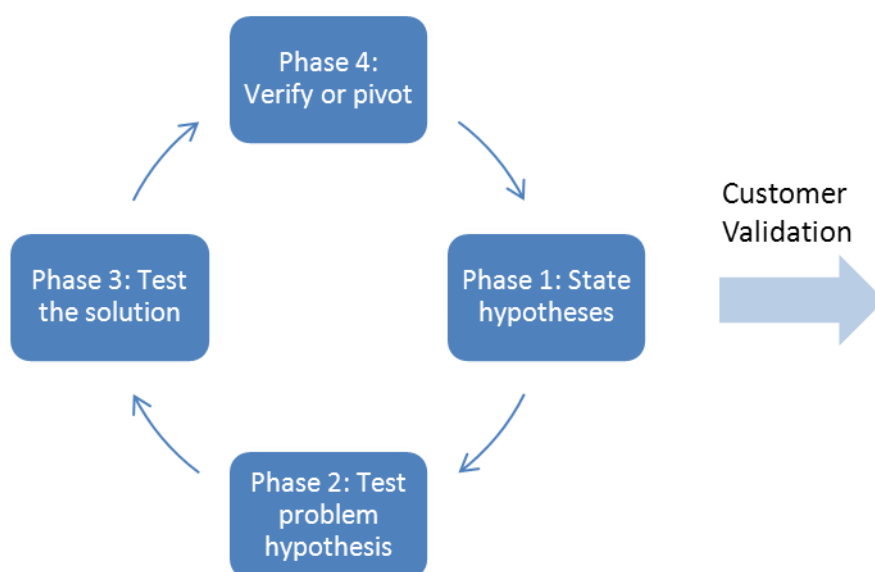


Figure 3: The customer discovery process

2.2.1 Phase 1: State hypotheses

In *phase 1*, the founder's vision is deconstructed into the nine parts of the business model canvas; customers, channels, partners, revenues etc. A list of hypotheses is written about each part of the canvas and also a plan for how the hypotheses will be tested through different experiments; this document is referred to as a "brief". In the following paragraphs, the different areas of the business model that needs to be investigated will be described in turn.

The first step in *phase 1* is to brief about the **market size**, containing hypothesis and experiments. A top-down estimate is a first step where the estimation is based on TAM (total addressable market), SAM (served available market) and finally TM (target market). For startups, a bottom-up estimate is usually more realistic though since entrepreneurs might be seduced by large numbers from research firms that have performed a top-down approach and only focused on the current aspect of the market. The market size hypothesis is tested by talking to customers (Blank and Dorf, 2012).

The next step is creating a hypothesis about the **value proposition**; which is basically the product or service offered to the customers. Details about the product, features and benefits will be detailed here and also a prototype for minimum viable product (MVP). The MVP is a "concise summary of the smallest possible group of features that will work as a stand-alone product while still solving at least the core problem and demonstrating the product's value" (Blank and Dorf, 2012).

Identifying the **customer** and describing their problems, needs and passions is the next step of the process. It is very important to get out of the building and understanding how customers experience their problem and why. Customers can experience their problems in different ways; latent problem (they have a problem but they do not know about it), passive problem (they are aware of the problem, but they are not motivated enough to change), active problem (they recognize a problem or passion, but have not done any serious work to solve it) or a vision (they have an idea, but are prepared to pay for a better one). There are also different types of customers, end-users being the ones that actually use the product, whereas influencers and decision makers influence and make the decision. A deep understanding of the end-users' need and motivation is vital, but since corporations are complex organizations it is most often someone else in the organization who actually makes the buying decision, and also a lot of other people within the organization that can influence the outcome of the buying decision. For these reasons, the entrepreneur must not only focus on the end-user (Blank and Dorf, 2012).

The next part of the canvas that needs hypothesis and investigation is the **channels**. The channels described how the product or service is delivered to the customer. Whether the product or service should be delivered through physical channels or web channels has big impact here. The main question the entrepreneur should ask himself is "does the product fit the channel?" A few examples of physical distribution channels are; direct sales, distributors and retailers. All of these alternatives have different strengths and weaknesses; the indirect channels such as distributors and retailers are indirect and more cost-effective, whereas direct sales is the most expensive alternative but provides the best control and oversight. When it comes to web channels, there are as many different options as for physical channels. E-commerce, mobile-app commerce and social commerce (e.g. facebook, twitter) are well-known web channels. In general, web channels have the benefit that they are accessible to everyone at all times and are more cost-effective than the physical channels. A pre-

requisite for generating sales is however to generate awareness and traffic on the site, a job which falls on the company itself.

The next part of the canvas that needs to be covered is the **customer relationships**. This brief describes how the venture should act in order to *get* in contact with the customers, *keep* them as customers and finally *grow* additional revenue from them over time.

The next part of the canvas that needs to be investigated is the **key resources**, which be divided in to the following categories; physical, financial, human and intellectual property. These resources are external and could be described as critical to the company's success and the draft should include hypothesis about which they are for this particular venture, together with how the venture is planning to acquire them.

Key partners to a startup are the ones providing financing, capabilities, products or services that the startup itself cannot, or do not, prefer to manufacture itself. The partners' hypotheses should contain the names of the essential partners, together with the value exchanged. Types of different partner relations are; strategic alliances, cooperation between competitors, joint development efforts and key supplier relationships (Blank and Dorf, 2012).

The **revenue and pricing** brief is the last piece in the hypothesis puzzle and may well be the toughest one to do at this point. It is however one of the most important since it makes sure that the venture's financial calculations are sane and that a business case actually exists. To break down the procedure, four different questions need to be addressed; 1. How many of these things will we sell?, 2. What is the revenue model?, 3. How much will we charge? And 4. Does this add up to a business worth doing?

Question 1 can be answered by using the market size data calculated in one of the previous steps, along with channel hypothesis and its volume potential and cost of sales. Question 2 can be determined by hypothesizing on different revenue models such as; sales, subscriptions, pay-per-use etc. Question 3 consists of two parts; determining the costs associated with the product; parts, assembly, shipping etc. and also determining how much that can be charged for the product. Lastly, answering question 4 in a precise way is very hard at this stage, but that is not the goal at this step. It is sufficient to do a rough calculation that answers if the revenue covers the costs in the short term, will the revenue grow larger over time and will the profitability increase in proportion to increased revenue? (Blank and Dorf, 2012).

2.2.2 Phase 2: Test the problem hypothesis

The idea with phase 2 is to get the venture team outside the building and start testing the problems and hypothesis that were created in the previous phase, on real potential customers. Questions that need to be answered during this stage are; does the team really understand the customer's problem? Does the customer really care about this particular problem enough that the venture can make a large business out of it? At this stage, the entire business model consists of guesses and hypothesis. The mission now is to turn these hypotheses in to facts by designing experiments that tests these hypotheses and then actually get out of the building and carry out these tests on potential customers (Blank and Dorf, 2012). This iterative process is illustrated in figure 4 below.

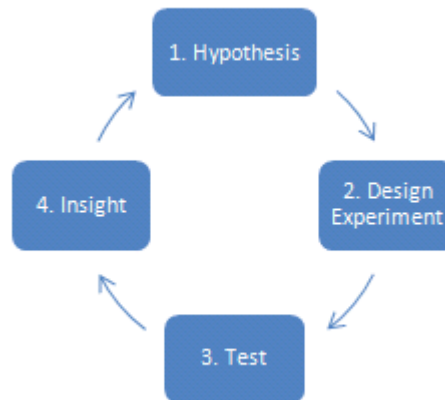


Figure 4: The process of testing problem hypotheses

According to Blank and Dorf (2012), the tests should be short, simple, objective pass/fail tests that give a clear signal if the hypothesis can be confirmed or not. There is no need to put a lot of money and time in building a sophisticated demo or advanced prototype at this stage, instead try to mock up a web-page or just a very simple prototype. The point of the experiments are not simply to collect data and confirm/discard the hypotheses, it is also about looking past the data, understanding the customer and gain insight of what they actually want. Maybe the customer is requesting something entirely different than what the venture is trying to sell?

The general idea of this phase and the meeting with the customers is getting the customers to talk. The company representative is there to listen and understand the needs and problems of the customer. At this stage, there should be a focus on the designed problem hypothesis and discussion with the customer whether they experience these problems or not, or if they perhaps are experiencing any other related problems. Questions such as; “If you have three major problems to solve in this area in the year ahead, what are they and why do they make the top three?” and “we think that these are the top five problems facing the industry in the next years, how would you rank them as they affect your company?” are extremely valuable questions and will make the venture understand if they are going in the right direction and going where the money is or not. It is important to remember that what require testing at this stage are the guessed problems, not the solutions (Blank and Dorf, 2012).

Another aspect of talking to customers is getting a better understanding of the competitive landscape and the overall marketplace. Are there any similar products out there? Has this solution been tried in this company? It is also a good idea to attend some industry trade shows and conferences on the subject in order to get a better understanding of the market (Blank and Dorf, 2021).

After testing the hypotheses on the customer’s problem and gained a good understanding of the customer and their problems it is time to expose the product to the customers for the first time. The purpose with the exposure is not to sell the product, but to receive valuable feedback. This process is described in the next phase, phase 3.

2.2.3 Phase 3: Test the solution hypothesis

The focus of the previous phase was to test the customer *problem*, in this phase the focus is shifted towards testing the customer *solution* for that particular problem. The goal of this phase is basically to test if the solution gets the customer enthusiastic enough to buy the product.

The first step in this phase is to review and update the business model, based on the deeper understanding of customers and their problems gained in the previous phase. The entrepreneur needs to gather as much of the management as possible for this pivot-or-proceed review. Everything that has been learned in the previous phase needs to be shared, discussed and put in to relation to the product. The gathered findings may affect the hypothesis created in phase 1 related to customer segments, value proposition, pricing etc. It is a near-certainty that some of these hypotheses need to be changed and if the change is substantial, it is referred to as a pivot (Blank and Dorf, 2012).

During this pivot-or-proceed meeting all the findings needs to be questioned; how well do the product specifications solve their problems? Spot on? Somewhat? If the answer is “somewhat”, the meeting will focus on understanding if the company have been talking to the wrong customers or if something is wrong with the product. A fundamental aspect of the customer development model is that customer enthusiasm needs to exist. If it has not been found so far; either get out of the building again and try to find a different set of potential customers or think about changing the product features. If, and only if, no customers can be found that genuinely needs and requires the product; discuss changing the feature list. It is also important to remember that the minimum feature set is sought in this phase. Figuring out which features that needs to be included is important, but equally important is figuring out what features do not matter (Blank and Dorf, 2012).

To summarize, this first step needs to conclude if the company has discovered a problem with a large enough market where customers are eager to get this problem solved. The main question is therefore to pivot or proceed? If the proceed options is chosen, it is time to present the potential product solution to customers.

Once agreed on the revised hypothesis, a product solution presentation needs to be built. The solution presentation is a tool for confirming that the product solves a customer problem or need and the preferred outcome is that customers express their will of buying this product when presented. A general rule is that the solution presentation should cover not more than five key product features along with the problems they solve. Even an overview of the “life before the product” and the “life after the product” might be appropriate to further elicit the benefits. However, the purpose is still to find out if the product is sellable; not actually selling the product. Make sure to listen carefully at the customer’s response and leave plenty of room for customer feedback.

A general outline for the solution presentation consists of four parts: i) Review the problem. Remind the audience on what problem the product solves and why it is important. ii) Describe the solution. Demonstrate the product is possible through sketches or prototypes to help the customer to understand. iii) Draw the customer work flow before and after the new product. iv) Understand the value equation. Figure out what the customer is willing to pay for the product. It is very helpful to have a prototype of the MVP to make the discussion more effective. The closer the MVP is to the actual product; the more informed will the customers be. When the solution presentation is finished, decisions need to be made on which customers to visit. A general rule is to try delivering

this presentation to everyone who heard the problem presentation, plus an extra few to make sure that the company is on to something.

The final step of this phase is another pivot-or-proceed point and it is time to update the business model again based on the responses from the solution presentation. Before entering the next phase, the company and its entrepreneurs needs to have seen a significant number of customers expressing enthusiasm for the product and being convinced that it solves an important business problem for a large share of customers. According to Blank and Dorf (2012) “a lukewarm reception can indicate a profound problem”.

2.2.4 Phase 4: Verify or pivot

Phase four is the final phase in the customer discovery process. The overall purpose with this phase is to determine if the hypotheses have been turned in to hard facts and if it is time to proceed with the next stage; customer validation. Figure 5 below describes three critical questions that need to be answered in order to know if the business model is scalable, repeatable and profitable. When these three questions have been analyzed it is time to make the decision whether to pivot or proceed with the current business idea.

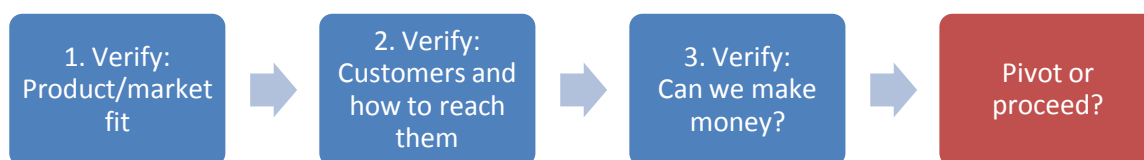


Figure 5: Verify or pivot process

The first question is: “Have we found a product-market fit?” In order to say that a product-market fit exist the problem addressed need to be urgent and vital to lots of customer. The product also needs to solve the problem at a price the customers are willing to pay, and finally there must exist enough customers for it to be a viable business opportunity.

The second question is: “Who are our customers and how do we reach them?” It has already been assured that there are customers that want to buy the product, but it also needs confirmation that the company know how to find them and sell to them within a reasonable marketing budget. To answer the question, it is also vital to know the key customers segments and how to reach them.

The third and final question is: “Can we make money and grow the company?” All the data that has been gathered in terms of pricing, revenue, marketing etc. needs to be analyzed in order to create an accurate net revenue forecast for at least the next year. The calculations do not have to be precise, but serves as a rough check that the company can become a growing profitable business.

As Blank and Dorf (2012) puts it *“this is either the beginning of the end, or more likely the end of the beginning”*. It is now time to assess whether the current business model canvas provide a good foundation for moving forward in to the customer validation phase and testing the business idea on a larger scale. The customer discovery process is an exhausting process and it often requires several iterations to fully understand the market and the customers. If the company is not convinced that

they should proceed with this particular business idea, it is necessary to go back to phase 1 and start over again based on all the insights and knowledge gained from this round (Blank and Dorf, 2012).

2.3 Innovation and innovativeness

According to Garcia & Calantone (2002) much has been written within the topic of innovation and innovativeness. As a consequence the definitions of these terms are many and many related terms have been introduced dealing with the nature of innovations as well as the degree of innovativeness. Therefore Garcia & Calantone (2002, p. 112) introduce a definition of the term innovation according to below, also used in this thesis.

“Innovation is an iterative process initiated by the perception of a new market and/or new service opportunity for a technology based innovation which leads to development production and marketing tasks striving for the commercial success of the invention”

The definition deals with two important aspects of an innovation. First, It characterizes the process as iterative meaning that new continuous improvement is made and second, it describes the process as a combination of technological development and activities concerning market introduction to commercialize the invention. The last is important as it clarifies the meaning of innovation and invention where the latter is the technical achievement and the former include the commercialization and diffusion of the invention (Garcia & Calantone 2002).

For the term innovativeness Garcia & Calantone (2002) conclude that the common use concerns the newness of an innovation. The degree of innovativeness is regarded on a continuum depending on if the newness is regarded as high or low. The judgment of the innovativeness is seen as highly subjective and dependent on what is new and from whose perspective it is viewed. To separate different perspectives the innovativeness is divided into macro and micro perspectives. From the macro perspective, innovativeness concerns the capacity of a new innovation to create a fundamental change in technology or market structure of an industry. From a micro perspective, innovativeness is the capacity of an innovation to change the firm's technological resources, skills, knowledge and/or capabilities. Hence the micro perspective perceives the innovativeness from a firm perspective and its environment while the macro perspective considers an entire industry or a global perspective (Garcia & Calantone 2002).

Other common terms used to distinguish the newness and differentness among new products, services and processes are radical and incremental innovations. Incremental innovations consider products and services that experience minor upgrade in terms of technology and application. Radical innovations are characterized by a very new and different solution or application that can be considered as either new to the world, industry or the firm (Schilling, 2010 p. 50). Garcia & Calantone (2002) point out that this is highly dependent upon whose perspective the innovation is evaluated from. They acknowledge that there are two dimensions consisting of technical and marketing discontinuities related to both a micro and macro perspective. A radical innovation is perceived as a solution new from both a market and technology perspective present on both micro and macro level. Incremental innovations on the other hand, only occur on a micro level either displaying a technological or marketing discontinuity. Further, Garcia & Calantone introduce a third expression, really new innovations, that include the range of innovation present in between the radical and incremental innovations (Garcia & Calantone 2002). The connection is illustrated below to enhance the reader's understanding.

2.3.1 Source of innovations

According to von Hippel (1988) the source of innovations varies, as a difference to the historical belief that product innovations are typically developed by manufacturing firms. He argues that the source of innovations varies from industry to industry where users are the main innovators in some industries while suppliers play a vital role in others. Further, he recognizes that the historical assumption of manufacturers remains true for many industries as well. What determines the source of an innovation is the perceived benefit from it. Von Hippel (1988) argues that this makes the source of innovation predictable in an industry because if one understands who profits from an innovation and how. Hence many innovators are external to the companies and in order to identify potential inventors the benefiter has to be identified. Schilling (2010) also emphasizes that innovations are created by the ones it solves a problem for, to meet their needs. As they both have an incentive and a rich understanding of the problem they are more likely to create innovations.

Peter Drucker (1985) chose to take a somewhat different approach as to the sources of innovation. He acknowledges seven different sources located either externally to a company or internally to a company or industry. The internal sources consist of unexpected occurrences, incongruities, process needs and industry and market change. Unexpected occurrences are merely where opportunities to apply an innovation in an unapparent manner that arises from unexpected events or failures. Another is incongruities in relation to work concerning results and expectations. Process needs relates to bottle necks and gaps that hinder a process from being successful. Industry and market changes are opportunities that arise from change of old structures, methods and process within a market. Moving on, the external sources comprise of demographic changes, change in perception and new knowledge. Demographic changes concern possible innovations in connection to changes in age distribution, education and role of genders that occur constantly. Change in perception refers to opportunities from changes of desires in connection to our mood, values and influences from our environment. Lastly, new knowledge created gives rise to many new combinations or needs to be served. It is important to recognize that the source of innovations varies through time and that most innovations stem from purposeful and conscious search for new innovation opportunities. Drucker (1985) states that innovators must go out and look, ask and listen, as an in-depth analysis of the customers' needs and desires are essential. Inadequate customer analysis leads to unsuccessful innovations. Further, it is important to have in mind that no one can foretell the extent of success for an innovation and that many effective innovations start small (Drucker, 1985).

2.4 Profiting from innovation

In the paper from Teece (1986) he pursues the answer as to how to profit from innovation and what the main elements are that make this possible. He develops a framework consisting of three elements that he argues are of fundamental value in assessing a firm's ability to profit from innovation. The framework consists of appropriability regimes, complementary assets and dominant design paradigm. Appropriability regimes refer to the external factors that have to be taken into consideration that influence the innovators opportunity to capture value from the innovation. These are made up of legal instrument consisting of patents, copyrights and trade secrets. Moreover, the nature of technology comprehends aspects such as products, processes, tacit and codified abilities that make it hard for a competitor to imitate (Teece, 1986). However Björkdahl (2007) argues that patents ability to protect are questionable. Instead he claims that time and effects from learning

curve have a greater influence on appropriation of value. Dominant designs refer to the theory presented by Abernathy & Utterback (1975), it conclude that innovations experience different focuses depending on the era of development it experience. Further, Teece (1986) identify complementary assets as assets other than the sold products that give an advantage to the firm in capturing value. Examples are specialized manufacturing, distribution channels, complementary technologies, marketing etc. The ownership of specialized complementary assets is identified to be essential in who profit from innovation. Similarly, Tripsas (1997) conclude that established firms, that experience technological shifts, are exposed to danger of losing significant market shares to new entrants if complementary assets become obsolete. From this, one understands that access to complementary assets is vital for the introduction of innovations, in determining who profit from them.

2.5 Core capabilities and resource based theory

In order for established companies to maintain a competitive advantage it is essential for them to develop a companywide strategy long term competence building, according to Prahalad & Hamel (1990). It requires the company to set out a road map to identify markets and customers of interest and the technologies that serves those markets. This help the company identify core competences that has to be acquired and/or developed to be able to serve that intention. Core competencies consist of the collective learning in an organization concerning how to coordinate diverse products skills and how to combine different sets of technologies to bring value to the market. An example is Casio's ability to combine its core competences in miniaturization of electronics, materials science, mini process design and ultrathin precision casting in a wide range of electronics products. Hence the presence of core competencies within a diversified corporation can be depicted as the roots of a tree. These enable the company to grow the stem made out of core products, which itself enables a wide range of end products in different business units within the company, illustrated in figure 6 below (Prahalad & Hamel 1990).

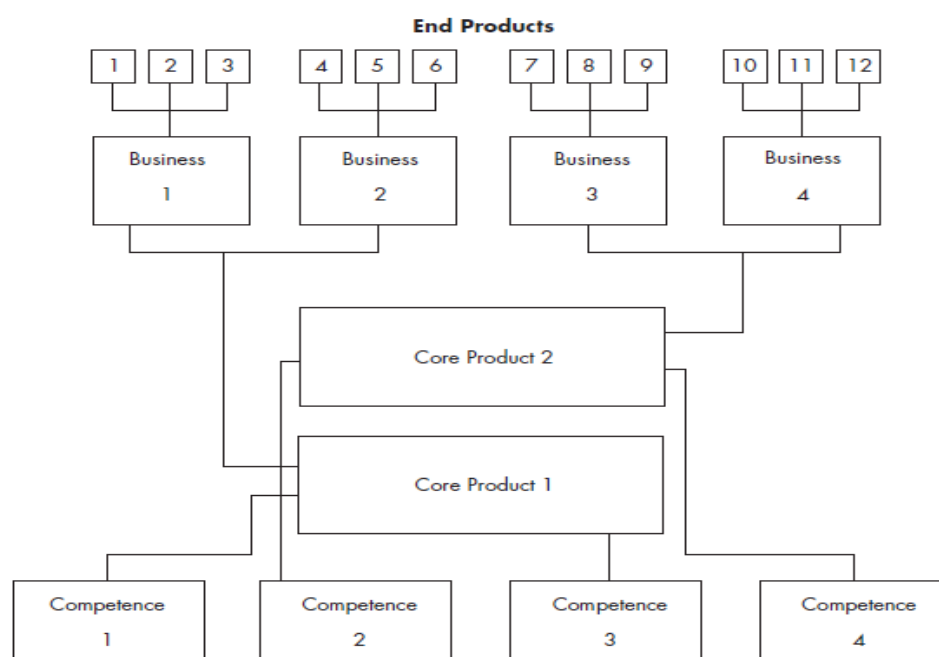


Figure 6: Illustration of the company consisting of core competencies, core products and end products.

Core competencies are further described as the glue that interlinks different units and the driver of new business. They are strengthened and maintained by continuous application and is vital to cultivate continue to enhance them throughout time. According to Prahalad & Hamel (1990) three tests can be applied to identify core competencies within a company. First, a core competence should grant access to a variety of different markets. Second, a core competence should contribute the perceived customer value delivered by the end products. Third, a core competence should be hard to imitate by competitors. An example can be intermingled abilities such as service attitude or integration of technologies. It is important to note that the amount of competencies is likely to be few and not more than five or six (Prahalad & Hamel, 1990).

The core products are what connect the core competencies with the end products and give rise to the final competitive advantage. It is essential that the core competencies can be turned into core products and that the core products are leveraged upon on a wide range of end products within different business units. By leveraging upon core products in many end products they grow better and stronger, where the aim is to gain market leadership. It is not necessarily achieved by brand share but by part of market products. This enables the firm to gain a dominant position within the market and there through shape the evolution of markets and product application. Moreover, by applying a set of core products in a wide range of products in different business units a company can profit from economies of scope and scale (Prahalad & Hamel, 1990).

2.5.1 Resource based theory

A similar reasoning is presented by Grant (1991) who also focuses on the importance of the internal abilities and activities as the source of strategic competitive advantage. The resource based view argues that the internal resources and capability is the foundation of a firm's strategy and the principal source of profit. As a result of the increasingly volatile environment, present in many industries, customers desires and needs change rapidly. Therefore an externally based strategy formulation cannot yield a sustainable competitive advantage. Instead firms have to acquire and develop internal resources and capabilities that allow them to deliver competitive products in accordance with present customer needs. In order to do so, the markets and customers served have to be defined more broadly to include industries where these resources and capabilities might be of interest (Grant, 1991).

The resource based view build its strategy on five consecutive steps following: resource, capabilities, competitive advantage, strategy and resource gap identification. Resources refer to the assets that a firm insert and transforms through their internal processes to create products and services. These consist of physical resources such as equipment, personnel and ranges to intellectual capital consisting of patents, brands and so forth. In total the resources can be divided into six groups consisting financial resources, physical resources, human resources, technological resources, reputation and organizational resources, which can be used as a foundation to identify internal resources (Grant, 1991).

Capability on the other hand is the ability to integrate resources in order to perform activities or create products the yield a competitive advantage (Grant, 1991). Hence the term capabilities reflect the expression core competencies used by Prahalad & Hamel (1990), described earlier. Capabilities does not have to be unique in what they perform, it is rather the relative competitive advantage they

achieve that is important. It is often the intangible capacity of coordinating and cooperating within teams that create capabilities. The complexity of capabilities varies and they are often characterized by economies of experience, meaning improved performance in correlation to application. The competitive advantage they generate is the basis for the creation of the firm's strategy for which resource gaps have to be identified to complement existing resources (Grant, 1991).

2.6 Resource dependency theory

Resources and capabilities are identified as the main drivers of competitive advantages, intended to yield a wide range of products that meet the shifting customer needs in different markets (Grant, 1991; Prahalad & Hamel, 1990). While capabilities are a source of competitive advantage they are also a potential sources of limitation as well as create a risk of core rigidities (Leonard-Barton, 1992). Further it is argued by several authors that firms are highly affected by the external resources of their organizations (Bower Christensen, 1995; Henderson, 2006; Pfeffer & Salancik 1978; Danneels, 2002). Based on this Christensen (1997) argue that the largest and most profitable customers extort power over the organizations ability to bring new technological innovations that serves new customers at lower margin. Further, it might hamper the introduction of new technologies as they might affect the profitability of present customer business. Danneels (2002) and Henderson (2006) present another perspective where the knowledge from market and customer experience becomes capabilities over time. As a result, firms gain profound understanding of the customer needs, distribution and sales channels, preferences and purchasing procedures. Hence firm become dependent upon their customer understanding capabilities and it becomes of interest to serve a particular market and customer group.

2.7 Services

Several theory compilations has been done within the field of service as attempts to delineate an overall understanding of the definition of service and its nature (Edvardsson et al., 2005; Lovelock & Gummesson, 2004; Grönroos, 2004). Edvardsson et al, (2005) conclude that the definitions vary significantly concerning their perspective of a service and that the definition often is too narrow. Common definitions emphasize that services are performances, processes and deeds and not physical objects (Edvardsson et al., 2005). Gummesson (1995) claim that customers buy offerings that renders services and not services or goods by themselves, where focus lies on the value created. However, this thesis makes use of the definition offered by Grönroos (2001, p. x), who defines service *"as an activity or series of activities of a more or less intangible nature that normally, but not necessarily, take place in the interaction between the customer and service employees and/or physical resources or goods and/or systems of the service provider, which are provided as solutions to customer problems"*. It includes four important dimensions from the authors' point of view namely: activities, interaction, including physical products as well as solutions to the customer problems.

Services are commonly described by many authors as characterized by intangibility, heterogeneity, inseparability and perishability. However, as mentioned above the view on this matter differ widely as to whether it is so in general for all services, for some or not characteristics at all (Edvardsson et al., 2005). Since it is commonly used it is deemed necessary to mention that these characteristics are not used to determine the scope of a service within this thesis.

The development of new service offers can be pursued from a variety of different ways. Sawhney et al (2004) propose a framework that emphasize on the importance to have a systematic and

structured way to approach the development of services, especially in product focused companies. To begin, they suggest that the firm have to stop using the terms service and product and instead focus on customer activities and customer outcomes present in the customer environment. Through this, the firm can map the customer primary activity chain, meaning the activities a customer perform to reach a certain outcome. In combination with the service opportunity matrix, firms can identify customer problems and needs that can yield opportunities for potential services offers. The service opportunity matrix present four different alternative approaches that can be used to identify new services opportunities. This done through two dimensions consisting of: *focus of growth* which refers to where growth occurs with focus on primary and adjacent activities to the customer activity chain. Second, *type of growth* which refers to how growth occurs concerning if it is through reconfiguration of existing activities or by adding new activities. As these dimensions are merged into a matrix four dimensions arise consisting of: Temporal expansion, temporal recon figuration, spatial expansion and spatial reconfiguration, illustrated in figure 7 below (Sawhney et al, 2004).

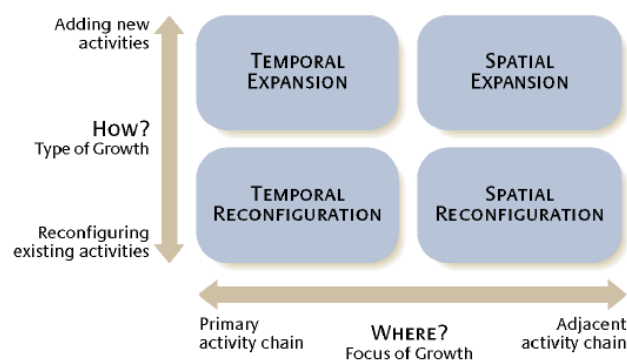


Figure 7: Sawhney's opportunity matrix.

The *Spatial expansion* reflects the adding of new activities to adjacent activity chains. Adjacent activities are often closely related to the primary activity chain. The *spatial reconfiguration* implies a change in structure and control within the adjacent activity chain. These opportunities require that the firm is present within the activity chain and can broaden its scope to take control over closely related activities. The *temporal expansion*, focus on growing the existing activity chain by adding new services to it. This can be done either through filling gaps in the existing chain, extending the chain or by adding support activities to the entire activity chain. The *temporal reconfiguration* concerns an alteration of the structure and control within existing primary activities. It does not add new services, instead it implies that the company takes control of existing services or offers an alternative structure to how they can be performed. Basically, the firm takes control over activities originally performed by the customer. The main arguments for this transition can either be that the firm is better at performing the activities due to existing core competencies. Second, firms can gain economies of scale by serving a large group of customers. Third, knowledge regarding best practice can be provided from industry wide experience (Sawhney et al, 2004).

In order to acknowledge opportunities within the different areas of opportunities Sawney et al. (2004) emphasize that the asking questions is the foundation. By asking questions concerning internal abilities to leverage upon, potential customer opportunities and risk associated, opportunities can be assessed. It is emphasized upon that development should be carried out in

cooperation with potential customers, preferably lead users. They continue by introducing three types of risk associated with introduction and development of new services. First, the internal capabilities have to be considered in terms of whether the service expansion takes the firm outside of the strategic intent and beyond the scope of existing capabilities and resources. Second, external market and customer perspective have to be taken into account. Will the perceived value be enough for customer to adopt the service and will they reach a critical mass in time to meet expected return on investments. Lastly, financial risks have to be considered such as: are the margins high enough? Is the service offer to labor intense to enjoy significant economies of scale? Moreover, service offer has to be considered together with present products offer and potential synergies. Change in competition has to be taken into consideration for present high marginal products together with risk of commoditization (Sawhney et al, 2004).

2.8 Creation of business models

According to Björkdahl & Holmén (2013, p. 2) “a business model innovation is the implementation of business model that is new to the firm” . As described by several authors the concept of business model innovation concerns the creating and capture of value by altering a firm’s business model (Chesborough, 2007; Björkdahl, 2007; Amit & Zott, 2010; Björkdahl & Holmén, 2013). Björkdahl and Holmén (2013) further specify this as consisting of both value creation for customers and users as well as capturing value for the firm. A business model innovation does not concern the creation of new products or service, instead Björkdahl (2009) argue that it may alter the manner in which existing products and services are delivered to the customer and how the firm profits. Björkdahl & Holmén (2013) further support this notion as they conclude that a business model is a new “integrated logic”. They conclude that business model innovation is a new combination of exiting things that may include other types of innovation such as service-, product- or process-innovation. In contrast, Swann (2009) note that some economists perceive business model innovations as a type of process innovation concerned with the internal structure of information flows. Hence, with the service definition presented earlier, one can understand that the delineation between a business model innovation and a service innovation can be somewhat unclear.

The activity of identifying and executing a new or different business model is described as an entrepreneurial act by Chesbrough & Rosenbloom (2002). They argue that this encompass understanding of both markets and technology. Moreover, the business model creates a structure for learning not only about the technology but also the economic environment of its potential application. Björkdahl & Holmén (2013) suggest that business model innovation encompasses ongoing experimentation among and in firms. Focusing more on the aspect of services, Neely & Visnjic (2011) conclude that creation of service business model innovations do not take place in isolation. Instead they argue that the eco-system in which the service is present have to be taken into consideration in order to create and capture value. It is crucial in order to understand how customers do business and for the service provider to be able to design, deliver and present the benefits of the value proposition. In addition, customer interaction is essential to allow co-creation of new service solutions that meet the customer needs. These actions enable the firm to identify capability gaps within the business model, needed to implement it.

Björkdahl & Holmén (2013) recognize that little research has been performed within the area related to how existing capabilities influence and shape the creation and implementation of new business models. One exception is Brink & Holmén (2009) whom argue that existing capabilities are central to

what the firm is able to perform and essential to capture the value it creates. As an effect, the creation of new business model is dependent upon present capabilities, which also limits the scope of new business models. Moran & Ghoshal (1999) acknowledge that the resources of firms are scarce which leads to underused set of capabilities. This creates a situation where firms have to be restrictive in how far opportunities are tested and which opportunities that are acted upon. At the same time Gunther & McGrath (2009) along with others argue that it is important to experiment in the development of new business models due to that business models need to be learned over time. A similar view is held by Murray & Tripsas (2004) whom identify that business models can be used too iterate and experiment with different business concepts, based on customer feedback the business model can be revised and adapted. When experimenting, Gunther & McGrath (2009) also emphasize that the customer has to be taken into consideration when creating new business models. The reason is that their perspectives too often are forgotten and companies fail to combine resource in a manner that captures the full value.

One of the main problems is that even if trends are discovered early it is hard to foresee how to best appropriate on these via business model innovation. To enable companies to make better use of their resources and create new business models, which maximize both value creation and value capture, they propose what they call a discovery driven approach. The discovery driven approach requires the firm to articulate and test the new business models. If it is well received the company can assess whether the opportunity identified can yield a satisfying pay back on investments (Gunther & McGrath, 2009). The proposal is very much in line with the iterative method, Customer development, suggested by Blank & Dorf (2011) for entrepreneurs to gain a structure approach to create scalable and profitable business models. Harper (2003) also support this by arguing that entrepreneurs have to engage in theory testing to fulfill their aim to predict and control market events in order to capture value.

Business model experimentation is concerned with finding a business model that is scalable there has been little research regarding what characterizes a scalable business model. Additionally, there has been no attempt to analyze underlying factors for a scalable business model. However, the commonly shared view of a scalable business model is that it enables revenues to increase faster than the associated costs. The reasoning has to a large extent been founded upon a reasoning concerning the abilities of economies of scale, scope and adoption (Björkdahl & Holmén, 2013). Economies of scale is described as when the average cost per unit declines with an increasing number of output, hence yield a greater margin as the volume of single products produced increases. Economies scope also occurs when the average cost decline with an increasing number of output but correlates to a set of different products that can be produced utilizing a common resource. Lastly, economies of adoption concern the increase of customer value that occurs when the number of users increases for a service or products (Swann, 2009).

2.9 Summary

The compiled theory in this chapter will be used mainly in chapter 5 to build a process model that allow established firms to experiment with business models in a structured way. In the analysis and the discussions chapter (chapter 8 and 9), references to this theory will also be made in order to underpin the reasoning and the conclusions drawn.

3. Methodology

This chapter describes the research design and the research process together with the methods applied in the thesis. It also describes how data has been gathered and analyzed as well as the validity and reliability of the results.

3.1 The research design/strategy

Bryman and Bell (2011) chose to separate research strategies into two types; quantitative and qualitative. Quantitative strategy refers to the gathering of large amounts of data as a means to perform numerical analysis through statistical analysis. The pattern derived from the statistical analysis is then often used as evidence to confirm a certain phenomenon. Qualitative strategy on the other hand makes use of methods that yield more descriptive and rich data. It allows the researcher to develop more in depth understanding of a phenomenon and its environment. That understanding is often used to build theory, but can in some cases be used to confirm theory as well. In this report the qualitative strategy has been applied to gain a rich and descriptive understanding of the environment and its possibilities.

Bryman and Bell (2011) distinguish between five different research designs. One of these is the case study design which is commonly used and has been applied in this report. The case study design focus on a particular object or organization and provides a narrow in-depth analysis, where qualitative data collection methods often are used. Due to the character of the case study design it is well suited to be used in exploratory or descriptive research, answering research questions based on “why” and “how” (Yin, 2009). The reason for applying the case study in this report is the aspiration to gain a deep understanding of the environment and its opportunities in the development of an innovative service business model.

3.2 Research process

The research process describes the overall process that this thesis has employed and the different phases it consisted of. The process is divided into four sections: *Building a process model*, *application of the developed process model*, *finalizing and improving the process model* and *analysis and discussion*, which are illustrated in figure 8.

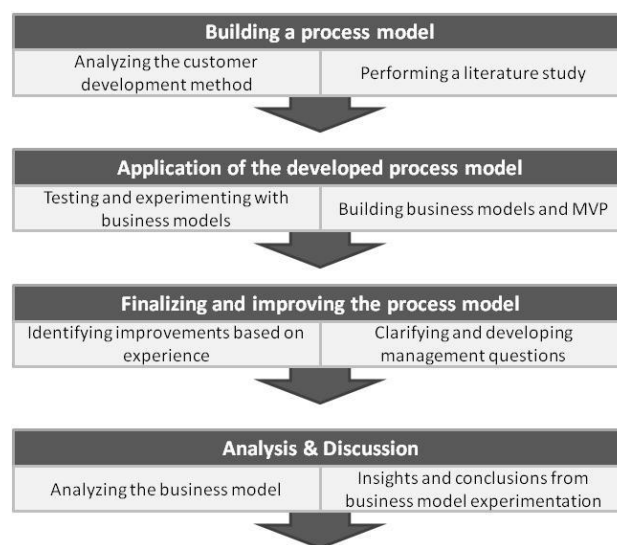


Figure 8: Overview of the different phases in the research process.

During the phase *Building a process model* a literature study was conducted. The take-off point for this was that the customer development method was intended to be used as the central method for the testing and experimenting with new business models. The customer development method was analyzed in order to identify how it could be developed in order to be useful within established firms'. Based on that the focus was to find literature that were related to the internal conditions of firms' and what determines a firm's success. Therefore the focus was within the area of resource based view and resource dependency. Further, literature within the area of servitization and service innovations were used since the intention was to develop a service business model. Lastly, theory on how to profit from innovation was incorporated in the literature search to enable a better assessment of the opportunity of new business models.

During the phase *Application of the developed process model* the process model was used to develop the potential service business model. The process model consists of three steps namely; *internal condition mapping*, *external experimentation and testing* and *business model assessment*, which is illustrated in figure 9 below. The content of these steps are thoroughly described in the process model chapter presented later on in this report. These three steps make use of different interviewing methods in order to gather data. First, the *internal condition mapping* utilizes semi-structured interviews to obtain the internal aspects. Second, the *external experimentation and testing* step make use of two different methods. In order to build business model proposals, by testing and iterating, it employs semi-structured interviews to derive a minimum viable product (MVP). Further, the MVP is tested through the use of structured interviews. Thirdly, the *business model assessment* step does not utilize any data collection methods instead it serves as an analysis step that evaluates derived business models.

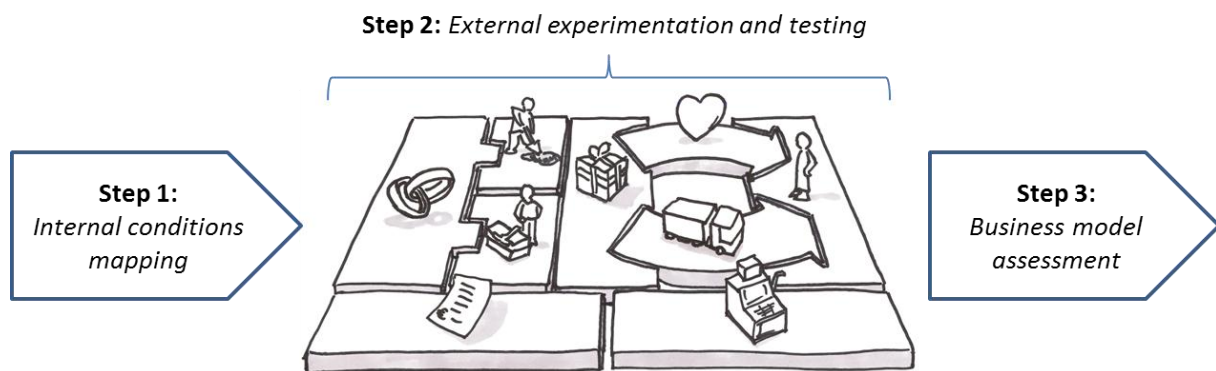


Figure 9: The developed process model.

During the phase *Finalizing and improving the process model*, parts of the process model were refined based on the experience from applying it. The experience gave a better perception on what was important and what could be changed in order to make it more precise as well as easier to use. In the first step we formulated outcomes and questions that would make it more clear for the user what to search for. In the second step we tried to clarify how the findings from the first step were to be used when applying the customer development method. However, the major alteration concerned the third step, the *business model assessment*, where clear questions were added to make

it easier to apply for others. These were added so that the user could use it as a check list that would be easy to go through in a clear and structured manner. Further, the description and intent of all steps in the process model was made more user-friendly by adding overarching management questions that are relevant questions for managers in their daily work.

During the phase *Analysis & discussion* the resulting business model was analyzed based on the different characteristics stated in the purpose. The analysis starts by identifying whether the business model can be seen as an innovation and its innovativeness by drawing on Garcia & Calantone (2002). Further the profitability and scalability is analyzed based on both a financial perspective and competitive perspective. The discussion aims to elaborate on the insight and conclusions drawn by the authors during the application of the process model. Therefore the discussion elaborates on three topical questions that is relatively unexplored. The three important questions comprehend; the role of capabilities and resources in the building of new business models, the role of users in business model experimentation and how to test and experiment efficiently with new business models.

3.3 Research method and data collection

In order to answer the purpose of this study, we have used two different research methods in three different phases. The research methods have been used to gain a rich understanding of the area and enable us to identify and develop a business model in line with the purpose. Further, this section aims to describe how the data was collected and how sample groups were selected. The first phase consisted of internal semi-structured interviews which were compiled and analyzed before moving on to the second phase. In the second phase external semi-structured interviews were carried out, while simultaneously analyzed. The continuous analysis was necessary for enabling iteration of the hypotheses, which led to that a final MVP that was set up. The MVP later served as the foundation in the third phase where it was tested through the external structured interviews. The three mentioned phases will be described in further detail in the sections below.

3.3.1 Internal semi-structured interviews

The internal semi-structured interviews were carried out within the global incontinence category and incorporated interviews from a variety of different managers and type of roles. As a consequence these interviews were set up with varying combination of questions adapted to the different roles of the interviewees. To maintain a structure, the interviews were planned to contain a similar structure that contained questions concerning; their role, TENA Solutions, their view on service and internal abilities. The majority of these interviews were carried out through face-to-face interviews apart from a minor number, due to geographical distances. These interviews were performed via telephone. During the interviews both interviewers were present where one held the interview and the other one took comprehensive notes during the meeting. After each interview we went through the interview and complemented the notes with more thorough descriptions. Simultaneously we reflected upon the answers and wrote down impressions and conclusions. Each interview was carefully prepared and booked in advance to make sure not to be disturbed. The time for each interview was set to be approximately one to two hours for the majority of the interviews apart from three senior management interviews which were 30 minutes due to time constraints.

The sample for the internal semi-structured interviews consisted of 13 people within the department of global incontinence category. Selection of the interviewees was done in cooperation with the internal supervisor together with recommendations from interviewees. This helped us to find people

whom had direct contact with TENA Solutions and select people from a wide range of functions and different areas of responsibility. These consisted of sales representatives, sales managers, members of innovation teams, key account managers, a global brand director and a vice president for business development. The diverse set up of the sample group is believed to represent a broad and overarching view of TENA Solutions within the global incontinence category. At the same time it is believed to give insight to the different capabilities and resources present in the organization, sought for the development of the business model. A more detailed description of the interviewees and their roles is presented in appendix A.

3.3.2 External Semi-structured interviews

The customer development method makes use of broad and open question at the beginning of the search for potential needs and problems. As it continues, it narrows down the scope of the questions to gain more detailed understanding of the customer problem. Therefore the set of questions have to be changed throughout the process to enable probing and iteration (Blank & Dorf, 2012). The same structure of the interviews has been used in this report. The first interviews focused on overarching questions concerning the quality of care, the ecosystem of elderly care industry and everyday challenges to test problems and solutions. Some potential value propositions were quite fast recognized as of no interest where as other needed more probing. After a while we identified an area of interest which led to more narrow questions related to the particular area of interest. Later in the research process, potential solutions to the value proposition where presented to interviewees. Another parameter was the diverse responsibility and work tasks among interviewees which required adapted questions. The interviews were carried out during a time span of approximately one to two hours, where notes were taken and interviews were also recorded. After each interview the notes where complemented with the recordings and analyzed.

The sample for the external semi-structured interviews comprised of 25 persons. The selection was made based on a brief screening of the elderly care market via home pages for private actors and the public sector. From the result we derived a large list of contact information and an understanding of the eco-system. Due to convenience reasons, the majority of interviewees chosen were located near the Gothenburg area. Interviewees from different geographic locations were mainly from private actors due to the location of their headquarter. The sample was chosen deliberately to respond to the eco system derived and consisted of senior management in private care companies, municipality area managers, nursing home managers, nurses and assistant nurses. The composition of the sample is described in more detailed in appendix A. A more geographical representative sample could have been chosen by selecting interviewees from different national regions in Sweden. However, the sample is believed to represent a fairly similar picture on national basis as private actors are present over the entire country and several of the interviewees had experience from other national regions.

3.3.3 External structured interviews

The aim of the external structured interviews was to test the MVP derived during the external semi-structured interview phase. In order to do so a description of the MVP was developed and critical questions concerning the content were derived and tested. The interview was set up so that there was an initial presentation of the MVP, followed by the opportunity to ask clarifying questions. After the presentation we asked our prearranged questions and in cases where the interviewee did not fully understand we would clarify the question. During certain interviews the interviewees gave short answers. As a consequence some interviewees were asked to elaborate on their answers and

thoughts. The interviews were carried out via telephone during a time ranging from 10 to 20 minutes with one interviewer present. Each of the interviews were recorded and later summarized to enable both interviewers to take part of the material.

The sample for the structured interviews consisted of 8 persons whom were selected from the original interviewees to be followed up. The sample was selected to represent the nursing home managers and the regional management in both the private and public sector, as they are highly influential. The selection consisted of two managers from both private and public sector nursing homes together with two regional managers from both private and public sector. To clarify, that makes in total four regional managers and four nursing home managers. The different interviewees from the public sector have been selected so that they represent different municipalities, where all are located near to the Gothenburg region. Regarding the private actors, we chose to interview the two major players on the Swedish market, Carema care and Attendo, together with a smaller actor, Förenade care. We believe that this sample is representative for the Swedish market in a large extent due to the mix presented above. The limited amount of people in the sample was deliberately chosen as a first test group, and it was perceived sufficient due to the similar response within the group. A negative factor to consider is that fact that the MVP was partly built by interviewing the same persons as it was tested upon initially. However, this is in line with the customer development method and was kept in mind while selecting the sample by choosing what was perceived as a non-biased group.

3.4 Research validity

According to Bryman and Bell (2011) validity refers to the integrity of the conclusions in a research. They acknowledge that it consists of several types of validity, to a certain point independent of each other. The external validity is described as the degree of generalizability of findings according to Bryman and Bell (2011) whom also points out that it is generally weak in case studies as a result of the focus on single objects or locations. The developed process model is based on generic theory that is applicable to all established firms and therefore we argue that the model is theoretically usable and generalizable to other established firms as well. However, the process model has only been tested on one occasion, in one single company, which means that the level of external validity is unknown and therefore is to be considered low, until proven differently. Generalizability has not been the main purpose of this report though, instead it has rather focused on developing and applying the process model in order to gain a rich understanding of its usability and effects. The external validity of for the proposed business model is of little interest as it solely concerns the company.

Bryman and Bell (2011) describe ecological validity as the extent to which the researcher and his methods capture the daily conditions, opinions and attitudes. The purpose is to question whether the findings are applicable to the intended environment and not just technically valid. The ecological validity is believed to be high in this report, due to that the research was carried out on-site at SCA and the fact that face-to-face interviews were carried out within the working environment of the interviewees. Further, we took part in sales work and education with sales representatives at nursing homes, which offered the possibility to discuss important questions. This gave a good understanding of the environment at nursing homes concerning values and attitude within them. Regarding the developed process model, the entire research was carried out at the company in close connection to

the ordinary activities and in cooperation with employees. This made us aware of the environment and gave important contextual understanding connected to the application of the method.

The possibility to replicate the results of a study is referred to as *reliability* by Bryman and Bell (2011). This mainly concerns the area of quantitative research studies whether the data measured are stable and reliable. As this study has been based on a qualitative research strategy, the reliability is likely to be low due to that it is dependent on many momentary factors. On the other hand, the possibility to replicate the layout of the study, referred to as replication by Bryman and Bell (2011), is believed to be good. This conclusion is based on the fact that the process is well described throughout the different part of the report.

3.5 Delimitations

The thesis project has been subject to a number of delimitations concerning both the scope and depth of the investigation performed. Delimitations in the scope concern the decision to work towards the Global Incontinence Category at SCA Hygiene Products and in connection to the existing service offer and products within that department. As an effect, the service offer TENA Solutions, present in the department, has been the starting point of this thesis. In addition to this, a number of delimitations were also introduced as a consequence of limitations of the project time and resources. The study was decided to be limited to Sweden and mainly the surroundings of Gothenburg as an effect of time and financial means. Further, the number of opportunities that has been thoroughly tested within the developed method was limited. The reason for this is that the developed process model includes a large set of interviews as part of the method. Since the decision was taken to make them face to face, for different reasons more thoroughly described in the methodology chapter, it was clear that this phase would be heavily time consuming. As a result the most potential opportunities were selected and experimented with. The extent of experimentation was also subject to limitations. It was decided that the study would only include the development of business models proposals and not succeeding development of prototypes. Instead the study stretches to the extent where the business model is developed and assessed concerning its future potential. Lastly, since the internal aspect of a company contains a range of sensitive information that could be exploited by competitors, some of the findings and analysis relate to sensitive areas has been left out of this report.

4. The case company: SCA Hygiene Products

SCA is a leading, global, hygiene and forest company that develops products and solutions within three different business areas; personal care, forest products and tissue. The company was founded in 1929 by the Swedish finance profile Ivar Kreuger, who merged ten different forest companies in to a single group. SCA has since then developed from a pure forest company to a company that also offers personal care products and tissue products. SCA is today associated with a range of different fast moving consumer goods and the most famous brands are; Libresse, Tork, Libero and TENA. During 2012 SCA divested their packaging operations and at the same time acquired a large tissue company in order to increase their hygiene profile of the company (source: sca.com).

SCA Personal Care, which is the division that this thesis was carried out within, is a global leader within the hygiene area. Their product portfolio includes incontinence products, diapers and feminine care products. Adjacent products such as wet wipes, soap, baby oil, lotion and cotton pads are also sold. The TENA brand makes SCA a world leader within incontinence products with a global market share of 25% and annual sales exceeding 10 billion SEK in 2012. SCA is also the fourth largest player within feminine care with a 6% global market share, and finally the fourth largest player in the baby diapers segment with a 5% market share (source: sca.com).

Traditionally, SCA has been a manufacturing and product focused company and still is in many ways. However, it is also in their heritage to be service minded and working closely with their customers. As this report deals with the issues of moving focus from products to services, it is important to understand SCA's present situation related to product and service focus. The only service offer that TENA provides today is called TENA Solutions, which is offered towards nursing homes that buys TENA's products. Further details will be presented about the TENA offer in the section below, since the focus of this thesis is closely connected to TENA Solutions' services.

4.1 TENA Solutions

TENA Solutions were originally launched in 2004 as a project to enable best practice within the sales organization across the European market. The best-practice routines involved both selling to customers and educating customers. The reason for initiating TENA Solutions was a trend of increasing competition and change in mentality, leading to focus on price before quality by the customers. The idea was that TENA Solutions would offer services that would enable SCA to differentiate the product offer and focus more on the value created rather than the product price. Over the years, the service package has grown larger in order to stay competitive and price pressure has increased. At the same time the product offer is becoming more and more commoditized. As a result, it is of interest for SCA to look into the possibility of charging for existing services or developing new service opportunities that can be charged for¹

TENA Solutions can shortly be described as a "free" service package offered in connection to the incontinence products related to TENA, in the market for elderly care. The TENA assortment is provided by SCA's global incontinence category and range from light incontinence pads to larger incontinence diapers. The major part of the heavy incontinence protections are today sold to the elderly care market, reaching customer groups such as care giving professionals and care giving relatives. In this market, TENA is considered a premium brand often with higher average pricing than

¹ Johan Feltner, Innovation Manager Global Incontinence Category SCA, interview 2013-02-04

competitor products. Due to the economic constraints in the market for elderly care, there is a need to provide education and service as a part of the product offer to make the TENA assortment competitive in relation to competitor products. By providing education and support services, TENA Solutions drive down overall costs and increase care quality for the residents. This is mainly done through changing the routines in connection to incontinence management and providing software solutions for overall understanding of economic key indicators².

4.1.1 Content of TENA Solutions program

The content and set up of TENA solution offer varies on both national and regional markets depending on different care systems and cultures, but also on regional differences depending on the way products are bought and paid for. However, on a general basis TENA Solutions can be described as consisting of three phases; Plan, Coach and Monitor. The Plan stage refers to the first phase of customer interaction where the customer and sales personnel identifies needs for improvement, goals to reach and actions for improvement. Further, the Coach step contains educations, product information and other activities that are aimed at reaching the goals for improvement. Lastly, the Monitor step is intended to follow up the actions taken to make sure that they have been effective and that the implemented changes are sustained, as well as identifying further actions³.

Apart from the education and coaching, the TENA Solutions offer consists of Index+ and TENA Quality. Index+ is a software system that offer cost control and extracts key performance indicators of the consumption of products related to incontinence within the elderly home. Its enables the manager to follow up on costs savings and development of products usage per resident to ensure that they keep down costs and provide a good and qualitative incontinence care. TENA quality is a tool that aids the nursing home personnel in delivering individual incontinence care through quality assurance. Further, it is also used as an ordering system for the incontinence products. The tool consists of three building blocks, namely; individual incontinence care, quality assurance and best practice. In short it enables the staff to create individual residents profiles with customized incontinence products selection and a structured approach for how to deliver this to the customer⁴.

4.1.2 Purchase process

The purchase process for the TENA assortment of incontinence products varies depending on whether it is purchased by a private actor or the public sector. For the Public sector the procurement is done via tender processes by the regional council, where between one to three suppliers are granted to sell within the region. In Sweden these tender processes are to a large extent based on price per unit, but also on some qualitative factors such as additional value offered through education and amount of hours the sales force spend at the nursing homes. By offering an extensive service package through TENA Solutions, TENA gain a competitive edge in the tender processes based on both quality and price. This has led to that TENA Solutions in many regional areas are included when products are purchased. Once products have been granted access, it is locally sold at the different nursing homes directly by the sales representatives. The processes for private actors are somewhat different where there are two options either to join the public tender contract or to purchase on their own. Some private actors choose to make their own deals with TENA as a way to

² Lars Antonsson, Nordic Sales Manager, Inco Care Europe SCA, interview 2013-01-31

³ Johan Feltner, Innovation Manager Global Incontinence Category SCA, interview 2013-02-04

⁴ Johan Feltner, Innovation Manager Global Incontinence Category SCA, interview 2013-02-04

include TENA Solutions adapted to their need. These deals are negotiated on a national level by and then later purchased on a home to home basis through the sales force⁵.

⁵ Lars Kylberg, Key Account Manager, Inco Care Europe, interview 2013-02-01

5. The process model

The purpose of this process model is to provide a structured method, based on the customer development method, for established companies to experiment and test new business models for services. The intention with the process model is to enable companies to fast answer important questions such as: how can we grow by leveraging upon existing capabilities? What are viable business opportunities? Do the opportunities create value and can we capture that value? And what implications do the new opportunities have? To answer these questions the process model is constructed in three phases that consider different important perspectives related to creation of new business models.

The different steps of the process model is illustrated in figure 10 below and explained briefly in this paragraph to provide the reader with an overall understanding. The first step, *Internal conditions mapping*, draws upon the resource based view and resource dependency theory to meet the requirements of an established company. Also incorporated in the first phase, is a structured approach developed by Neely and Visnjic (2011) that describes how to approach service development and identify opportunities for new services. Following, the *External experimentation and testing* step uses the customer development methods first part, customer discovery, as a means to structure the iterative process of creating, experimenting and testing new business models. The customer development follows the structured proposed by Blank & Dorf (2012) with one major change. Resources, activities and capabilities are taken into consideration during the process with the purpose of identifying potential synergies. The final phase, *Business model assessment*, investigates whether the derived business model allows the firm to profit from the innovation, while also assessing the alignment with strategy and the impact of new resources and capabilities needed.

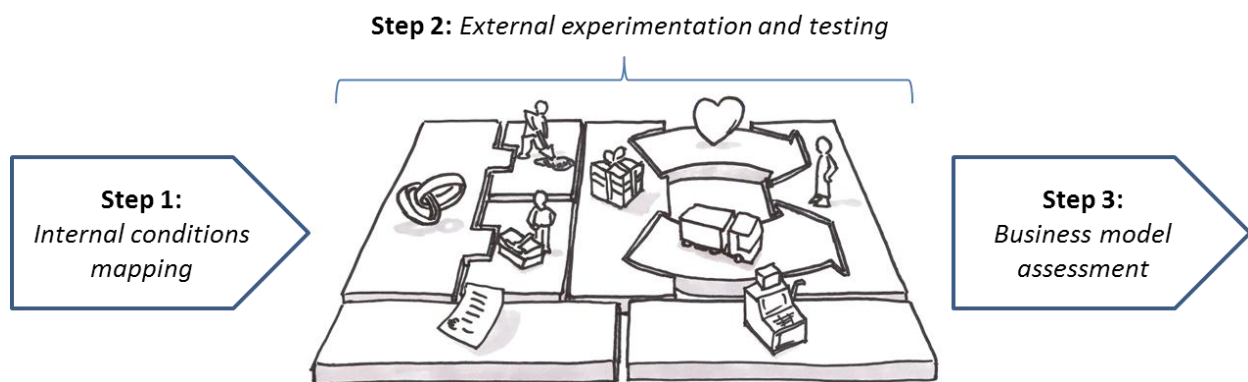


Figure 10: The developed process model.

5.1 Step 1: Internal conditions mapping

The purpose of this step is to map the internal conditions in the company. The aim for the firm with this step is to get answers to important questions such as: what are we good at? What opportunities exist? And, are we limited by our internal conditions? This is done through interviews and reading secondary data, while simultaneously analyzing the information and identifying opportunities, based on these insights.

The starting point of this step is to formulate a scope for the study. This can either be induced by an internal idea that has emerged or an external influence like a change in the market structure or something similar that needs to be investigated and exploited. An example of a scope could be: *“Investigate how our current service offer can be either modified or expanded towards market X”*. It is important to remember that the scope needs to be defined as broadly as possible since the whole purpose of the process model is to allow existing companies to experiment and test new ideas during the external discovery phase. By looking outside the current markets and customers, new industries where the existing resources and capabilities can be leveraged upon can be found. Some kind of limitation of scope is however necessary in order to be efficient in the discovery phase and to be able to identify the relevant internal capabilities. When the scope is set, the mapping of internal resources and capabilities of the company starts. This is achieved through performing internal interviews and reading secondary data. The entire list of the company’s generic resources and capabilities will not be identified, only the ones that can be considered relevant or adjacent to the set scope of the study. But again, do not be too narrow because it will limit the rest of the study too early. The existing markets, customers and key partners will also be mapped during this phase in order to investigate the company’s level of resource dependency. In addition to mapping the internal resources, service opportunities are identified based on the insights from the interviews and the internal conditions. The result of this analysis will be a list of identified opportunities within the set scope of the study. These opportunities will then be used in the following external step as a basis for formulating customer problem hypotheses.

The following sections will explain in more detail how step 1 of the process model is meant to be carried out. To provide a structure and make the process model easy to work with, the four internal areas that need to be mapped are presented and explained in separate paragraphs below together with the outcomes that each described area should result in (illustrated with this icon ⇒).

5.1.1 Resources & activities

According to the resource based view (Grant, 1991), resources refer to the assets that a firm insert and transform through their internal processes to create products and services. These resources are a mix of physical and intangible and can be divided in to the following six categories: financial resources, physical resources, human resources, technological resources, reputation and organizational resources. Key resources are an element in Osterwalder’s (2010) business model canvas and play an important role for delivering the proposed value. Based on that, resources are considered to play an important role in business model experimentation and that is the reason why they are included as an element in this process model. The point of identifying the internal resources is not to limit the study based on these, but to allow later on to investigate if they can be leveraged on within the new business model. Another concept, in close connection to resources is activities. Osterwalder (2010) uses the term activities to describe the actions that are required for a company to deliver their current value proposition. Moreover, by mapping the existing activities within a firm it will later on create an overview of potential synergies between existing activities and new activities related to the new business model.

⇒ *Which are the firm’s existing resources, related to the set scope of the study?*

⇒ *By looking at three different elements of the business model; channels, relationships and value proposition, which are the firm’s existing activities carried out within these?*

5.1.2 Capabilities

A company's capabilities are closely connected to the company's resources and also have a strong influence on the company strategy and vice versa (Grant, 1991). Grant (1991) states that capabilities are the ability to integrate resources in order to perform activities or products that yields a competitive advantage. Prahalad and Hamel (1990) define core competencies as the glue that interlinks different units and is the driver of new business. For this reason, the internal capabilities are valuable not just for improving the existing business, but also when it comes to exploring and finding new areas of application (Prahalad and Hamel, 1990). The capabilities need to be leveraged upon to create new core products and services (). Brink & Holmén (2009) agrees with this standpoint and argues that the creation of new business models is dependent on a company's present capabilities. Grant (1991) agrees with Prahalad and Hamel (1990) that the internal capabilities and activities are the source of strategic competitive advantage. Moreover, Grant (1991) goes even further than Prahalad and Hamel (1990) and claims that since the market is such a volatile environment, companies need to focus on their internal capabilities and leverage upon them to yield a sustainable competitive advantage and not focus externally too much. As mentioned above, the process model is based on this approach and aims to identify capabilities in this initial step in order to be able to look externally for areas where the capabilities can be leveraged on; very much in line with Grant (1991) and Prahalad and Hamel's (1990) reasoning. In order for a company to identify their capabilities, a few guidelines can be followed: a capability should grant access to a variety of different markets, contribute to the perceived customer value delivered and be hard to imitate by competitors (Prahalad and Hamel, 1990).

⇒ *Which are the firm's existing capabilities, related to the set scope of the study?*

5.1.3 Resource dependency

As mentioned above, a company's capabilities are often referred to as the source of competitive advantage by many authors (Grant, 1991; Prahalad and Hamel, 1990). There is however risks associated with focusing on the capabilities too much since they may limit the company's perception of potential business opportunities (Barton, 1992). In general, companies tend to listen and be dependent on their existing customers to a large extent, which may hamper the exploration towards new markets and customers since the existing customers exert such a large power over the company. Based on this reasoning, it is essential for companies that want to grow and explore new markets to dare to look past the existing customers and markets for further opportunities.

The purpose of investigating the level of resource dependency is therefore to get an idea of how dependent the company is on their current customers, markets and key partners. By identifying the current customers, markets and key partners and making an overall assessment of how dependent the company is on these actors, the level of resource dependency can be estimated. The rest of the study should not be too limited by the discovered level of resource dependency, the purpose is to get an indication of the current situation and then take that in to consideration when exploring and assessing new opportunities. If the resource dependency is considered to be very high, there is no sense in trying out too radical ideas outside the existing customer base since the risk associated is simply too large.

⇒ *How dependent is the company on the existing customers, markets and key partners? I.e. what level of resource dependency is present within the firm?*

- ⇒ *Is the resource dependency considered to be so high that it affects how radical new business ideas can be?*

5.1.4 Service opportunities

In order to identify service opportunities related to existing or new activities, Sawhney et al (2004) suggests using a structured approach illustrated in figure 11 below. Sawhney et al (2004) suggests that companies should stop thinking in terms of products and services and instead focus on activities. By using this approach, the company can focus on two different dimensions of the activities; *how* and *where*. The “*how*” refers to whether to focus on new activities or reconfiguring existing activities, whereas the “*where*” refers to the primary or adjacent activity chain.

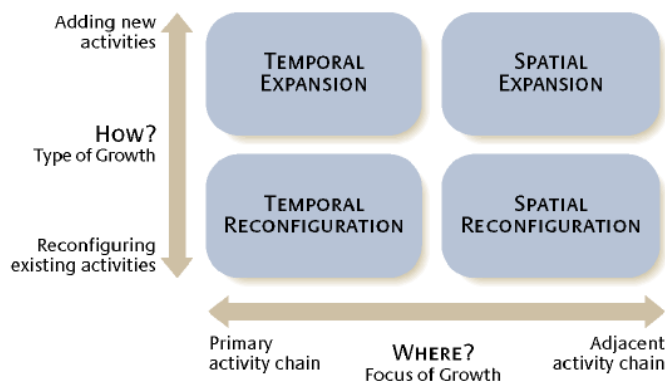


Figure 11: Sawhney's opportunity matrix.

In this process model, Sawhney's model is used as a tool for identifying service opportunities in a structured way, based on the insights from the interviews and the internal documents. Three questions that help to identify new service opportunities are stated below and all three of them are based on the logic of activities derived from Sawhney's model.

- ⇒ *Is it possible to start charging for existing services in their current shape? (no effect on existing activities)*
- ⇒ *Is it possible to modify or expand the existing services in order to start charging for them? (reconfiguring activities)*
- ⇒ *Is it possible to create entirely new services that could be charged for, either stand-alone services or services based around existing products? (add new activities)*

5.2 Step 2: External experimentation and testing

The customer discovery method, part of Blank and Dorf's (xxx) customer development method, is integrated in this part of the process model. It is applied as a means for established companies to gain fast answers to important questions such as: what are the biggest customer problems and needs? How can we deliver maximum customer value? Is the new business model profitable? By performing interviews in accordance with the customer discovery process, described in detail in chapter 2.2, these questions will be answered. The next paragraph aim to describe the theoretical reasoning behind the selection of the customer discovery method, and the modification of the method required to meet the requirement of established firms.

Many authors conclude that it is vital to test and experiment with new business models (Gunther & McGrath, 2009; Brink & Holmén, 2009; Neely and Visnjic, 2011, Chesbrough & Rosenbloom, 2002; Björkdahl & Holmén 2013; Murray & Tripsas, 2004). Harper (2003), Blank & Dorf (2012) and Gunther & McGrath (2009) argue that this is best done via hypothesis-driven theory testing, which also is the perception within this process model. The reason is that even if trends and problems are known, it is hard to foresee how to best capture the value from these (Gunther McGrath, 2009). Therefore it is important to develop new business models in close relation to customers and users to fully understand their problems and needs (Drucker, 1985; Gunther & McGrath, 2009; Sawney et al., 2004; Neely and Visnjic, 2011). The customer feedback is crucial in order to develop a business model that is able to deliver and present a value proposition that captures the full value (Murray & Tripsas, 2004; Gunther & McGrath, 2009). It is not only important to understand the customer needs and problems, but also to gain an understanding of the business environment surrounding the customer (Neely and Visnjic, 2011).

The customer development method presented by Blank and Dorf (2012) is originally developed for entrepreneurs and startups in order to offer a structured approach to create and work iteratively with new business ideas. By utilizing hypotheses, one can make assumptions about what can be a potential problem and what can be potential value proposition that can be offered to the customers. This allows a more dynamic and iterative approach. The close contact with potential customers through interviews allows the user to test ideas and create new hypothesis for new business models and assess their financial potential. Therefore, the method offers a structured approach to test and experiment with new business models, in line with what is described above. However, one major adaption is implemented in the process model. As concluded by Brink & Holmén (2009) the resources and capabilities of a firm affect what it is able to perform and its ability to capture value. Further, Björkdahl & Holmén (2013) point out that the creation of new business models concern both value creation and value capture. Hence, the creation of a business model is dependent upon existing capabilities and resources. Therefore existing resources and capabilities are taken into consideration to meet the requirements of an established firm. Further, it enables synergies with existing business and connects it closer to existing scope of business. This is done throughout the method as findings are continuously analyzed when building the business models.

5.3 Step 3: Business model assessment

Even if the process model takes internal conditions into consideration, the experimental phase might lead to new business models that can be perceived to be outside the company's scope. Further, early financial estimations can be uncertain and new business models might affect existing customer and business. Therefore this step intend to answer the questions: can we profit from the new business model? Is the new business model in line with our strategy? Does the proposed business model have a negative effect on vital customers? To answer these questions we draw on the literature presented by Teece (1986), who present generic parameters that indicate a firm's ability to capture value from an innovation. Moreover, the strategic intent of the firm is dependent on existing resources and capabilities, why the impact from new resources and capabilities need to be analyzed (Grant, 1991). Lastly, the effect on existing customers and business is evaluated in relation to the perceived customer dependency. The three following sections will answer the three mentioned questions above related to profitability, strategy and existing customers.

5.3.1 Potential to profit from the business model

The customer development method evaluates the profitability of a business model from a financial perspective. However, Teece (1986) have identified other perspectives that affect firms' possibilities to profit from innovations. He argues that firms have to consider the aspects of appropriability regimes and specialized complementary assets that are present within the company. The aspect of specialized complementary assets has also been identified by Tripsas (1997) as vital for a firm's possibility to maintain market shares when radical innovations are introduced. Therefore it is believed necessary to consider what can be perceived as specialized complementary assets to the proposed business model. Further, it is of interest to assess whether the firm possesses these specialized assets. These specialized assets can consist of activities and resources such as: specialized manufacturing, marketing, sales channels, relationships, complementary technology etc. (Teece, 1986). Appropriability regimes incorporate aspects that protect the innovation proposed via the business model in terms of the nature of the innovation and legal instruments. These consist of trade secrets, patents, processes, tacit and codified abilities etc. that are hard for competitors to imitate and can therefore enable the firm to capture value (Teece, 1986). Hence, these are seen as important to acknowledge as they can have major impact on the potential of the proposed business models ability to capture value. As result three questions have been derived that needs to be assessed.

- ⇒ Are there any specialized complementary assets associated with the new business model and if so does the firm possess any of these?
- ⇒ Are there legal instruments that protect the innovation and prevent competitors from imitating?
- ⇒ Does the business model include processes, activities or resources that are tacit or codified, making them hard to imitate by competitors?

5.3.2 Consequences of resources and capabilities

The existing resources and capabilities create the foundation for an enterprise's competitive advantage and give rise to the strategy (Prahalad & Hamel, 1990; Grant, 1991). The development of resources and capabilities is therefore a long-term engagement where a firm has to make conscious decisions (Prahalad & Hamel, 1990). Moreover, the capabilities are essential to what the firm is capable to perform and vital in order to capture the value created (Brink & Holmén 2009). Sawhney et al. (2004) stress that it is important to consider whether expansion through a service business model take the firm outside of its strategic intent, beyond the scope of its existing capabilities and resources. Hence it is of interest to assess whether the developed business model corresponds to the strategy of the organization. Continuing, it is of interest to analyze to what extent new resources and capabilities are needed and how they correlate to the existing ones. If the business model makes use of new resources and capabilities to a large extent it might hinder the firm's ability to perform. Further, capabilities which are not related to other products might be hard to maintain competitive. The reason is that capabilities become better and more competitive as they are put to use (Prahalad & Hamel, 1990). Based on this reasoning it is proposed that firms should ask themselves three questions.

- ⇒ Is the proposed business model in line with the strategic intent?

- ⇒ Does the proposed business model demand an extensive set of new resources and capabilities? If so can this present a risk for the firm's ability to perform the new business model?
- ⇒ Can the existing capabilities and resources be leveraged upon in the new business model?

5.3.3 Implications for current business and customer

Firms have been identified to be highly affected by their existing customers, according to the resource dependency theory (Bower Christensen, 1995; Henderson, 2006; Pfeffer & Salancik 1978; Danneels, 2002). Christensen (1997) argues that the largest and most profitable customers extort power over the organizations ability to bring new innovations that serves new customers. Hence there might be complications associated with large customers to the company if they experience that a new business model is not in favor of their business. At the same time companies might struggle with introducing new innovation since they seldom can present a similar cash flow as existing core business. If the new business model present a risk to the existing business it is likely to be discarded. Therefore, new service should be evaluated from an overall perspective including synergies and important trends such as product commoditization or technology shifts (Sawhney, 2004). Therefore, the effect that the new business model has on existing customers need to be assessed in order to discover if it presents a risk of affecting the current customer base.

- ⇒ Does the proposed business model extort risk of influencing current customer base in a negative way?
- ⇒ Does the proposed business model extort risk of influencing existing business negatively?

6. The study: applying the process model

As described in chapter 5, a process model based on the customer development method has been developed, customized for established companies to allow them to test and experiment with new business models for services. This framework has been applied in the empirical study of this thesis and the results will be presented in this chapter. The structure of this chapter is based on the different steps in the framework, described in figure 12 below.

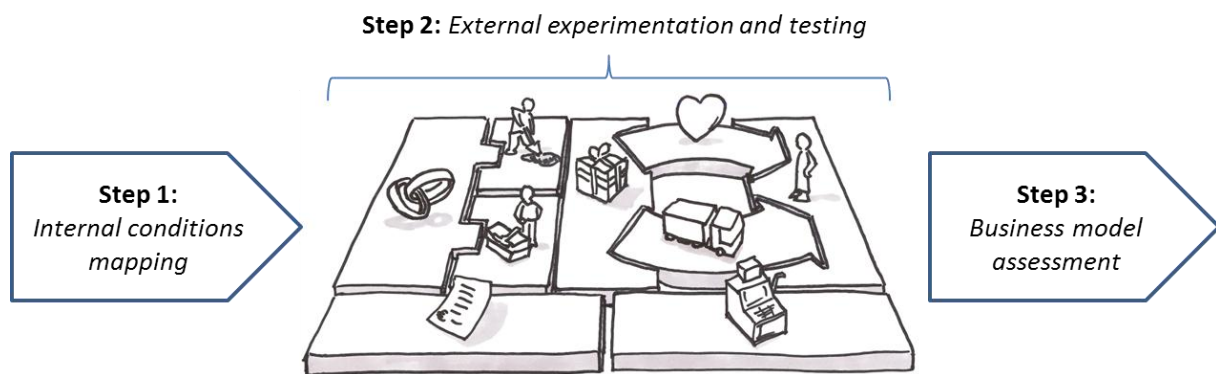


Figure 12: The developed process model.

6.1 Step 1: Internal conditions mapping

As described in detail in chapter 5.1, the purpose of this step is to map the internal conditions in the company. This is done through interviews and reading secondary data, while simultaneously analyzing the information and identifying opportunities. These identified opportunities will then be passed on to the next step in the process, the external discovery step where hypotheses will be formulated based on the opportunities identified here. To guide the direction of the study, a scope was formulated by the supervisors at SCA:

“investigate the possibilities to start charging for the existing services that SCA provides today towards nursing homes in the elderly care market, or try to find new profitable service offers towards the nursing homes.”

Based on the scope of the study it was essential to understand what TENA Solutions offers today, how the value is created, pricing etc. The discussions around TENA Solutions were focused on both the services that are delivered today towards nursing homes and thoughts about future service offers and strategies. The results of these interviews are presented below related to the different departments interviewed; sales, innovation team and upper management.

6.1.1 Interview insights on TENA Solutions

The *sales department* has a very clear product focus and is generally reluctant towards start charging for existing services or start selling new ones. One of the underlying reasons for this is probably that the sales department is only measured on the amount of products they sell. The sales managers are consistent with emphasizing the benefits with the product focus and using TS as a sales argument to sell more products. The sales representatives however, had a more positive attitude towards to start

charging for some services since they sometimes got the question “*what does this cost?*” when delivering services free of charge in connection to the products.

The *innovation team* working with developing the service offer towards nursing homes obviously have a clear focus on services and are pro charging for services. They believe this is a necessity since the products are starting to get commoditized and they are convinced that there are many areas at a nursing home where TENA could take advantage of their competence and start providing relevant services that could be charged for. They also refer to that SCA have always been a service minded company and worked closely with their customers, but they have not been able so far to actually start charging for any kind of services due to the product focus.

According to our interviews with *upper management* it was revealed that the question of whether to start charging for existing services or not, or to come up with new services that could be charged for, was a very current question. However, the interviews revealed that there is a challenge for a company with deeply rooted manufacturing logic to shift overnight towards a service focus. Different initiatives for moving more towards a service focus is seen throughout the organization, but so far services are only bundled together with products, no stand-alone services that are charged for exists at SCA today. One of the managers expressed that there are of course opportunities associated with moving towards a more service focused business, but there are also risks associated and SCA must take these risks into careful consideration. Figure 13 below illustrates different positions that a company can be in, related to service and product focus. One may argue that SCA’s TENA Solution offer would put them in the position of “Services as the key differentiator”, but one may also argue that SCA are using “Service to protect the business”.

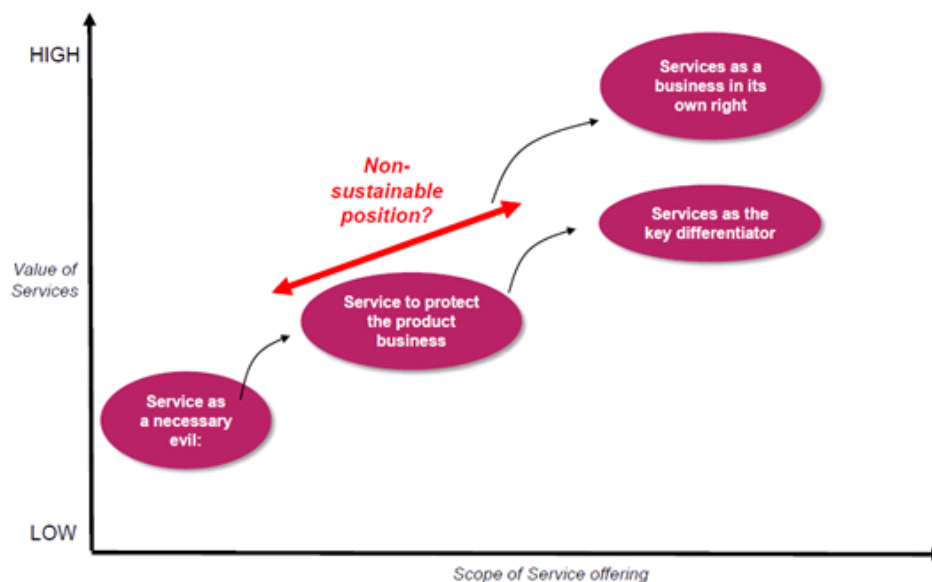


Figure 13: Illustrating different service positions a firm can be in (Strömgård, 2012)

6.1.2 Internal conditions

In addition to getting a better understanding of the TENA Solutions offer and SCA’s situation of product focus versus service focus, the purpose of the interviews was also to map the company’s existing resources, capabilities, markets and customers that were related to the set scope of elderly

care and services. These findings will be presented below according to the structure and the questions presented in the framework in chapter 5.

Resources and activities

As described in the framework, existing resources and activities that are related to the set scope of the study should be identified. Based on interviews and secondary data, the identified resources at SCA that are considered relevant for the set scope are the following:

1. *Well-established sales organization*

TENA has a strong and well-established sales organization that advertises and delivers the TENA Solution offer to nursing homes today. The sales organization consists of sales managers, key account managers (KAMs) and sales representatives. Related to the scope of finding new chargeable services that can be delivered to the nursing home, the sales organization can be a valuable resource.

2. *TENA brand*

The TENA brand has a reputation of providing high quality continence care and personal hygiene care. This is a resource that ties in nicely with the set scope and provides possibilities to be leveraged on for providing new services within the same or adjacent areas.

3. *Incontinence & hygiene knowledge*

TENA has a long experience of working with incontinence products and incontinence care. They also hold knowledge within the larger area of hygiene, mainly focusing on skin care. This knowledge is likely to be useful within the scope of delivering hygiene related services to nursing homes.

4. *Product patents*

SCA and TENA hold a large share of patents related to incontinence and hygiene products. These patents may become an important resource related to the set scope since services could be developed in connection to existing products, which are protected by product patents.

5. *Industry & customer knowledge*

Related to the scope with focus on the elderly care industry and nursing homes, TENA has long experience from working within the elderly care industry and providing both products and services to its customers. This has resulted in significant knowledge about both the industry as a whole and the customer's needs.

6. *Local market knowledge*

SCA is a global company present on many different geographical markets. Due to local variations between the different markets, both in terms of regulations and customer preferences, SCA has made sure to obtain local knowledge on their markets which is an important resource for competing with the local actors.

7. *Established industry relations*

Naturally, from being active in the elderly care industry for a long time, TENA has many established relations in the elderly care industry with nursing homes, county councils and municipalities.

8. *Marketing knowledge*

Being a large and global organization working with fast moving consumer goods, TENA naturally possesses marketing knowledge around both products and services.

9. *Product development competence*

The product development competence can be relevant for building service offers indirectly since services can be based on physical products.

In addition to the identified resources, the existing activities related to the set scope were also mapped according to the guidelines in the framework. Only one activity relevant to the set scope was found:

1. *Sales visits by sales representatives & KAMs*

This activity includes sales visits to nursing homes by sales representatives that raise awareness for the TENA brand, promotes and sells TENA products and also carries out education related to the TENA Solutions offer. The KAMs are also performing sales meetings, but on county council level in the public sector and on top management level in the private sector, with the purpose of maintaining good relations and influence the tender processes. These activities are considered to be in close connection to the set scope of finding services related to nursing homes and was therefore included here.

Capabilities

As described in the framework, capabilities that are related to the set scope needs to be identified in this step. Based on the criteria that a capability should grant access to a variety of different markets, contribute to the perceived customer value and be hard to imitate, the three following capabilities were identified related to the set scope:

1. *“The capability to create customer adapted high quality absorption products through the combination of a range of different technologies and knowledge resources”*

TENA has extensive knowledge resources within areas such as product application, ergonomics and customer understanding. In combination with its technological resources, consisting of absorption-, material- and fitting-technology they are able to create products that are well suited to the practical application as well as contain high absorption ability. Continuing, the products have an ergonomic fit that make them comfortable and reduce product related disorders.

2. *“The capability to maintain a customer and service minded approach through extensive customer understanding and ability to build customer relations”*

TENA's long history within the elderly care market has enabled them to build an extensive knowledge bank related to customer behavior and preferences. Further, the focus on building customer relations through an extensive sales force and high focus on creating a value larger than the product value alone, creates the foundation for this capability.

3. *"The capability to combine overall knowledge in several areas to deliver best practice incontinence and hygiene management processes adapted to the preconditions of the elderly care environment"*

TENA holds strong knowledge concerning the working environment and the management of a nursing home. In combination with the product related knowledge this allows TENA to provide education within continence- and skin care-management at the nursing homes. Thereby TENA helps them achieve a qualitative continence and hygiene care as well as staff wellbeing, internally referred to as residence wellbeing within SCA.

Resource dependency

In order to determine the level of resource dependency that exists at SCA, the existing customers, markets and key partners needs to be identified and analyzed. By talking to different functions within the company; sales, innovation teams and upper management, the consistent impression is that TENA is very dependent on their current customers. Incontinence products that are sold to the professional segment (nursing homes and home care) are procured through large tender processes that cover several municipalities. Since there are a limited number of nursing homes, these tender processes become extremely important for TENA and the customer dependency is increased. Cautious and risk averse were two words that a senior manager used to describe SCA and since the company is successful and profitable in what they are doing towards their current customers and the current markets, there are low incentives for breaking new ground. Especially from talking to the sales department, it became obvious that the current customers are protected and nurtured to a large extent. Services are delivered free of charge to the customers with the purpose of making them continue to buy TENA's products and provide a more competitive whole solution that leads to lock-in effects. The idea of start charging for services is declined by the sales department since they are afraid that customers will not use the service anymore if it will be charged for and thereby lose the customer. The fear is partly based on the fact that there are a limited number of customers for the incontinence products and quite clearly defined customer segments, which makes SCA very dependent on their customers and keeping a good relation with them. Regarding key partners, TENA is dependent on the wholesaler OneMed which deliver all TENA's incontinence and skin care products to the nursing homes. Another relevant key partner is the reference homes that TENA is cooperating with and trying out new concepts on.

- ⇒ Based on the outspoken dependency on the current customers and markets, the resource dependency level is concluded to be high within TENA and this need to be taken in to consideration in the process ahead. For this reason, too radical business model experimentation is not considered wise, since losing existing customers would be disastrous for the company.

Service opportunities

Simultaneously with carrying out the interviews and mapping the internal conditions in the company, opportunities for new service offers was constantly looked for. As presented in the process model, three different questions need to be analyzed in order to identify new service opportunities.

⇒ *Is it possible to start charging for existing services in their current shape? (no effect on existing activities)*

The services associated with TENA Solutions are provided free of charge today, but they convert nursing homes to using TENA products and increase the product sales, which financially motivates why the service should be provided for free. Two additional arguments for providing the existing services for free are that the education sessions also strengthen the customer relation and provide a good marketing opportunity. The fact that the customers are used to receiving these services for free also complicates things and makes it hard to suddenly start charging for them. Based on the reasoning above, it was concluded that it would not be wise to start charging for the existing services.

⇒ *Is it possible to modify or expand the existing services in order to start charging for them? (reconfiguring activities)*

Since it was realized that the current TENA Solutions offer resulted in high value for the customers, it seemed reasonable to try to expand some of the existing services and start charging for them. When attending the education sessions carried out by TENA's sales representatives, the current education element in TENA Solutions was discovered to be quite limited. The personnel at the nursing home came across as eager for education and the short education session that the sales representative carried out (1-2 hour) was much appreciated. This led to that opportunities in relation to expanding the current education element in TENA Solutions were identified. The second opportunity identified is related to the cost control software (Index+) that is currently provided free of charge to TENA's existing customers. Since the elderly care industry is very focused on cost-savings and is forced to keep a tight budget, this software was identified as a potential opportunity for expanding a current service and start charging for it. The third identified opportunity is related to TENA Quality's support material for improving the care routines at nursing homes. The support material is based on physical paper sheets that the caregivers fill out manually. The idea of digitalizing the current material and expanding it with additional features emerged with the purpose of being able to charge for it.

⇒ *Is it possible to create entirely new services that could be charged for, either stand-alone services or services based around existing products? (add new activities)*

Instead of modifying or expanding the existing services, the alternative of coming up with entirely new services that the customers are interested in and willing to pay for was also analyzed. In line with the question above, it was also evaluated whether the new services would be stand-alone services or based on existing products. Influenced by the internal interviews, the idea of creating a rating/certification system for nursing homes was founded. The purpose of this rating system would be to help caretakers have a better decision material when choosing nursing home and also make the nursing home actors more aware and quality focused. This type of service would be a stand-alone service that has no connection to TENA's products. No entirely new services related to existing products were identified as worth pursuing.

6.2 Step 2: External experimentation and testing

Based on the opportunities identified in the previous step, value proposition hypotheses are formulated and tested within this step. Founded on the outcome from the hypothesis testing the promising hypotheses are further iterated with, in order to derive a MVP. Finally, the MVP is tested and revised before reaching a final business model proposal. To remind the reader of the process followed within this chapter, an illustration of the customer discovery process is shown in figure 14 below.

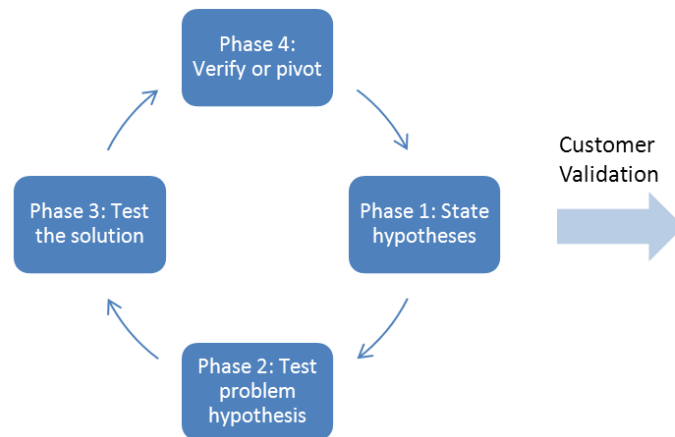


Figure 14: Blank and Dorf's (2012) customer discovery process

6.2.1 State hypotheses

At this stage, it is time to start transforming the opportunity insights from the internal step in to hypotheses about potential value propositions. In line with the process model, the initial hypotheses are influenced by the service opportunities discovered in the internal step. The stated value proposition hypotheses are illustrated with this icon: \Rightarrow . When an important decision is made that influences the discovery process, this is illustrated with this icon: \checkmark in order to make it easier for the reader to follow the process. The continuous development of the business model canvas is also illustrated by screenshots of the current state of the canvas.

The first three value proposition hypotheses are related to modifying or expanding existing services in order to start charging for them:

- \Rightarrow H1: "It would be possible to expand the current education element in TENA Solutions and start charging for it"

It was realized that the education element in TENA Solutions is quite limited. Education on incontinence care, changing routines and product knowledge was crammed together in 1-2 hour sessions. A hypothesis was formulated with the purpose of investigating whether it exist a need for more education.

- \Rightarrow H2: "It would be possible to expand the Index+ offer or modify it in any way to make customers willing to pay for it"

The cost-control software Index+ is provided free of charge to the nursing homes if they are buying TENA products. Since the software supplies such an important function and could perhaps be modified to take competitors' products in to consideration as well, the idea of selling this software as a stand-alone service emerged.

- ⇒ H3: *"It would be possible to digitalize the TENA Quality material, in terms of providing individual care guidelines and care support through computers and iPads"*

TENA Quality's support material offered towards nursing homes for improving the routines and care quality is based on physical paper sheets. The idea of making this support material digital and expanding the offer with explaining video clips and digital best practice instructions were founded. The idea of integrating this system in the nursing homes' other systems was also discussed, with the purpose of increasing the efficiency and the quality of the care.

The last two value proposition hypotheses are related to creating new stand-alone services:

- ⇒ H4: *"There is a need for a rating/certification system for nursing homes"*

The idea of creating a TENA rating system of nursing homes emerged. The purpose of this rating system would be to help caretakers have a better decision material when choosing nursing home and also make the nursing home actors more aware and quality focused.

- ⇒ H5: *"High staff turnover is a large problem for nursing homes in general"*

There was a general opinion/understanding among the interviewees at SCA that high staff turnover was a large, complicating issue within the elderly care. In order to investigate opportunities related to this issue a hypothesis was formulated.

When one or several value proposition hypotheses are verified, a discussion will follow regarding who the *buying customer*, the *end-user* and the *influencer* will be.

6.2.2 Test problem hypotheses

The purpose of this phase is to actually get out of the building and turn these hypotheses in to facts or modifying them in an iterative manner as new insights occur (Blank and Dorf, 2012). This section starts with presenting the findings related to the elderly care industry, divided in the following categories; the eco system, care quality and education. The findings related to these different areas will be described in turn in the following paragraphs. After this, the iterative process with testing the value proposition hypotheses is described in detail.

The eco system

In figure 15 below, the eco system of the Swedish elderly care system is described containing the following actors; county council, municipality, politicians, nursing homes and Socialstyrelsen (Sweden's governmental authority for elderly care). From the interviews with the municipality managers it was learned that the municipality has sole responsibility for the elderly care and therefore also the overall responsibility for the management of the nursing homes. Since the de-

regulation of the elderly care market, the municipality is also responsible for the procurement process and the communication with the private actors.

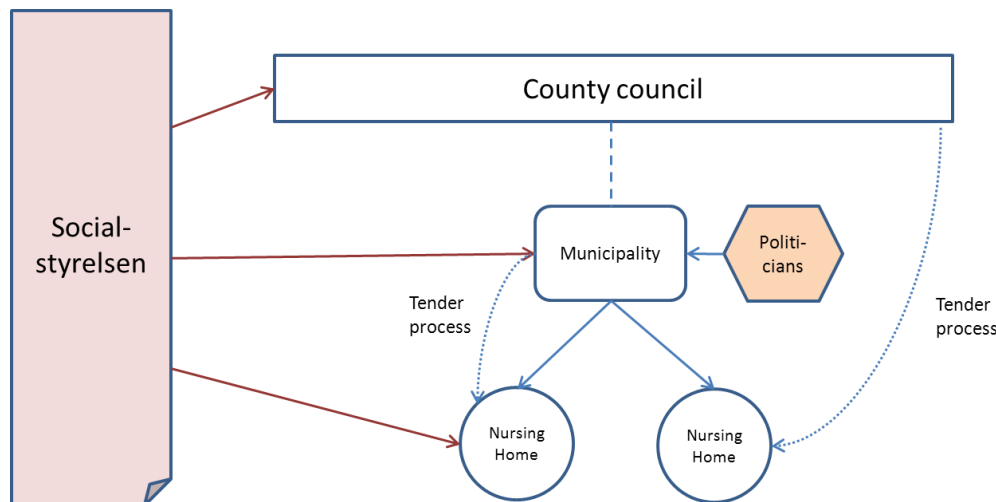


Figure 15: Eco system of the Swedish elderly care.

The municipality is influenced and governed by two actors; the municipality politicians and Socialstyrelsen. The county council does not control the municipality per se (hence the dotted line in the diagram) when it comes to elderly care, but the two actors naturally have a close relation since the county council is responsible for the medical care in the county whereas the municipality is responsible for the elderly care. The authority that influences and regulates the elderly care on a national basis is called Socialstyrelsen. They are responsible for defining national guidelines and laws on elderly care and also monitoring and performing continuous follow-ups on these areas.

When it comes to buying products and services for the nursing homes, they are reliant on so called tender processes. A tender could either be negotiated on county council level or municipality level (see the dotted arrows in figure 15). For more common products, e.g. incontinence products, that the whole county has similar preferences on and cost savings can be made due to large volumes, the tender process will be dealt with on county level, whereas smaller and more specific products and services is dealt with on municipality level.

After having grasped the big picture of the eco system it was also of importance to understand the close relation between the municipality and its nursing homes. Questions regarding the responsibilities of these actors and job positions at the two levels were asked in order to be able to understand the decision paths and the influencing persons. Figure 16 below is a stylized view of the relationship between the municipality and a nursing home and the typical job positions therein.

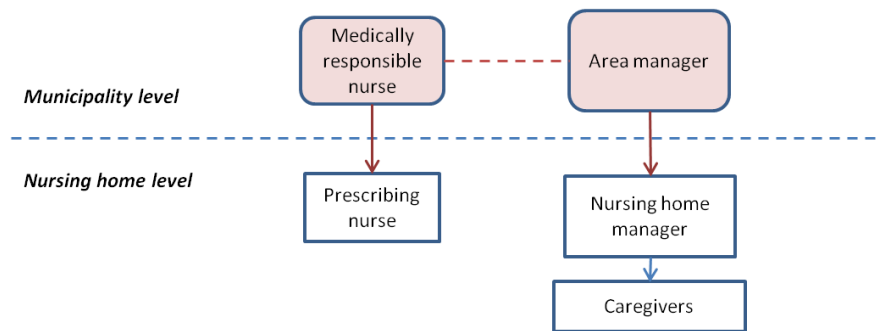


Figure 16: Illustration between municipality and nursing homes.

The municipality set quality demands and budget demands on the nursing homes and there are continuous follow-up meetings between the *area manager* and the *nursing home manager*. To a large extent, the municipality is also providing the nursing homes with different types of education (more specific details on education are presented in the education paragraph further down). Even though the *nursing home manager* is reporting to the municipality, the nursing homes can be considered to be relatively autonomous in the system.

On the municipality level there is an *area manager* that is responsible for all the *nursing home managers* in the municipality. The role of the area manager is quite versatile and includes budget responsibility for the given area, responsibility for the private actors in the area, supporting the nursing home managers, strategic issues and quality work. By talking to the area managers it was obvious that a large focus of their job was on quality work and education. Apart from the continuous follow-up with the nursing homes' quality work, they are also involved in procuring education programs for all the nursing homes in the municipality, applying to quality registers and other municipality-wide initiatives related to quality and education. The nursing homes are assigned their share of the education budget (between 1500-2500 SEK per employee/year), but the area manager is the one responsible for the larger education budget that will be used for municipality-wide education initiatives.

The *area manager* delegates the budget responsibility of the nursing homes to the corresponding nursing home manager and the *nursing home manager's* tasks include staff responsibility, budget responsibility and also responsibility for the caretakers and the care quality. As mentioned above, each nursing home can be considered to be quite decentralized and the *nursing home manager* has the overall responsibility of the operations. However, the *prescribing nurse* working at the nursing home is reporting to the *medically responsible nurse* at municipality level and not the *nursing home manager*. The *prescribing nurse* holds a special function since she has the medical responsibility for all the caretakers at the nursing home and is the only one that has the rights to prescribe the drugs needed.

Caregiver is a collective term used for all the employees working directly with the care of the residents. The caregivers can have different education backgrounds; some of them are assistant nurses, nursing assistants or not educated at all. The caregiver's responsibility is the daily care of the residents and documentation associated with that. A few of the caregivers have more responsible functions such as *group leaders* or *quality representative* etc.

Quality of care

When approaching the subject of care and quality, all the customers almost immediately refers to Socialstyrelsen's *national core values* ("*Nationella värdegunden*"), which is the documentation that steers the municipalities and the nursing home's quality work. The *national core values* put a lot of emphasis on the interaction between the caregiver and the caretaker and use the word *salutogenic* to describe how this relation is desired to be. The *salutogenic* approach means that based on every individual's own conditions stimulate a feeling of meaningfulness and independence. As a direct effect of these guidelines, the municipalities have implemented individual care plans for all the residents and thereby focusing on achieving more individual care. These individual care plans contain information about the residents' personal preferences such as daily rhythms and personal and professional background. Socialstyrelsen's *national core values* has created a trend of moving away from standardized care and implementing a more individualized care based on individual preferences and conditions.

All interviewed nursing homes had also implemented some kind of quality management system (QMS) to keep track of fall accidents, medicine deviations, care deviations etc. The nursing home managers explained that the QMS was a systematization of the directives from the authority Socialstyrelsen. The results in these systems were followed up usually on a monthly basis between the nursing home manager and the area manager at the municipality.

Quality registers was another subject that often came up during the customer interviews. These registers are governmental programs that are rewarded with funding money if the nursing home participates and meets the goals. "Senior alert" is one program that many nursing homes are connected to, and based on their efforts towards reducing the number off fall accidents they receive funding. "Paliativregistret" is another quality register that is based on how the caretakers are treated in the last phase of their life. "BPSD-registret" is for treating people with dementia that has a violent behavior.

Education

Education is closely linked to the area described above; care quality. Even though the municipalities have different structures and approaches for educating their employees, a strong focus on education and quality work is common for all interviewed municipalities. Some municipalities were very far ahead compared to others when it comes to the level of education and the structure of their education system. Certain municipalities had close cooperation with universities and colleges for further developing their employees, others had plenty of internal competence at municipality level whose job was to continuously educate the employees at the nursing homes. Whereas other municipalities did not have so well-developed internal education systems and used more external actors for satisfying this need. The education programs that were used at the nursing homes varied between traditional lectures (either on-site or at an external location) interactive educations with acting and also digital solutions such as e-learning.

The education efforts can be divided in two different strategies: 1. enhancing the overall competence level within the elderly care, and 2. create conditions for individual competence development. Enhancing the overall competence level at the nursing home is partly achieved by only hiring educated assistant nurses and encouraging uneducated employees to take classes. The individual competence development is achieved by establishing individual competence plans for all the

employees where they together with their manager discuss their education goals and are allowed to contribute with their own input.

The private actors have taken the education aspect one step further than the municipality homes. In addition to the obvious benefits with education; improving the care and the daily life for the residents, the private actors realize that education also results in branding and certification of the care. This type of quality assurance improves their relation towards the caretaker's relatives, the municipality and also the press. A concrete example of a quality assurance is the certified education on dementia that the Silvia foundation is providing. They have managed to brand that education so well that being a "Silvia nurse" is something that carries very high status and the result is that nursing homes that have a "Silvia nurse" increase their reputation.

The iterative process: finding the most urgent problem

This chapter will describe the iterative customer development phase in more detail and how the understanding of the customer grew gradually and the VP hypotheses were modified accordingly. This part of the process had a clear focus on investigating value proposition and the other remaining aspects of the business model were developed in a later step.

The areas that we wanted to discuss with the customers initially were: care & quality, budgeting, procurement of services and education. After a few initial interviews had been carried out and we felt that some kind of understanding of the customer and the elderly care area had been gained, we started to talk about the subjects of our hypotheses. Below, the results from this follow.

⇒ H2: *"It would be possible to expand the Index+ offer or modify it in any way to make customers willing to pay for it"*

When investigating this hypothesis a few technical issues became apparent. Access to the type of data required; costs of competitors' products, order and usage statistics of products related to the daily care turned out to be a complicated issue, especially in the municipality homes. For the private actors it was less complicated and one of the private actors already had their own cost-control system installed that they were satisfied with. Due to the problems with integration of a stand-alone cost-control system in to the already established systems at the nursing home's, together with the problems associated with accessing data, this hypothesis was turned down.

⇒ H3: *"Is it possible to digitalize the TENA Solutions' process material, in terms of providing digital individual care guidelines and care support through computers and iPads?"*

The attitude towards computers and digital solutions was investigated in the customer interviews and both problems and opportunities were identified. The managers at the nursing homes revealed that parts of the personnel, especially the older group, have reluctance towards using computer and digital systems in their daily work. However, even though parts of the personnel sometimes complained they still managed to use the IT systems on a daily basis and also use digital education (e-learning). The idea of creating this digital system of the individual care and also integrating it in the other IT systems at the nursing homes turned out to be a quite complicated story. Different municipalities had different types of systems and they all had several systems for different purposes; quality management system, ordering system, journal system etc. The idea of integrating another IT system seemed challenging and the hypothesis was therefore turned down.

⇒ H4: *“There is a need for a rating/certification system for nursing homes”*

The biggest problem with this hypothesis was that the revenue model for SCA was very unclear. Another problem is that SCA as a company cannot be considered to be an independent reviewer since the nursing homes are their customers and they are buying TENA's products. Further, due to the high customer dependency this was perceived not to be of interest. For these reasons, this hypothesis was abandoned early on in the process.

⇒ H5: *“High staff turnover is a large problem for nursing homes in general”*

Influenced by the internal perception at SCA that the staff turnover is high at nursing homes in general and that this provides a problem, this was thoroughly investigated throughout all interviews, both on municipality level and nursing home level. The consistent answer was that the staff turnover was low among the caretakers, but relatively high among the nursing home managers. A decision was made not to pursue this hypothesis further since the market for nursing home managers is quite small.

⇒ H1: *“It would be possible to expand the current education element in TENA Solutions and start charging for that”*

The *national core values* and their focus on individual care quality naturally results in an increased focus on education within the elderly care. These guidelines results in higher demands on the municipality, the nursing home managers and also the actual caregivers. In order to meet the set requirements, education is an important tool. This became obvious since education always was a fond subject of the interviewees and they were eager to tell about their plans to both increase the overall competence level at the nursing home, but also meet the individual's desires to develop their skills further through education. The trend that more severely ill people are living at the nursing homes also sets higher demands on the personnel, both in terms of medical knowledge and also how to approach these people. All in all, the stricter laws on care quality and especially individualized care, together with the outspoken desire to increase the general level of competence within the elderly care industry, made us take a decision to pursue the education hypothesis further. Additional hypothesis and questions more specific to education were developed and the interviews became more focused on education and care quality from now and onwards.

✓ The value proposition hypothesis related to education seems like the most interesting one to follow-up. Therefore the rest of the process will have an expanded education focus.

Education areas

In order to find out what type of content and education areas that would be attractive for the nursing home and their personnel, questions were asked about the employees' biggest challenges in the daily work and challenges that the industry would be facing the coming years. These type of questions were asked both to the nursing home managers and also the caregivers at the nursing home. When talking to the caregivers, open questions such as describing their daily work and daily routines were also asked. After gaining a better understanding for the daily routines of the caregivers and their challenges in the daily work, specific education areas were discussed with them. Two specific interview questions were developed for the purpose of mapping interesting education areas, one for the nursing home manager: *“If I were to give you 100,000 SEK that were dedicated to*

education, what subject would you like your caregivers to learn more about?” and for the caregivers “If you could choose one subject that you feel that you are interested in and would benefit yourself and the caretakers in the daily work, what would that be?”

The answers to these questions were quite varying, but the six most commonly mentioned areas were;

- *“The meeting”*
- *Documentation*
- *Dementia*
- *Palliative care*
- *Multi-diseased caretakers*

“The meeting” was the most common answer among the interviewees. The current focus in the elderly care industry towards providing more individualized care and taking the caretaker’s personal preferences into consideration is probably the main reason for this. A need was expressed to increase the caregivers’ ability to meet the caretakers, the caretakers’ relatives and their co-workers in a more salutogenic way. The nursing home managers had also identified benefits by having trained personnel that were able to handle the caretakers in a way that made them relaxed and not stressful, which resulted in time and cost savings.

Documentation was another common answer to this question and it was obvious that documentation was a large part of the caretakers’ daily work and that it did not always function as properly as wanted.

Dementia was also a popular answer since there are so many different types of dementia and that many elderly people at nursing homes suffer from it. Again, it was expressed from the nursing home managers that there were potential cost-savings associated with being trained on dementia and being able to handle the caretakers more efficiently.

Palliative care was also considered to be an essential part of the work at the nursing home and training for this was requested. The reason was that it was viewed as an important part of the salutogenic way, to maintain a worthy treatment at the end of the caretakers’ lives.

Due to a trend of taking care of more severely ill people at the nursing homes, a demand for education related to *multi-diseased caretakers* was expressed. The people living at nursing homes today are seldom just old or seldom just incontinent, they usually have several issues and diseases which call for a different type of care than a few years ago. Education related to this area was sought for.

Education structure

The other part related to the education hypothesis was to figure out what type of structure of the education program that would be most suitable and efficient. The previously mentioned questions about preferred education areas were followed up by asking: *“And what type of structure would you prefer this education program to have in order to learn as much as possible and get a sustainable effect?”* Many of the interviewees replied that practical influences and interactive elements were very important during the education. Especially the caregivers emphasized that they were not always comfortable with just sitting and listening to a lecturer for half a day with little interaction. Both the

caregivers and the nursing home managers replied that those type of educations that did not have a well-developed structure with reflection meetings and discussions did not result in a sustaining effect in the daily work. Reflection meetings and continuity after an initial lecture was therefore considered to be very important for the sustaining effect of an education. Regarding digital education programs, both the nursing home managers and the caregivers replied that the flexibility was very much appreciated, even though some nurses replied that they were a bit skeptical towards the technology.

Based on the insights from asking questions concerning education contents and education structure a decision were made to continue probing even deeper within the education area. It was obvious that the customers were enthusiastic about the education area and it also seemed like that there was some dissatisfaction with some of the current education programs. For this reason, further questions were developed around problems associated with education with the purpose of probing deeper on the underlying reasons why not everyone seemed happy with the current education programs.

- ✓ The education area is getting increasingly interesting due to the customer enthusiasm and it is decided to continue by probing even deeper within the area.

When the nursing home managers were probed deeper concerning the problems they experienced with procuring education and carrying out education programs for the employees, the two main problems identified were costs and organizing the schedule for the employees. The costs refer to both the actual education cost and also the cost associated with bringing in temporary staff for covering up for the employees sent on education. The other problem was related to the organizing of the education and making it possible for as many employees as possible, both day shift and night shift workers, to attend the education. It was revealed that it was close to impossible to get all the employees to attend the same education due to organizational reasons. A common approach was to send one or two nurses or caretakers on a specific education for a day and then they were given the task to transfer their knowledge internally to their colleagues by holding internal lectures.

Customer segments

The next step was to identify the end-user, the buying customer and the influencer for the chosen value proposition hypothesis. The potential *end-users* for a new education solution were further investigated and through talking to managers at the municipality, managers at the nursing home and the caregivers at the nursing home. They were probed deeper on what type of education the different groups of employees are in need of in order to match the value proposition to the correct end-user. The nursing home managers and the nurses had quite a lot of educations to choose between and these groups of employees were also fewer than the caregivers. This made it easier for them to attend customized educations for their specific needs. Educating the caregivers was more problematic since they were many more and both the costs and the organizational issues became more apparent. This led to the conclusion that the caregivers were the ones in most need for education.

- ✓ The end-user of the business model is concluded to be the caregivers at the nursing homes.

The next step was to identify the *buying customer*. Since interviews were carried out with top management of private actors, managers at the municipality and managers at both private- and municipality homes, a good overview of the budget breakdown and the procurement possibilities at different levels in the organization was gained. The managers at the municipality are the ones who can make decisions to procure a certain education to all the nursing homes in the municipality. Compared to the individual nursing homes and their managers, the municipality has a much larger education budget and bigger possibilities. As previously mentioned the nursing home manager's education budget is very small and is usually spent on planning days for the personnel. For this reason, the municipality becomes the main *buying customer* in the public sector. The *nursing home manager* can theoretically be a *buying customer* as well, but will most likely be limited to an *influencer*. The *influencer* role is however very important since it was found out during the interviews that the municipality managers listens to what needs and suggestions the *nursing home manager* has in terms of education and quality work. TENA's existing sales force will play an important role here, making the personnel at the nursing home aware of the TENA education program.

- ✓ The municipality is concluded to be the main buying customer in the public sector.

The procurement and budget situation is very similar in the private sector. The top management of the private actors has a central responsibility for quality and education and therefore has the power and the budget to procure company-wide education programs. In general, the *nursing home managers* at the private institutions had more possibilities in terms of budget and independent decision making in comparison to the municipality's *nursing home managers*. Their education budget is however small compared to the central one and the top management of the private actors should be considered to be the main *buying customer* for this segment as well. In the same manner, the private *nursing home managers* will theoretically be considered to be a buying customer, but mainly an *influencer* since their opinions are very important to the top management.

- ✓ Top management of the private actors is concluded to be the main buying customer in the private sector.

Since the education program is delivered as a service, it needs to go through a service tender process at municipality level in order for it to be allowed to be procured within the municipality. This step is vital since it will allow the identified *buying customers* to actually buy the service.

Results from iterative process

Based on the iterative process so far and the probing within the education area, five main problems related to education were identified. These main findings are based on all previous interviews on both municipality level and nursing home level. Each of the main findings is stated below with a short explanation and motivation of the problem.

1. Need for more time- and cost efficient education

For the nursing home managers buying the education for their employees, the actual education cost is usually not the largest cost, but the costs for bringing in temporary staff.

2. Need for a more varied education structure with interactive elements

From the interviews it was revealed that especially caregivers are unhappy with the structure of many education programs since they are based on a traditional lecture style with limited interaction.

3. *Need for better integration and application of education in the daily work*

Both nursing home managers and caregivers experienced that the educations that were concentrated to one single occasion without any follow-up or reflection resulted in poor implementation in the daily work.

4. *Need for access to education for a larger share of the employees, not just a few selected individuals*

It was considered to be problematic to reach out to a large share of the employees at once and engage them in education due to organizational limitations. For this reason, only a few individuals were selected to be educated and then bring the knowledge on internally.

5. *Need for an education structure and content that are adapted to people with limited study experience*

According to the caregivers themselves, many of them do not have an extensive study background and they do not appreciate too theoretical education material and traditional lectures. Additionally, they did not appreciate writing assignments.

6.2.3 Test the solution

The focus of the previous phase was to find an urgent and vital problem that many customers experienced. In this phase, the focus is shifted towards testing the customer *solution* for that particular problem. The goal of this phase is basically to test if the solution gets the customer enthusiastic enough to buy the product (Blank and Dorf, 2012).

The first step in this phase is to review and update the business model based on everything learned about the customers and their problems in the previous phase. Further, some of the resources, activities and key partners that were identified in the *internal condition mapping* step are also included in the canvas (illustrated in a lighter color). The reason why they were included in the canvas is that they are related to the set scope and can potentially be leveraged on in the proposed business model. Finally, based on all the confirmed and declined hypotheses in the previous stage about the customer's problem the canvas currently looks like illustrated in figure 17 below.

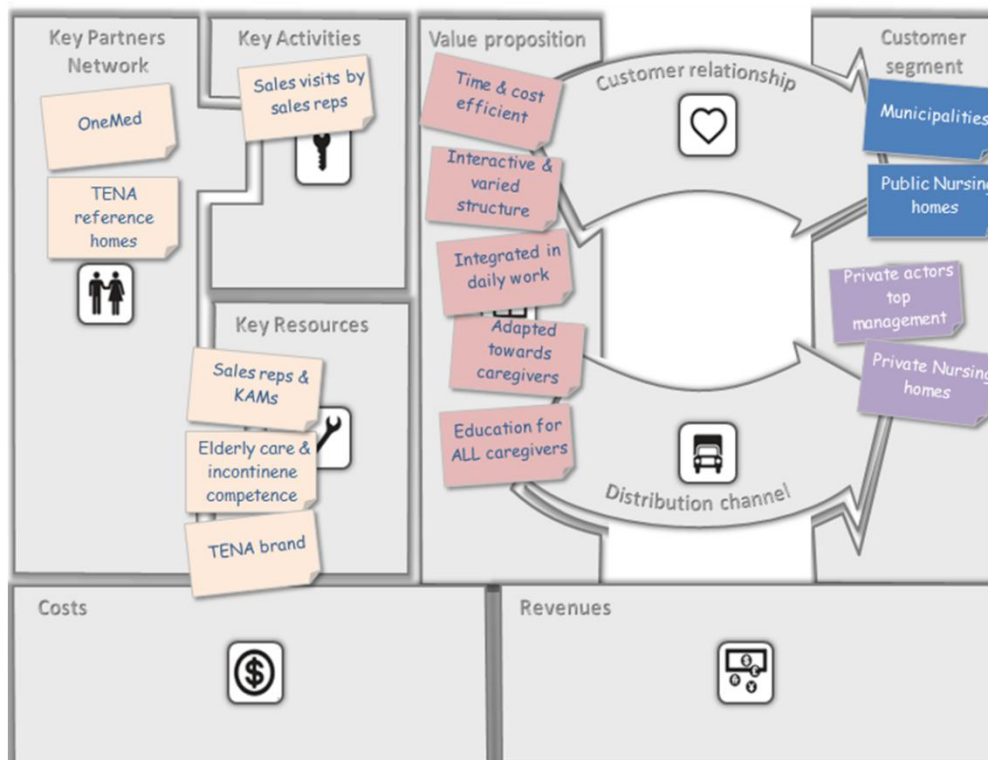


Figure 17: Business model canvas version 1

Color codes: blue = public sector, purple = private sector, light pink = existing resources at SCA, pink = applies to all

The suggested value proposition is based on the main identified customer need; education. The different building blocks of the value proposition are based on the previously stated customer needs in relation to education. The customer segments were also investigated in the previous phase and the private and the public segment are illustrated in two different colors.

Initial testing of the solution

Further interviews were conducted, on both municipality and nursing home level, in order to test the solution. The solution suggested at this stage was an innovative education program based on e-learning that can be used independently by the caregivers, on-site during working hours and without the costs of bringing in extra temporary staff. It was a result of the analyzed interviews carried out at this point.

During the following interviews the solution was presented and followed by discussions regarding every aspect of the proposed education program. The discussions became mostly focused on practical issues related to the education and it was learned that it would be feasible for the caregivers to spend two half-hour sessions a week during working time for the e-learning module. Moreover, it was learned that it would be possible to have internal reflection meetings on a regular basis for discussing the contents of the e-learning. It was also revealed that the caregivers would prefer working in pairs when working with the e-learning due to the possibility of discussing the contents and insights directly.

The proposed education areas for the modules were also further discussed. The general feedback was that there must be a clear connection between each education area and what results the

education will yield in the daily care. It must be very clear how the education will improve the caregivers' daily work and the experience for the caretakers, or it will not be procured. The opinions on what education areas that were most urgent differed between different municipalities and even nursing homes within the same municipalities. In general, the most urgent area seemed to be connected to Socialstyrelsen's guidelines and the individualized care. Many nursing home managers replied that they wanted to further educate their caregivers in meeting their caretakers, meeting their relatives and also meeting each other in a good and salutogenic way. More fact based education areas such as incontinence, nutrition, skin care etc. were also interesting, but in general the more soft areas related to treating the caretakers and other people in their surroundings in a proper way was expressed as more interesting.

Other feedback from the solution presentation was that a few of the interviewees stated that they believed it to be important to have a differentiating factor when trying to sell an education. They declared that there are so many education programs out there that you need to be innovative and differentiating in some way in order to be able to sell it. The interviewees were very positive towards the idea of cooperating with prominent actors with knowledge within different parts of the hygiene area. Since for example the Silvia Foundation has earned a strong reputation already within the dementia area, key partners similar to them but within other hygiene related areas as well seemed like a very good idea to the interviewees.

Based on the test feedback so far a new version of the business model canvas was generated, illustrated in figure 18 below.

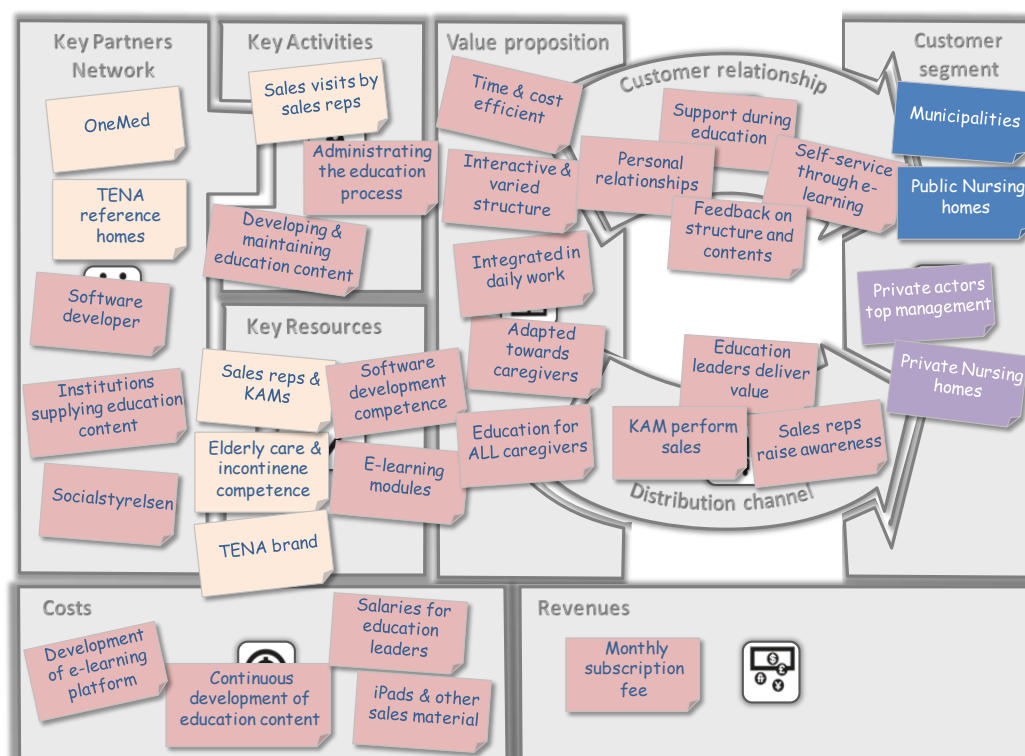


Figure 18: Business model canvas version 2.

Color codes: blue = public sector, purple = private sector, light pink = existing resources at SCA, pink = applies to all

Testing the first MVP version

Based on the current version of the business model canvas, a minimum viable product (MVP) was generated in order to test it on a set of eight customers. The MVP at this stage was very similar to the solution presented to customers in the previous phase, but with a few minor additions and further specifications. The solution testing revealed that the caregivers preferred working in pairs and therefore that was implemented in the MVP. The solution testing also revealed that there was a larger interest for education within areas such as “meeting and interacting with the caretaker” than incontinence and skin care, so the education areas were modified as well. For a more detailed description of this version of the MVP, please see appendix C.

The hypothesis that the caregivers would be able to work in pairs during the e-learning sessions was soon declined. Due to varying schedules and the fact that the e-learning work is meant to be carried out when the caregiver can spare some time, working in pairs complicated this. The reference point is therefore to work independently during the e-learning sessions, but if the situation allows it nothing will stop you from working in pairs since this is believed to create another dimension of the learning when the material is discussed with a partner.

The hypothesis that it was possible for the caregivers to spend two half-hour sessions a week on e-learning, during calmer periods of the working day or in connection to the start or the end of the shift, was yet again confirmed.

The hypothesis that it would be possible to have three education periods per year with one new module in each period also got declined. Due to large share of temporary staff during summer and holidays and temporary staff during the winter, the recommendation was to limit the program to two education periods; spring and autumn. When discussed how many months that should be set aside for each education module, the answers varied between 2-4 months. For that reason, it was decided that one or two modules could be run within one education period, depending on preferred study pace. The number of internal reflection meetings was also discussed and the conclusion was to have it once a month, either as a stand-alone meeting or preferably in contact with the regular APT meeting. It was also revealed during the MVP testing that the nursing home managers got a little bit worried by the fact that the education leader would only show up at the start and at the end of the program. Some kind of support there in between would definitely be needed they said.

Regarding pricing, the general attitude among the interviewees was that 150 SEK/person/month for this education program would be cost-efficient and willingness to pay existed. The feedback on whether they wished to pay the education fee on a monthly basis or all at once in a fixed fee was that they honestly did not care, they had no incentives to distribute the costs evenly throughout the year so it did not matter to them. An interesting aspect, was that several interviewees identified the cost savings of temporary staff that this education concept would result in without our help. An insight about pricing was that quite a few e-learning programs are provided for free today. This makes it important to emphasize that TENA Education program does not simply consists of an e-learning module, but personal education occasions on-site as well.

Result: final composition of MVP

Based on the learning from the iterative solution testing and the MVP testing, a modified, final version of the MVP is built. An MVP should not contain more than five key features according to

Blank and Dorf (2012) and the selected five key features of this MVP are based on the previously mentioned identified customer needs:

1. *Need for more time- and cost efficient education*
2. *Need for a more varied education structure with interactive elements*
3. *Need for better integration and application of education in the daily work*
4. *Need for access to education for a larger share of the employees, not just a few selected individuals*
5. *Need for an education structure and content that are adapted to people with limited study experience*

The MVP that the customer development project resulted in is an innovative and modern education program that is based on a mix of independent education through e-learning, reflection meetings in groups and lectures carried out by a professional education leader. The education program is built up of modules with different education themes and each module follows a specific process that is described in figure 19 below.

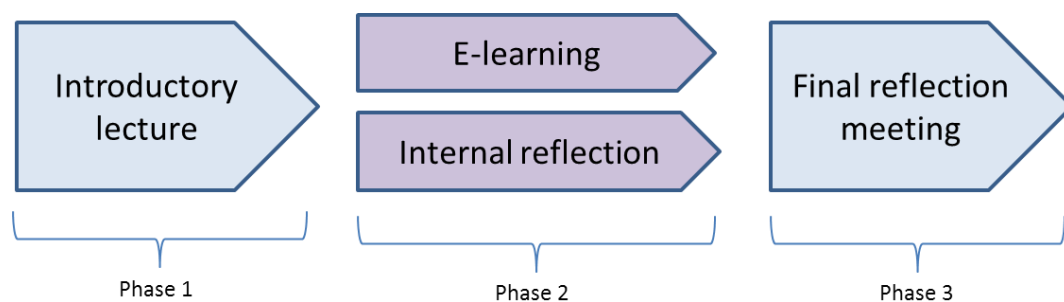


Figure 19: The structure of the education process.

An education module is started off by an “Introductory lecture” where a professional education leader from SCA visits the nursing home and introduces the subject and the structure of the program. The next phase consists of independent work with the e-learning module for the caregivers at the nursing home, mixed with internal reflections meetings. The caregivers will spend two half-hour sessions per week working with the e-learning module on leased iPads during less busy hours of the day or in connection to the start or finish of the shift. Every month there will be half an hour set aside for internal reflection and discussion in group about the education theme, on the APT-meeting. During this phase, the managers and the caregivers at the nursing home can work independently and without close contact with the education leader since the education material has a pre-defined structure and is prepared with reflection questions for the internal reflection. The TENA education leader is however accessible for support over telephone or similar communication. In the last phase of the module the professional education leader visits the nursing home again to have a proper “final reflection meeting” with all the caregivers. Questions that have arisen during the independent phase will be dealt with and reflection will be mixed with lecturing on the subject.

Referring back to the customer *problems* and *needs* mentioned at the top, the MVP answers them in the following ways. The “*need for more time and cost efficient education*” is addressed by mainly focusing on independent self-studies with the e-learning module, internal reflection meetings and a

low number of lecture hours together with the professional education leader. According to managers and caregivers it is possible to carry out this type of education work during less busy working hours during the day. As a result it is possible to achieve significant cost savings from less employment of temporary staffing.

The *“need for a more varied education structure with interactive elements”* is addressed by providing a mix of lectures, independent work and reflection meetings in groups. The e-learning module is designed in a modern and innovative way with video clips, interactive elements such as quizzes and situational issues as well as suggestions on how the theory can be applied in the daily work.

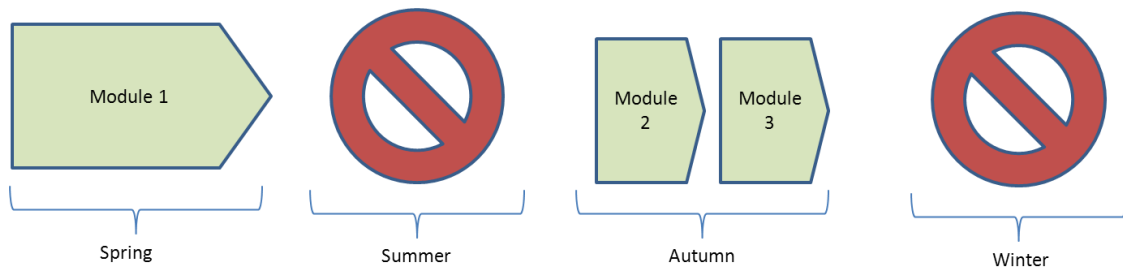
The *“need for better integration and application of education in the daily work”* is partly addressed by the continuous work with the e-learning twice a week, which results in a more intensive and closer connection to the daily work. The e-learning module also suggests related tasks that the caregivers can put into practice during the continuous education program, which will result in a closer integration between education and the daily work. Suitable reflection questions will also be presented in the material that the caregiver can discuss with the other employees during work. The internal reflection meetings will also serve as a tool to discuss the knowledge gained and how to implement it in the daily work.

The *“need for access to education for a larger share of the employees, not just a few selected individuals”* is addressed by making it possible for all caregivers to take part in the education program. Not just a few individuals are selected to participate in an education and then pass on that knowledge to the rest of the caregivers; this education program reaches out to all caregivers on equal conditions. By using key partners for the development of the contents in the different modules, the caregivers are given the opportunity to take part of top knowledge provided by prominent actors.

Finally, the *“need for an education structure and content that are adapted for people with limited study experience”* is addressed by having a pedagogical e-learning module that is based on video clips and situations in the daily work, not heavy theory and text paragraphs that the caregivers have shown reluctance towards. Neither is the education program based on monologue lectures where the caregivers have to listen for many hours at a time; instead the focus is on providing an interactive and integrated education program that the caregivers appreciate and understand the practical use of in their daily work.

Time period

Regarding the time frame of the education program and the study pace, different versions have been tested on the customers. One of the main insights were that the spring and the autumn are two good periods to run education programs since during the summer and the winter there are a lot of holidays and temporary staff at the nursing homes that would interfere with the process. The lengths of the modules have also been discussed during the interviews and the responses have been mixed between 2-4 months. For that reason the MVP should be adaptable and either one or two modules could be completed per semester depending on preferred study pace.



Module content

Finally, four education areas were selected to be included in the MVP. The three first areas were selected on the basis of customer needs and the full motivation behind the selected areas can be found earlier in the findings chapter. The fourth education area; incontinence, was added to the MVP since TENA has that knowledge today and can deliver that education on their own. The three first education areas however require cooperation with external actors in order to gain the relevant knowledge.

- *“The meeting”*
- *Palliative care*
- *Multi-diseased caretakers*
- *Incontinence*

The two other identified education areas that did not make it in to the MVP were *dementia* and *documentation*. Dementia did not make it because of a tough competitor situation with free e-learning modules from “Silvia Stiftelsen” (called “ABC demens”) and *documentation* was not really considered to be close enough to SCA’s core business.

Result: final business model canvas

The final step of this phase was to review and update the business model one last time based on the input from the MVP testing. The resulting business model is shown in figure 20 below:

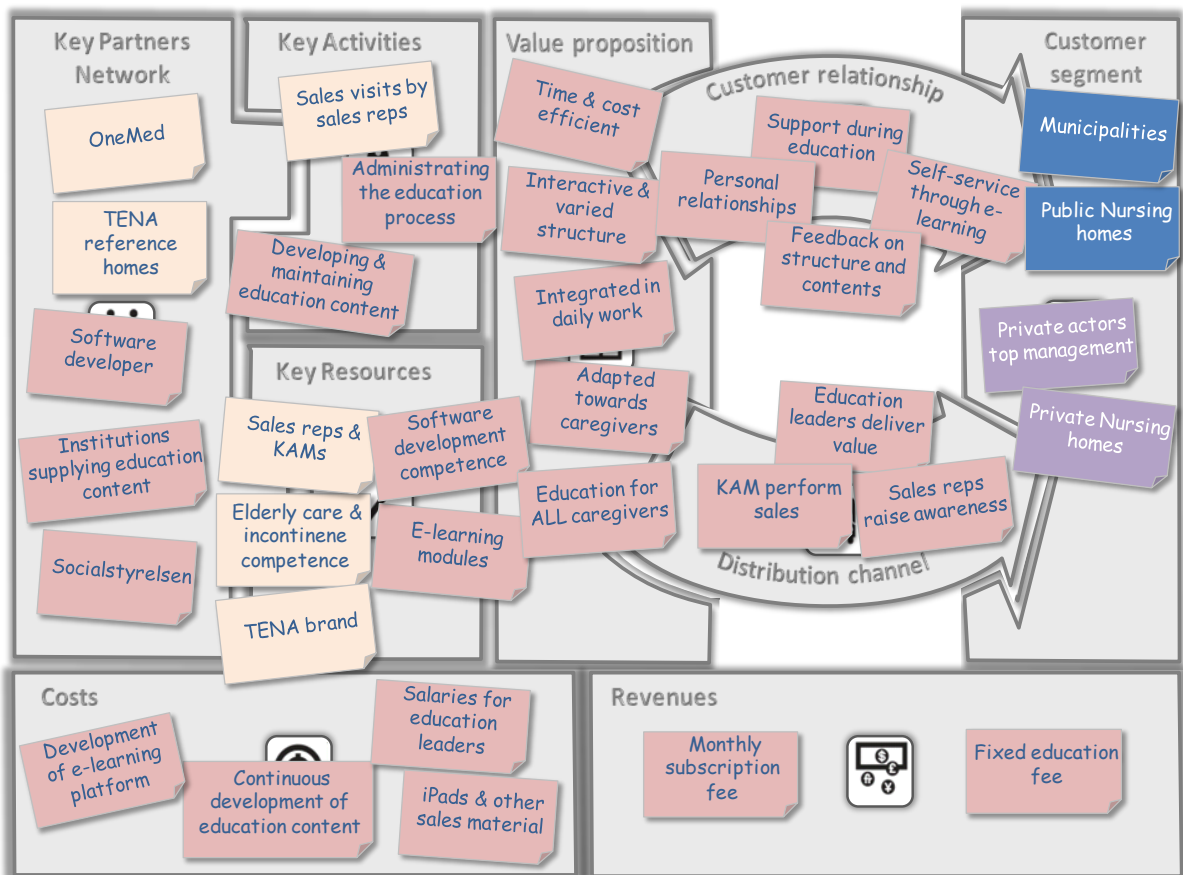


Figure 20: Final version of the business model canvas.

Color codes: blue = public sector, purple = private sector, light pink = existing resources at SCA, pink = applies to all

Some of the elements in the left-hand side of the canvas are SCA's existing resources and were identified in a previous phase; these are illustrated in a lighter color. All the elements that have been added as a result of the study are illustrated in a darker color. The only change of the business model since before the final MVP testing is the addition of a second revenue model; fixed education fee. A discussion on how SCA as a company can leverage on the existing resources when executing the new proposed business model is held on the last phase of the process model.

6.2.4 Verify or pivot

This is the last phase of the customer discovery process and it is time to determine if the hypotheses have been turned in to hard facts and whether the business model is scalable, repeatable and profitable. In order to decide this, three different questions needs answering, according to Blank and Dorf (2012).

1. "Have we found a product-market fit?" (i.e. is the addressed problem urgent and vital to lots of customers and are they willing to pay the decided price)

During the interviews it soon became very clear that education was something at the heart of interest at both nursing home level and municipality level. The interviewees could not stop talking about the increased quality demands on the elderly care and the importance of increasing the overall competence at the nursing homes. It was not just the managers that expressed this, the caregivers

were also enthusiastic and hungry for further education in general. The fact that many of the interviewees experienced that some of the existing education programs had poor structure and resulted in poor integration in the daily work opens up for the possibility to deliver an innovative and modern education program that is better adapted towards their needs and conditions. The existing education programs were in general very traditional with lectures and limited interaction and in those cases where the nursing homes had tried an e-learning program the reception was very positive because of the flexibility and the variation.

There is however competitors on this market and as mentioned before, a few e-learning modules are provided on the market for free, which makes it very important to emphasize that this education program is more than just a standalone e-learning module. Through the MVP testing it was however revealed that there exists a willingness to pay the proposed price.

2. "Who are our customers and how do we reach them?"

SCA's existing customers and sales channels will be taken advantage of to promote and sell the education program. Synergies will be generated by using SCA's existing sales representatives and key account managers to sell the education offer at the same time as they are promoting and selling SCA's products. The sales representatives will continue to work on nursing home level and municipality level to influence and try to sell the education service. The KAMs that usually only works on county council level will need to start working towards the municipality level in order to, a) win a tender for delivering education services and, b) sell the education service municipality-wide through the managers at the municipality. Regarding the private segment, the hierarchical structure is very similar to the public sector. The private actors' top management is the ones with mandate and budget to procure an education service to all its nursing homes, whereas the separate nursing homes and their managers are important influencers.

TENA's sales organization have mostly been active on nursing home level and county council level previously, but in order to sell this service offer they need to focusing more on the municipality level as well. The municipality is the main paying customer for this service and also in charge of the tendering process for this type of service. The nursing home is however still an important actor and strong influencer on what type of education the municipality wish to use and therefore the sales force's presence at the nursing homes need to be maintained in order to promote TENA's brand and influence the use of the proposed education program.

3. "Can we make money and grow the company?"

Detailed calculations in terms of pricing, revenue and costs can be found in appendix B, whereas this paragraph will deal with the financials on a more general level. First, the assumptions made regarding the average nursing home are presented in table 1 below.

Assumptions	
Number of caregivers at average nursing home	20
Number of nursing homes in Sweden	2500

Table 1: Assumptions for the financial calculations.

Table 2 below presents an overview of a predicted scenario for the three first years with the proposed business model.

Year	Market penetration	# of homes	Turnover	Variable costs	Fixed costs	Profit
1	2%	50	1 800 000 SEK	1 016 000 SEK	-1 104 000 SEK	-320 000 SEK
2	5%	120	4 320 000 SEK	2 438 400 SEK	-1 104 000 SEK	777 600 SEK
3	10%	250	9 000 000 SEK	5 080 000 SEK	-1 104 000 SEK	2 816 000 SEK

Table 2: Predicted scenario for the three first years.

An estimated market penetration of 2%, 5% and 10% for the first three years is considered reasonable since TENA already has established relations with many of the potential customers. Based on a fixed fee of 600 SEK per caregiver and module, that can either be paid for in advance or as a monthly subscription fee, this will yield the revenues presented in table 2 above. The revenues have been based on the current levels of price and costs associated to educations within the elderly care. The variable costs presented in table 2 include salaries for education personnel, transport and iPads. The fixed costs refer to the development of web-platform and e-learning modules carried out together with key partners. To allocate the costs on a yearly basis the fixed costs for the web-platform has been estimated to have an economic lifetime of 5 years and 3 years for the education modules. The estimation is based on the perception of an experienced web-platform project manager and the perceived technology development pace for software technology. With the total costs taken in to consideration it can be seen that the business model is profitable from the second year with a gross margin is 41%. However, worth emphasizing is that these numbers are based on that an average of 20 caregivers attends the education per nursing home. Moreover, it is recognized that there is a minimum need of 15 participants in average per nursing, in order for the education program to be profitable in the 3rd year. That would yield a gross profit margin of 34 % in year three. The reason that the participants per nursing home is emphasized upon is that the personnel needed to carry out the onsite education lectures are the most significant variable cost. Furthermore, this initial profitability assessment is only based on the Swedish market and since there are large similarities within the elderly care between different geographical markets there are good opportunities for growing the business.

6.3 Step 3: Business model assessment

This is the final step in the developed process model. Until now, the internal conditions have been mapped by identifying resources, capabilities, customer dependency and service opportunities. Moreover, the opportunities has been tested and experimented with and turned into a business model proposal, consisting of a MVP and a canvas. The last step in the process intends to assess the potential for the proposed business model related to the firm's situation. This is done by evaluating the business models potential to profit, effects from resources and capabilities and implications for current business and customers.

6.3.1 Potential to profit from the business model

-
- ⇒ Are there any specialized complementary assets associated with the new business model and if so does the firm possess any of these?
 - ⇒ Are there legal instruments that protect the innovation and prevent competitors from imitating?
 - ⇒ Does the business model include processes, activities or resources that are tacit or codified, making them hard to imitate by competitors?
-

Regarding the complementary assets, the proposed education service creates a situation where there are multiple interfaces for communication that need to be considered. These consist of both direct contacts via sales representatives, key account managers and education leaders as well as indirect contacts via distribution, digital feedback and telephone support. A part of the direct contact is the procurement process towards municipalities, which requires sales personnel with knowledge about tender processes. Therefore it is perceived to be important to have access to key account managers with extensive knowledge in local tender processes. Especially if looking at a European perspective where the tender processes and evaluation differ extensively among countries and many firms struggle to enter new geographical markets within the elderly care industry. This competence already exists within SCA and has proven to have a good track record of winning tender processes. Further, marketing efforts and information need to be provided towards the nursing home managers and the nurses, in order to build a good reputation for the education service and create a demand within the nursing homes. If a demand is created it is significantly more likely that the municipality or management of a private company will purchase the education service. It is therefore deemed that there is a need for personal interaction that can perform marketing activities towards the nursing homes. It is perceived that this can be performed by the TENA sales representatives. Altogether, there is need for a sales department with a large sales network that has experienced key account managers, elderly care marketing knowledge and sales representatives. However, it is worth mentioning that selling an education service is different from selling products and this requires the sales representatives to adapt to new ways. Therefore the sales organization within TENA is considered to be a specialized complementary asset on the condition that they will be able to adapt to selling services.

The education package is made up out of a combination of personal education and e-learning. The e-learning module will require a certain design and compilation of knowledge in text format. Hence there will be some legal protection to lean against in terms of design right and copyright. However these are perceived to give a very weak protection in this case. Looking closer to the activities carried out during the education service, it contains a setup of many activities and resources. To begin it is made out of a combination of e-learning and personal interaction with focus on reflection. Further, it uses key partners to provide the latest academic knowledge which is combined with an interactive design. In combination with support, introduction and marketing from the TENA sale organization the nature of the service is perceived to be hard for competitors to fully imitate.

In addition to the discussions above on potential to profit from the business model, an initial profitability assessment was also carried out in chapter X, with a positive result. For more details, the calculations can be found in appendix X. An important aspect that has to be considered is that the

proposed business model is not yet up and running, therefore the profitability aspects cannot be fully known.

6.3.2 Consequences of resources and capabilities

-
- ⇒ Is the proposed business model in line with the strategic intent?
 - ⇒ Does the proposed business model demand an extensive set of new resources and capabilities? If so can this present a risk for the firm's ability to perform the new business model?
 - ⇒ Can the existing capabilities and resources be leveraged upon in the new business model?
-

The overall strategy assessment is unfortunately limited for the reader due to confidentiality reasons. However the assessment of the alignment with the strategy of the new business model concluded that the proposed service business model does fit the strategic intent. This conclusion was reached through comparing the business model and its scope with insight from interviews and internal documents, containing the brand strategy and overall strategic plan for the Global incontinence department.

The proposed business model contains some elements that require resources not available within the company. The main foundation of the education package consists of the knowledge it distributes through personal interaction and the e-learning module. Some of the examined knowledge areas of interest for the education package were present within SCA, such as incontinence and hygiene. However, the response to these areas, within the market examined, was quite lukewarm. Hence the proposed subjects require knowledge resources available outside the existing knowledge base present within SCA. This can of course present a threat to the performance of the business model within these areas but the idea is to solve this by proposing a key partnership solution with prominent actors within the different fields.

The e-learning module also requires it-skills in terms of software development. This knowledge is on the other hand perceived as to be quite generic, why it is not believed to limit the firm's ability to carry out the business model in a qualitative manner. Additionally, teaching requires pedagogic knowledge and access to education leaders which can be a scarce resource if the existing sales force isn't used as education leaders. The sales representatives have knowledge within education and pedagogic skills since TENA Solutions incorporate teaching and education in relation to the incontinence products. As a result there already exists knowledge within teaching but the sales representatives have to be educated in each knowledge area.

There are a several existing resources that can be leveraged upon within the new business model. As noted in the profit assessment earlier, two of these are sales and distribution. However, the TENA sales force today is very product focused and there is a risk that they will have a hard time adapting to promoting and selling services. Depending on how adaptable the sales force is, it can be considered to be a resource that can be leveraged on, or not. Further, the proposed business model aim to leverage upon the existing brand, TENA, with its high quality association within the elderly care market. Moreover, the capabilities presented in the first step of the process model comprehend

“customer and service minded approach” as well as the “best practice in incontinence and hygiene management processes”. These are perceived to be of great use in creating a service that really fit the environment and provides adapted knowledge. Additionally, existing customer relations and service mindedness presents a great base for trust towards the customers. This is perceived as beneficial since the outcome of the service is tacit where trust and reputation strengthen the firm’s offer. That factor can prove to be essential as quality of services tend to be hard to assess in advance in terms of what you receive.

To summarize, the perception is that the extent of new resources and capabilities needed in the proposed business model are limited to a few. Further, these are not perceived to be vital resources and therefore identified not to affect the performance of the service business model to a large extent. A stronger argument is however that there are potential synergies from existing capabilities and resources. And since the service is perceived to be in line with the strategy, the business model is identified to be well suited both in terms of strategy, resources and capabilities.

6.3.3 Implications for current business and customers

-
- ⇒ Does the proposed business model extort risk of influencing current customer base in a negative way?
 - ⇒ Does the proposed business model extort risk of influencing existing business negatively?
-

TENA is placed as a premium player within the elderly care market through its high quality products and TENA Solutions. As an effect, the brand represents an important asset towards customers. Therefore new services introduced, related to the TENA brand, needs to maintain a high standard. This is also the case for the proposed service business model, however the introduction of new business models always presents a risk of failure. Apart from that there are no other potential threats identified that could extort a negative effect upon existing customers. Instead, it is rather perceived to strengthen existing customer relations through more interaction. Further, it can yield more trustworthy for the sales representatives as they are related to the quality education.

For the existing business new routines, as a consequence of education, might lead reduced utilization of products. However, TENA’s aim is to deliver “residence wellbeing” where the goal is to reach an appropriate use of incontinence products with a correct application and worthy personal care. By offering both service and products through the sales organization there is a potential for synergies and reduced costs for the sales organization. However, as more is sold by the sales personnel less time might be available for the products and customers might perceive that sales meeting takes too much time and there by affect the product sales negatively. On the other hand, by spending more time with customers and offering extensive quality education TENA can also gain a stronger brand recognition associated with a larger extent of knowledge within the elderly care area. This could potentially open up for new opportunities.

7. Analysis

The purpose is to create, test and verify what can be a profitable and scalable business model for an innovative service offer at SCA Hygiene Products, related to the existing market for professional elderly care?

The purpose written above is the basis for this analysis and the conclusions that are drawn. The analysis concerns four different areas that will be dealt with separately in sequence throughout the analysis. The areas that are of interest to analyze are: to what extent the service offer can be considered to be innovative, whether the service is a service innovation or a business model innovation, and finally the aspects of scalability and profitability of the business model.

The service business model that has been developed within the scope of this thesis is founded on a set of activities and resources of which none is new to the world in itself. Instead the newness of the business model lies in the combination of existing resources and activities as a means to meet the problems and needs that was perceived during the external experimentation and testing phase, in the developed method. Even though the supply of education towards the elderly care market is perceived to be quite extensive in general, it was perceived that there existed an opportunity to deliver a differentiated education service that could create more value. The current educations often consist of a teacher that lectures for a few hours during the day and potentially combined with some practical application of the knowledge. E-learning is also available for some education areas, where the student takes part of the education material on her own and no personal interaction is included. Since it was learned that complementing the traditional lecture style with a an interactive element was much appreciated, it was deemed as an important part of an education offer. Within these different education structures, there is seldom reflection activities included, which results in that the education often is forgotten and not sustained within the routines at the nursing homes. The proposed business model creates a different value because it offers a combination of live lectures and e-learning with a structured program for self-reflection. Continuing, this is followed up with a group reflection with an external education leader to achieve a deeper understanding of the applicability of the knowledge, acquired by the temporary nurses during a longer time. This is not necessarily a new type of education structure in general but it is not present within the elderly care market. The enhanced value lies in the education service potential to offer education with more benefits in a cost efficient manner.

Considering what has been presented above, the new business model is argued to be perceived as an innovation, based on the definition presented by Garcia & Calantone (2002). They emphasize that an innovation should consist of a new combination of technology and activities and be new to a market. Further, it should lead to commercialization of the original invention. The proposed business model comprehends a combination of technology and activities that are new to the firm. Further, the combination of activities and the differentiated structure presents something that is new to the market. This is of course based on the assumption that the proposed business model is brought to the market and commercialized, which cannot be known at this point. The research question emphasize on that the service offer should be perceived as innovative. As mentioned by Garcia & Calantone (2002) the innovativeness concerns the newness of an innovation and is highly dependent on from whose perspective it is viewed. The macro perspective concerns a newness that infers a fundamental change in technology and structure to an industry, which the new business model is not perceived to do. However, the micro perspective incorporates change in technology, knowledge

and/or capabilities on a firm level. As the proposed business model need to acquire new knowledge for how to manage service contracts, service pricing, new technology for the e-learning platform and new knowledge within the education areas the business model is perceived to be innovative on a micro level.

Another consideration, that is deemed important, concerns whether the innovation should be viewed as a service innovation or a business model innovation. As noted in the theory section, the difference between these two denotions can be perceived as quite vague, especially if similar activities have been carried out within the company before. This reasoning is based on the definition presented by Björkdahl & Holmén (2013) which state that business model innovation is a new combination of existing things that may include other types of innovations such as service- , product- or process- innovations. Further, the definition of service by Grönroos (2001) focus on that it is a set of activities with intangible nature and that it can be a combination of things that create value for the customer. Therefore it seems that the extent to which similar activities, to the proposed business model, have been carried out within the company before or the extent of new resources needed for the innovation determines how it is defined. An example of activities, similar to the proposed business model, that is carried out within the company today is TENA Solutions. TENA Solutions contain elements of education towards nursing homes related to primarily incontinence and skin care. Likewise, the proposed innovation concerns education towards nursing homes but use another structure. Further, it is suggested that the content, for the new business model, should incorporate areas beyond the resources available within SCA hygiene. On the other hand, many of the existing resources and capabilities are applied in the new innovation and yield the basis for its competitive advantage. The conclusion from this is that the description both meets the prerequisites of a service innovation and a business model innovation. Therefore the perception is that the proposed business model is a business model innovation that is created in the nature of a service. Hence the partial purpose to identify a potential service business model is perceived to be achieved.

The aspect of scalability is included in the customer development method and evaluated in the second part of the developed process model. Blank & Dorf (2012) emphasize that scalability is essential for new business models in order to proceed and profit from the proposed business model. The problem is, as recognized by Björkdahl & Holmén (2013) that the concept of scalability lacks a clear definition and need more research. However, the common understanding is that a scalable business model enables revenues to grow faster than the associated costs. Existing research that touch upon the subject build its reasoning on the concepts of economies of scale, scope and adoption.

The proposed business model contains activities and resources that are identified to enable both economies of scope and scale. First, it is based on an education platform that has to be developed initially. This is perceived to a yield high initial fixed cost for the overall platform. The perception is that the platform then can be used for as a basis for all the other education modules based on that platform. Hence as the amounts of users grow, one do not have to develop the underlying platform but only the new education modules adapted to the platform. The belief is though that the modules also will be able to build upon older technology. One aspect that might hamper this is the fact that technology related to information technology has a fast pace of change. As a result, minor continuous development has been seen necessary during a period of five years' time whereas after that a major upgrade might be necessary for both the platform and modules. This is though hard to

assess since it is highly dependent on the development pace of hardware and software technologies, utilized in the e-learning system. Hence web platform for the education service experience economies of scale as more users adopt the education offer and economies of scope as more education modules are added. Another aspect is the knowledge incorporated in the modules. Some of the knowledge required for the contents of the education modules needs to be acquired or co-developed with key partners, which will result in a fairly large cost. A risk factor in connection with that is that the knowledge within the education areas develop quickly and the old knowledge might become obsolete. Large alterations are however not perceived as likely why it also is believed to experience economies of scale as adapted by more users.

The proposed model is also dependent on the amount of users per home as live lectures are included. The reason is that the costs for the education leader remain the same but as the number of participants grows revenues increase, leading to a higher contribution profit. Hence, there is an element of economies of scale related to this. Further, if the education leader is an educated TENA sales representatives it will enable economies of scope as products sales visits can be carried out in connection to the lectures. Lastly there has not been identified that there exist any economies of adoption. Summarizing, the identified possibilities for economies of scope and scale indicate that the business model can grow revenues faster than its cost. This leads to the conclusion that the model can be regarded as scalable, based on the present knowledge.

Concerning the perspective of profitability for the proposed business model, it has been evaluated from both a financial and a competitive perspective. The financial perspective came to the conclusion that the proposed business model is estimated to be profitable. Though, it is important to have in mind that this conclusion is based on an early financial estimation, to a large extent built on rough estimations from costs and revenue levels from similar projects. What has been identified as the main costs are the development of the web-platform, education leaders and the creation of education modules with content. The cost of the education leader has been estimated based on the salary level of existing sales personnel which is believed to be quite representative and adequate. Concerning the platform costs, one of the managers in an SCA innovation team was consulted who has experience from development of web-platforms. Another important factor is the assumption of the market penetration, which might be a bit optimistic with a 2%, 5% and 10% development over the first three years. Further, the financial estimation has been based on an average group size of 20 students which is an assumption made by the authors based on the experience from the interviews. The average group size assumption needs to be considered a bit uncertain for whether it is representative for the market as a whole. This assumption might have a large impact on the financials since the revenue model is partly based on monthly payment, based on cost per student. Hence these figures will experience changes, as the business model is likely to experience a continued development throughout a potential implementation phase. Nevertheless, the current results derived, point toward a service model with high financial potential. Further, the competitive perspective which incorporate strategy, resource and capabilities as well as abilities to profit, gave a positive perspective concerning profitability. The somewhat tacit nature of the service and access to specialized complementary assets yield a strong competitive basis for profit. Moreover, the education service can leverage upon existing resources and capabilities and is perceived to be in line with the strategic intent. Since the competitive perspective was thoroughly described in the assessment part of the findings chapter the reader is directed to that section of more details. Together this presents a situation where the proposed business model is concluded to have high

potential for becoming profitable. However, it is important have in mind that since the business model has not yet been implemented, the aspect of profitability cannot be fully determined.

8. Discussion

In this chapter we will discuss three different questions related to business model experimentation and business model innovation in established firms. The three questions are focused around the three following areas; users' role in business model experimentation, processes for structured business model experimentation and the role of capabilities in business model experimentation.

What is the role of users in business model experimentation? How can firms interact with users in order to manage their new business model creation?

The historical belief in the literature is that innovations are developed by manufacturing firms. Von Hippel (1988) opposes that standpoint and suggests that the source of innovation varies between industries and that the end-users also could create innovations. Schilling (2010) supports this standpoint and argues that the underlying argument is that innovations are created by the ones it solves a problem for. Neely & Visnjic (2011) argue that business model innovations, and especially service business model innovations, should not take place in isolation from the users and customers. They argue that the eco system that the service is directed towards needs to be taken in to consideration, and that customer understanding is essential for understanding how to create and capture value. Based on this reasoning and on our experiences from the study within this thesis, our perception is that users can play an important role in business model experimentation in established firms.

Referring to our study performed within this thesis, the business model experimentation was influenced by an external discovery phase where customers and users were interviewed. Our approach with high customer involvement, based on Blank and Dorf's (2011) customer development method, was not used at SCA and resulted in many new insights for the company. An example of this was the internal perception at SCA that the staff turnover was very high within the elderly care and provided a large problem. During our discovery phase it was however revealed that the staff turnover was low in general. Talking to both end-users and buying customers resulted in an important understanding of the eco system of the industry, the daily life of the user, and the user's most significant problems and needs. The insights from these interviews were extremely valuable and as a result, the final service offer and the delivered value were able to be customized according to the users' needs. Our conclusion is therefore that listening to potential users and interacting with them, provides valuable input for the business model experimentation process in large established companies. This conclusion is very much in line with Blank and Dorf's (2011) theories for startups, which say that potential customers and users should be placed at the center of attention in business model experimentation and the customer's problems and needs are central to explore business opportunities. Our conclusion from this study is that users' role in business model experimentation is equally important in large established companies. We argue that dynamic and customer focused methods such as customer development is a very powerful tool that allows established companies to experiment outside, or in connection, to their existing business. One key insight, from talking to potential users, is the importance of asking questions about the same thing several times, but from different angles. By doing this, a contextual perception is gained and a more complete understanding of the customer and his needs is accomplished. Finally, we argue that an important part of the users' role in business model experimentation is to allow the firm to gain a contextual understanding and thereby allow maximizing the customer value.

It is our perception that depending on what type of business model experimentation that is carried out, the needed level of user involvement will differ. For some opportunities, customer understanding is central and a lot of focus is put on customer interaction in the experimentation phase. These type of opportunities tend to be very time-consuming and this might be a complicating issue for an established firm. Our perception is that there is no direct solution to that issue since it is the iterative process that creates the contextual and the deep customer understanding. The gradually increasing customer understanding is essential for asking more relevant questions as you go. We argue that it is first when the initial knowledge of the eco-system and customers' daily life is learned, the really interesting questions and answers occur.

In our study, strong focus was put on understanding the customer's needs and problems in order to develop a customized service offer that satisfied them. A range of different customers were interviewed and sometimes the results and their opinions differed quite a lot. This is in line with Sawhney et al's (2004) theory that there exist different kinds of users; lead users and laggards for example, and that they will give significantly different feedback when interviewed. This became obvious in our study when different municipalities were interviewed and it was discovered that their progress in the education area varied significantly. The municipalities had also developed in different directions within the education area. Blank & Dorf (2012) argue that one should avoid the laggards and focus on the lead users in these situations. However our perception is that the laggards also can provide valuable information regarding why they have not adopted a new solution. For example, the laggards made us aware of the reasons on why they have not embraced the newer education offers and allowed us to adapt our offer accordingly.

Further, it is perceived that there are risks associated with listening too much to customers. Grant (1991) argues that market and customer preferences can change very quickly nowadays in the global world that we are living in. And focusing too much on the current preferences of the customers can result in that the company will struggle with building a sustainable competitive advantage. Therefore, he argues that firms should create new offers based on internal resources and capabilities. In line with this, our process model is based on the philosophy that the company also needs to look internally and analyze what resources and capabilities that can be utilized in order to be competitive in a sustainable way. If the involvement of customers is combined with the internal perspective, we believe that it creates a powerful approach for experimenting with new business models, which can increase the creativity and result in new insights for an established company. Our study presents a good example of this. The deep customer understanding allowed us to develop a creative education service, which is a mix of already existing activities and products.

It was also realized during our study that when involving users in business model experimentation, there is a risk of only talking to the existing customers and users. By being too focused on existing customers and users when searching for new innovative ideas, the experimental process may be hampered and the resource dependency towards the existing customers and markets will be enhanced. By talking to both existing and new potential customers within our study, it was obvious that they had different perspectives on certain things and we gained insights that would have been missed out otherwise. Our perception is that a certain level of dependency on the existing customers is naturally present in all companies, but it is dangerous to be too limited since the largest and most profitable customers exert large power over the company, according to Christensen (1997). Our study interviewed both existing TENA customers and also potential new customers. By doing so it is

possible to get new influences and limit the risk of hampering the experimental process. It was also discovered during the study that talking to existing customers could be a complicating factor for established companies. SCA tended to be a bit restrictive with allowing us to talk to their existing customers and asking questions related to their current offers towards them. The pressure on a company's existing customers in terms of interviews and meetings must of course be balanced and restricted somehow in order not to harm any relations. At the same time, we argue that companies must dare to challenge their customers with new ideas in order to be competitive in the long run.

***What is the role of capabilities in business model innovation and business model experimentation?
How does business model innovation affect the firm's capabilities and why?***

Not very much literature has been written on the subject of capabilities' role in business model innovation and how they affect each other. However, Brink & Holmén (2009) argues that there is a link between capabilities and business model innovation. The firm's existing resources and capabilities (and new combinations of these) can serve as means to act upon new emerging opportunities that are discovered by the firm (Brink & Holmén, 2009). Grant (1991) agrees with this standpoint and suggests that since the market is such a volatile environment, companies need to focus on their internal capabilities and leverage upon them to yield a sustainable competitive advantage and not focus too much externally since the preferences are changing too fast.

Referring to our study carried out at SCA, it was obvious from the set scope of the study that SCA wanted us to experiment in a clearly defined area where their resources and capabilities could be utilized. The fact that firms are characterized by scarce resources makes them constrained in the way that they cannot act on all identified opportunities and experiment with all new ideas (Brink & Holmén, 2009). Hence firms act upon the opportunities that are most likely to be profitable. Since the firms' competitive advantage comes from its resources and capabilities, our perception is that the opportunities connected to these are the ones most likely to be experimented with in established companies. This perception is based on our experiences from the study at SCA, where our supervisors decided that the scope of our study was to be related to an existing customer in an existing market. It is likely to assume that the underlying purpose of this was for them to be able to leverage on some of their existing capabilities in the resulting business model.

The resulting business model of our study was aimed at education services and utilized SCA's core capability related to service-mindedness. SCA's resources in terms of the TENA brand, established industry relations, incontinence and hygiene knowledge and a well-established sales organization were also leveraged on in the new business model. Our study therefore presents a good example of how companies are influenced and affected by their existing resources when experimenting with new business models. During the study, a few potential business ideas were also discarded on the basis that they were too far away from SCA's core business and the existing brand. In line with Holmén & Björkdahl (2013), we therefore argue that there is a strong connection between the existing capabilities and the direction of a firm's business model experimentation efforts. Our perception is that the reason why the internal resources and capabilities have such an impact on the business model experimentation, is that it is risk reducing and cost-efficient for the company if the already existing resources can be leveraged on. The study also gave us insight into how resources and capabilities can be used in business model experimentation. We found it important to be influenced by the internal capabilities, but not to an extent that the process is completely steered. Instead it

should create a basis that new business models can be founded upon. This is of course not a trivial issue, but something that is important to strive for.

We argue that our study provides an example of how the internal core capabilities can be a driver of new business. This is in line with Brink & Holmén's (2009) reasoning about the strong connection between capabilities and business model experimentation. Moreover it is in line with Prahalad & Hamel's (1990) opinion that the internal capabilities are valuable not just for improving the existing business, but also when it comes to exploring and finding new areas of application. At SCA, education has previously only been provided towards nursing homes in connection to product sales, whereas our business model suggests that a stand-alone education service could be sold and charged for. From SCA's perspective, our idea is in line with their overall strategy and brand strategy, but the business model is also innovative and new to the firm in the way that they have never sold stand-alone services before. This is achieved through utilizing the existing resources and capabilities in new combinations, while also complementing with a few new ones. Hence, capabilities drive new business as it enables the creation and performance of new offers which often demand new resources. Continuing, the introduction of new resources affects the capabilities and enables the firm to pursue new opportunities, driving new business.

Our perception is that, acting on new opportunities outside the normal scope of the company may result in that new resources, activities and capabilities are developed. Business model experimentation and the opportunities that the firm acts on may have an effect on the evolution of the existing capabilities (Brink & Holmén, 2009). There are many different types of business model innovations; change in value creation and value capture, change in revenue model etc. A conclusion derived from our study was that, depending on the extent of the business model innovation and what type of business model innovation that is carried out, there will be a difference in the evolution of the firm's existing capabilities. In the case of our study, the proposed business model is not considered to be especially radical and it does not affect any of SCA's core capabilities directly. However, the business model results in that a few new resources and activities are required. These new activities and resources might in turn enable new products and services that would result in a need for new capabilities for the firm. If our proposed business model would have been different and more radical, it would most likely have had a more fundamental effect on the existing capabilities of the firm. Based on our insights from the study, we argue that there is a connection between business model innovation and the evolution of the company's capabilities in some cases, but not in all.

How can established firms experiment with new business models and business model innovations? What are the best processes? How can firms test new business models in an efficient and cost effective manner?

Existing literature argue that significant experimentation needs to be carried out in order to exploit new business opportunities and to build new business models (Gunter and McGrath, 2009). At the same time, it is also important to experiment with new business ideas in a structured and systematic way that reduces uncertainty (Murray and Tripsas, 2004). Since the experimenting process is considered an entrepreneurial act by some authors (Chesbrough and Rosenbloom, 2002), large established companies often struggle with this.

One of the contributions of this thesis is a process model that helps established companies to experiment with new business ideas in a structured and efficient way. An important aspect is that an

established company has gathered resources and developed capabilities and relationships during many years. The organizational issues at an established company also complicate the possibilities for experimenting with new innovative business models; how much time and resources should be put aside for these types of projects? How should they be managed and whom should they report to? Is this in line with our strategy? Will the result be usable or simply a waste of time and resources? In order to manage the difficulties mentioned above, a few points can be made. Murray & Tripsas (2004) suggests that the business model concept can be used as a tool to iterate and experiment with different business concepts. Blank & Dorf's (2012) customer development method is based on a discovery driven approach consisting iterative work with the business model concept and customer input. The method is however customized for startup companies that seek to identify new opportunities without having any existing resources to take in to consideration. Based on our study, it was obvious that SCA, as a global and established company, was very focused on improving their current business and capabilities. One of many reasons for this is probably that they have already developed their strategy and their capabilities and wants to take advantage of them as much as possible. For that reason we believe it is essential for established companies to use a structured method for exploring and experimenting with new business ideas that takes the internal conditions in to consideration.

The purpose of our process model is therefore to help established companies to experiment with new business ideas in a structured and efficient way. The process model takes both the internal perspective in terms of the company's resources and capabilities, as well as the external customer perspective in consideration. In business model canvas terminology, the left-hand side of the canvas is leveraged upon in order to identify new opportunities that are in line with the company's strategy and intentions. The external opportunity identification phase of our process is very much based on the customer development method and the thought process is identical, with the addition that our suggested process is influenced by the mapped internal capabilities. The structured approach helped us to get a perception of the internal capabilities at SCA initially and thereby assess the possibilities and the constraints for the rest of the study. The internal assessment was essential in our study since we were able to discard a few of our own initial ideas and gain a few additional ideas based on internal interviews and reading internal material. For a large established company that wants to experiment within a certain scope, the internal assessment phase help to identify constraints and possibilities. The external phase in our study was carried out quite efficiently since the scope had been narrowed due to the internal capabilities and the customer segments were already clearly defined. To conclude, our perception is that our process model helped us to experiment in a structured and efficient way at a large established company. The structured approach with predefined steps and clearly defined outcomes of each step, made the large process less complex and helped us to be more efficient in our work. Thanks to the structure, the large amount of interviews and insights were managed. We would also like to argue that the customer discovery element in our process model makes it a dynamic process which allows probing deeper on interesting subjects and test ideas in parallel with the investigation. As mentioned above, it is important for an established company to be able to leverage on their current resources when exploring new business opportunities, and within our study at SCA, our process model helped us to achieve this. Our proposed business model leverages on several of SCA's existing resources and capabilities, while at the same time opening up a new direction for SCA since it would be their first stand-alone service business model, if they choose to implement it. To summarize, the process

model allows established firms to test and experiment cost efficiently with new business models in a dynamic way which enables them to discard less promising opportunities at an early point. Thereby firms' can avoid costly prototype development phases. Moreover, it leverages on the existing capabilities, while at the same time spurs creativity thanks to the customer discovery element. Our perception is that the combination of these elements makes it valuable for established companies that wish to experiment with new business models in a structured way.

9. Conclusions

The main purpose of this report was to create, test and verify what can be a profitable and scalable business model for an innovative service offer at SCA Hygiene Products. The result is a service business model that provides an innovative and modern education program. The education program is based on a mix of independent education through e-learning, reflection meetings in groups and lectures carried out by a professional education leader. In the following paragraphs, it is concluded whether the proposed business model is considered to be innovative, profitable and scalable, as the purpose stated.

Regarding the innovativeness of the business model, it is based on a combination of technology and activities that are new to the firm. Further, the combination of activities and the differentiated education structure presents something that is new to the market as well. Based on this, the proposed business model is concluded to be an innovation, according to Garcia and Calantone's (2002) definition. Moreover, the innovativeness is highly dependent on what perspective that is used, and it is concluded that the proposed business model is considered to be innovative on micro level (firm level), but not on macro level (market level) since it does not result in a fundamental change of the industry.

The proposed business model contains activities and resources that enable both economies of scale and scope. The perception is that the underlying web platform can be used as a basis for all education modules that needs to be developed and as more users adopt and buy the education, the web platform will experience economies of scale. Economies of scope will also occur since the sales personnel are able to promote and sell both products and education solutions at the same time when visiting customers. The high pace of technology development and the development of new knowledge regarding the education areas provides two risks for the scalability aspect, but based on the present situation our conclusion is that the proposed business model is considered to be scalable.

The profitability aspect of the proposed business model has been evaluated from both a financial perspective and a competitive perspective. The conclusion of the financial perspective is that the business model is profitable, but it must be remembered that the conclusion is drawn on an early estimation of costs and revenues, together with certain assumptions. Further, the competitive perspective, incorporating aspects such as strategy, resources, capabilities and ability to profit from innovation, was also analyzed. The proposed business model is considered to be able to leverage on existing resources and capabilities within SCA and is also considered to be in line with the firm's strategic intent. Moreover, access to three important specialized complementary assets is also provided through existing resources at SCA. Based on these reasons, the proposed business model is considered to be profitable from the competitive perspective as well.

In addition, the aim of this thesis was also to develop a process model, to be used as a tool, that allow established firms to test and experiment with new business models in an efficient and structured way. The process model is this report's contribution to the general field of academic business research. The first phase in the process model maps the internal conditions and identifies the firm's existing resources and capabilities. The second phase is external and heavily influenced by Blank and Dorf's (2012) customer development method, and the third final phase is an assessment

phase were it is analyzed whether the proposed business model is aligned with the firm's strategy and the impact of new resources and capabilities needed.

The process model was applied within this thesis in order to perform the business model experimentation study and answer the stated purpose above. By discussing the application of the process model in our study, a few insights were made. Based on our study, one conclusion was that users can play a large role in business model experimentation in established firms with established business. Users help the established company to gain a contextual understanding of the users' situation and thereby allow the firm to maximize the customer value when creating offers. It was also concluded from our study that there is a strong connection between a firm's existing capabilities and the direction of its business model experimentation efforts. The main reason for this is perceived to be that it is risk reducing and cost-efficient for firms to leverage on their existing resources and capabilities. Furthermore, by applying the process model in our study, the main benefit with the model was concluded to be the combination of a cost-efficient method that takes the internal conditions in to consideration, while also containing an external element where users are involved and creativity is spurred.

10. References

- Abernathy, W.J. and Utterback J.M., (1975). "A Dynamic Model of Process and Product Innovation", *OMEGA, The International Journal of Management Science.*, Vol. 3, No. 6, pp. 639-656.
- Amit, R and Zott, C. (2010) Business model innovation: Creating value in times of change. IESE Business School, working paper, WP-870.
- Björkdahl, J. (2007). "Managing Value Creation and Appropriation: ICT Integration for Business Renewal", PhD Dissertation, *Department of Technology Management and Economics*, Chalmers University of Technology.
- Björkdahl, J. (2009) "Technology cross-fertilization and the business model: The case of integrating ICTs in mechanical engineering products", *Research Policy*, Vol.38 No.9, pp.1468–1477.
- Björkdahl, J. and Holmén, M. (2013) "Business model Innovation: The Challenges Ahead" unpublished work for editorial.
- Blank, S., and Dorf. B. (2012). "*The startup owner's manual: The step-by-step guide for building a great company*", First Edition.: K&S Ranch Inc. Pescadero
- Bower, J. and Christensen, C. (1995) "Disruptive Technologies: Catching the Wave" *Harvard business review*, Vol. 73, No 1, pp. 43-53
- Brink, J and Holmén, M. (2009) "Capabilities and radical changes of the business models of new bioscience firms", *Creativity and Innovation Management*, Vol.18 No.2, pp.109-120.
- Bryman, A. and Bell, E. (2011). "Business Research Methods". *Oxford University Press Inc.*. New York
- Chesbrough, H. (2007) "Business model innovation: It's not just about technology anymore", *Strategy and Leadership*, Vol.35 No.6, pp.12-17.
- Chesbrough, H. and Rosenbloom, R. (2002), "The Role of the Business Model in Capturing Value from Innovation: Evidence from Xerox Corporation's Technology Spinoff Companies", *Industrial and Corporate Change*, Vol. 11 No. 3, pp. 529-555.
- Christensen, C. M. (1997). "The innovator's dilemma: When new technologies cause great firms to fail". *Harvard Business School Press*, Boston
- Daneels, E. (2002). "The dynamics of product innovation and firm competences". *Strategic Management Journal*, Vol. 23, pp. 1095–1121.
- Drucker, P. (1985). "The Discipline of Innovation". *Harvard Business Review*, May-June, pp. 67-72.
- Edvardsson, B. Gustafsson, A. Inger, R. (2005) "Service Portraits In Service Research: A Critical Review", *International Journal of Service*, Vol.16 No. 1, pp. 107-121.
- Garcia, R. and Calantone, R. (2002). "A critical look at technological innovation typology and innovativeness terminology: a literature review". *The Journal of Product Innovation Management*, pp. 110-132.

- Grant, R. M. (1991). "The Resource-based Theory of Competitive Advantage: Implications for Strategy Formulation," *California Management Review* Vol. 33: 114–35;
- Grönroos, C. (2001), "Service Management and Marketing: A Customer Relationship Management Approach", 2nd ed., *Wiley*, New York
- Grönroos, C. and Ojasalo, K. (2004), "Service productivity: toward a conceptualization of the transformation of inputs into economic results in services", *Journal of Business Research*, Vol. 57 No. 4, pp. 414-23.
- Gummesson, E. (1995), "Relationship marketing: its role in the service economy", *Wiley*, New York
- Gunther McGrath, R. (2010) "Business models: a discovery driven approach", *Long Range Planning*, Vol.43 No.2-3, pp.247-261.
- Harper, D. (2003) "Foundations of Entrepreneurship and Economic Development", *Routledge*, London
- Henderson, R. (2006) "The innovator's dilemma as a problem of organizational competence", *Journal of Product Innovation Management*, Vol. 23 No. 3, pp. 5-11.
- Leonard-Barton, D. (1992) "Core Capabilities and Core Rigidities: A Paradox in Managing New Product Development". *Strategic Management Journal*, Vol. 13, pp. 111–25.
- Linder, J. and Cantrell, S. (2000) "Changing business models: Surveying the Landscape", *Accenture Institute for Strategic Change*
- Lovelock, C. and Gummesson, E. (2004), "Whither services marketing? In search of a new paradigm and fresh perspectives", *Journal of Service Research*., Vol. 7 No. 1, pp. 20-41.
- Moran, P. and Ghoshal, S. (1999), "Markets, Firms, and the Process of Economic Development", *Academy of Management Review*, Vol. 24 No. 3, pp. 390-412.
- Murray, F. and Tripsas, M. (2004) "The Exploratory Process of Entrepreneurial Firms: The Role of Purposeful Experimentation. Business Strategy over the Industry Life Cycle". *Advances in Strategic Management*, Vol. 21 No 1, pp. 45–75.
- Neely, A. Visnjic, I. (2011) "From Processes to Promise: How complex service providers use business model innovation to deliver sustainable growth", published as a White Paper at the *Cambridge Service Alliance conference*.
- Osterwalder, A. (2004) "The Business Model Ontology: A Proposition in the Design Science Approach", unpublished dissertation, University of Lausanne.
- Osterwalder, A and Pigneur, Y. (2010) Business model generation: a handbook for visionaries, game changers, and challengers, *John Wiley and Sons*, Hoboken, New Jersey.
- Pfeffer, J. and Salancik, G. R. (1978) "The external control of organizations: A resource dependence perspective", *Harper & Row*, New York

- Prahalad, C. & Hamel, G. (1990). The Core Competence of the Corporation. *Harvard Business Review*, Vol. 74, pp. 1-15.
- Sawhney, M. Sridhar, B. and Vish V, K. (2004), "Creating Growth with Services," *Sloan Management Review*, Vol. 45 No. 2, pp. 34-43.
- SCA (2011) "SCA's business" http://www.sca.com/en/About_SCA/SCAs-business-and-operations-worldwide/ [2013-06-12]
- Schilling, M. A. (2010). "Strategic Management of Technological Innovations", *McGraw Hill*, New York
- Strömgård, J. (2012) "Industrial service transition" <http://www.iei.liu.se/index/teim10/filarkiv-2012/xlent-strategy/1.420156/XLENTStrategy19nov.pdf> [2013-06-12]
- Swann, P. (2009). "The Economics of Innovation - An Introduction". *Edward Elgar Publishing Limited*, Cheltenham
- Teece, D. (1986), "Profiting from Technological Innovation", *Research Policy*, Vol. 15 No. 6, pp. 285-305.
- Tripsas, M. (1997). "Surviving radical technological change through dynamic capabilities: evidence from the typesetter industry". *Industrial and Corporate Change*, 6, 341-377.
- von Hippel, E. (1988). "The Sources of Innovation". *Oxford University Press*, New York
- Yin, R.K. (2009). *Case study research: design and methods*. Fourth Edition. *SAGE Publications*, Inc. London

Appendix A

The external interview sample is presented in the table below.

Position	Geographical location	Employer
Nursing home manager	Göteborg centrum	Attendo
Prescribing nurse	Mölnadal	Attendo
Caregiver	Mölnadal	Attendo
Nursing home manager	Göteborg Centrum	Attendo Care
Quality manager	Stockholm	Attendo Care
Prescribing nurse	Göteborg Centrum	Attendo Care
Nursing home manager	Göteborg Centrum	Bräcke Diakoni
Area manager	Göteborg Centrum	Bräcke Diakoni
Nursing home manager	Göteborg centrum	Carema
Caregiver	Göteborg Centrum	Carema
Caregiver	Göteborg Centrum	Carema
Business development manager	Stockholm	Carema
Nursing home manager	Kungsbacka	Förenade Care
Nursing home manager	Borås	Borås
Nursing home manager	Göteborg centrum	Göteborg centrum
Nursing home manager	Mölnadal	Mölnadal
Nursing home manager	Mölnadal	Mölnadal
Nursing home manager	Partille	Partille
Quality manager	Mölnadal	Mölnadal
Medically responsible nurse	Kungsbacka	Kungsbacka
Area manager	Mölnadal	Mölnadal
Area manager	Partille	Partille
Area manager	Lerum	Lerum
Procurement manager	Kungsbacka	Kungsbacka
Business development manager	Kungsbacka	Kungsbacka

The internal interview sample is presented in the table below.

Position	Number of interviewees
Sales Representatives	2
Global Innovation Manager	4
Sales Manager	4
Key Account Manager	1
Global Brand Director	1
Business Development Manager	1

Appendix B

A detailed presentation of the financial estimations for the proposed business model is presented here.

average nursing home	
number of caregivers	20
number of caretakers	30
number of nursing homes in sweden	2500
subscription fee per month/employee	150
revenues	
income from education program per month	3 000
income per module	12 000
summary variable results per NH	
total variable costs 1 year	20 320
total variable income 1 year	36 000
total profit before taxes 1 year	15 680
Market penetration	#of homes
Year 1: 2%	50
Year 2: 5%	120
Year 3: 10%	250

Economic development over a 3 year period		Gross profit margin
Year 1 contribution profit	784 000,00 SEK	
Year 1 Fixed cost	1 104 000,00 SEK	-40,8%
Year 2 contribution profit	1 881 600,00 SEK	
Year 2 Fixed cost	1 104 000,00 SEK	41,3%
Year 3 contribution profit	3 920 000,00 SEK	
Year 3 Fixed cost	1 104 000,00 SEK	71,8%
EBITA over a 3 year period	3 273 600,00 SEK	49,7%

module contents (4 months)		
kickoff meeting	4	h
preparatory work x2	4	h
transport time x2	4	h
transport x2	8	mil
ipads	8	st
reflection meeting	4	h
Unit costs		
salary education leader	320	kr/h
salary sales rep	320	kr/h
transport costs	40	kr/mil
ipad lease (Purchase cost 1000 kr and economic lifetime 2 years)	42	kr/unit/month
variable costs per module		
personnel costs	5 120	kr
transport cost	320	kr
material costs (ipad)	1 333	kr
fixed costs		
initial dev. of e-learning platform	720 000	3 months, 2 consultants
dev. of one new module contents	240 000	kr
dev of one new module (technical implementation)	240 000	kr
<i>fixed costs per year</i>		
dev. of new module contents	720 000	3 new modules per year
dev of new module (technical implementation)	720 000	3 new modules per year
initial dev. of e-learning platform	144 000	economic life time
Total cost for 3 years	3 312 000	
Cost per year	1 104 000	

Year	market penetration	# of homes	turnover	variable costs	fixed costs	profit
1	2%	50	1 800 000,00 SEK	1 016 000,00 SEK	-1 104 000,00 SEK	-320 000,00 SEK
2	5%	120	4 320 000,00 SEK	2 438 400,00 SEK	-1 104 000,00 SEK	777 600,00 SEK
3	10%	250	9 000 000,00 SEK	5 080 000,00 SEK	-1 104 000,00 SEK	2 816 000,00 SEK

Appendix C

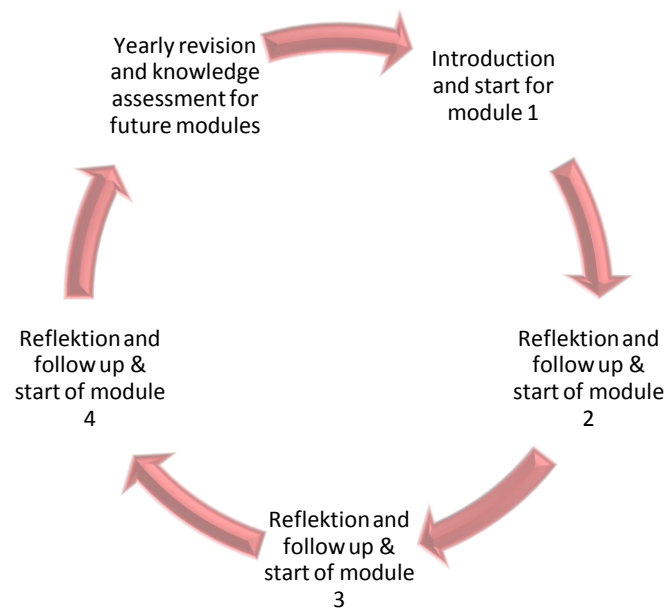
The first version of the MVP is included here. Please note that this is NOT the final MVP version.

Intro

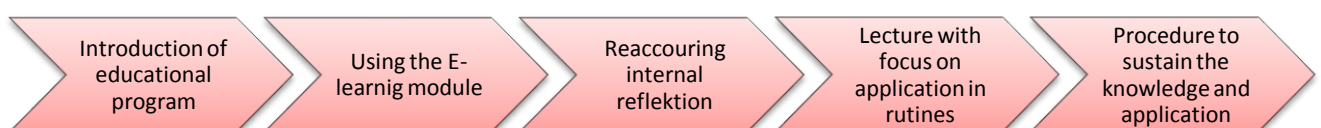
The minimal viable product is made up of an E-learning module together with personal interaction at specific points during the education. The idea is that the entire education program consists of 3-4 modules on a yearly basis containing different subjects of interest for the particular home. The education is carried out during a longer period of time where the nurses study in shorter sessions of 30 minutes, two times a week via an E-learning platform as the main instrument but combined with live lectures for initiation, reflection and practical training within the subject. The aim is to use shorter reoccurring lessons to sustain the knowledge and make it easier to reflect on how it is implemented in routines. To make it even more applicable and enable the nurses to connect it with other educational areas the different modules are interconnected among each other in a structured manner that yields a red thread. To make sure that the customer gain access to the latest knowledge within different fields of knowledge the material in the education is developed in cooperation with in highly esteemed academic actors, such as the Silvia foundation.

Program procedure

Below is a schematic picture of the process described above for the yearly basis followed by the structured process in each single module.



Each model is then made up of a structured process with E-learning combined with live lectures adapted to the subject within the module.



The Webb platform

Usage is based on an interactive Webb platform designed to be as user friendly as possible as many older nurses claim they feel unaccustomed with using computers. The content is designed so that all activities can be carried out via touch screen so that the education may be carried out via PC-tablet where the student feels most comfortable. The content is made up of a variety of shorter lessons and text that are combined with illustration, tests and questions for reflection as well as practical examples for implementation. The thought is to offer a more interactive and dynamic way of learning where students unaccustomed to studying and less interested in longer lectures will appreciate studying more. In the end of each module the students will be tested both in terms of practical situation and on theoretical knowledge as practical application is just as important in their everyday work where it is intended to be applied. As a measure to make students use their new gained knowledge more voluntarily on breaks and potentially even spare time there will be a quiz function available. It allows nurses to compete against each other in questions concerning the subject studied.

Advantages and thoughts

The program allow for more individually adapted education based on the internal assessment of what the home need they to develop, personal request and on a longer term also based on the competence assessment possible from previous education. It also enables the nurses to take part of the education on their own permissions in sense of when they have time, feel like it and so forth. As a result they will be less stressed when they carry it out and do it when they are motivated to learn. The education program is also intended to be used two and two where young and old nurses are matched together to primarily reflect together on implications, ethical concerns and general reflection on the subjects but also to avoid the resistance for computer present among several of the older staff.

Certificates plus advantages for personnel and managers

The results from the education and the different modules carried out will be registered on an independent server to help nurses keep track of their education for personal interest in knowledge curve, salary negotiation and CV backup for application of new work. For the EC and others on the employer side it is supposed to improve the understanding of the content of previous educations and give a better overarching picture that makes it easier to make an assessment of the entire personnel competence and where extra education is needed to enable the nurse to perform the best care possible from the resources available. Lastly the Certification and diplomas from reaching different levels and completing different courses are intended to strengthen the nurses' individual strength and spirit.

Payment

The payment is based on a subscription model with monthly payment to match with the reimbursement given from the municipality. The reimbursement is given monthly and is based on the amount of clients/night and a large expense could affect the cash flow. Further the EC often have a significant level for single expenditures that they are allowed to make.

Appendix D

A glossary is provided for the reader to understand the terminology used throughout the report.

Nursing home = a home for elderly people that require continual nursing care and have significant deficiencies with activities of daily living.

Residents = the people living and being treated at the nursing home is referred to as residents.

Caregivers = person working at a nursing home for elderly people with the main responsibility of taking care of the residents.

Key account manager = person responsible for managing the full relationship between a business and its most important customers.

Capability = a capability is the ability to integrate resources in order to perform activities or create products the yield a competitive advantage.

Business model = a business model describes the rationale of how an organization creates, delivers and captures value.

Business model innovation = this concept does not refer to the creation of new products or services, instead it alters the manner in which existing products and services are delivered to the customer and how the firm profits. It can also be explained as a new “integrated logic” in the business model.

Business model canvas = a tool that allows managers to gain a better overview of existing opportunities, the value they can create for customers and how much value the firm can capture. The canvas presents key components of a business model, their relation and the overall logic of earnings.

Hypothesis = a formulation of an idea that is later on investigated and either verified or declined.

Eco system = in this thesis the term eco system refers to the network of actors in a specific business environment.

Appendix E

Four different interview guides are presented here, used for interviewing different functions: area managers, nursing home managers, caregivers and internal interviews at SCA. All interview guides except the internal one is presented in Swedish since the interviews were carried out in Swedish.

Questions to area managers (municipality level)

Introduktion

- Vad inbegriper din roll?
- Väldigt kort, vad använder ni er av lite för kvalitetsledningssystem?

Vård, omsorg & kvalité

- Hur arbetar ni konkret med den nationella värdegrunden och vad betyder den för er?
- Arbetar ni med individanpassad vård? *Hur?* Vilka områden blir den individanpassad på?
- Största utmaningarna för äldreården idag och framöver? Vad tror du skötarnas utmaningar vara?
- Hur många olika system finns på hemmen? Journalsystem? Kvalitetledningssystem? Individuell vård-system?
- Hur ofta ges det ut nya direktiv från socials styrelse? Årligen eller med annat mellanrum?

Budget

- Hur ser ansvarsfördelningen ut mellan kommun/koncern och hem vad gäller budget? På vilken nivå är budgeten specificerad för EC?
- Hur stort kostnadsfokus har ni inom er kommun/koncern och vården? Hur jobbar ni med kostnadsbesparingar?

Inköp av tjänster

- Har EC rätt att ta eget initiativ till att köpa in en tjänst inom ramen för sin egen budget? Ett exempel kan vara en demensutbildning.
- Behövs det upphandling i detta fallet? Finns det nån gräns för vilken summa där det krävs upphandling eller inte, eller krävs det i 100% av fallen?
- Hur går denna upphandlingsprocess till i sådana fall?

Utbildning

- Vilka utbildningar utför kommunen själva på hemmen? Vilka är obligatoriska/återkommande varje år?
- Hur avgörs vilka andra utbildningar ni ska satsa på? Vem avgör detta? Vilka utbildningar blir vanligtvis det, eller är det alltid olika?
- Hur upplever du effekten av dessa utbildningar? Har de bestående effekt?
- Använder ni er av externa aktörer för att bedriva utbildning?
- Arbetar ni med projektpengar på något vis, omvårdnadslyftet eller liknande?
- 100,000-frågan?

Fokusområden

- Vilka olika förbättringsområden/fokusområden arbetar ni med?

Personal

- Hur hanteras personalomsättning och kunskapsöverföring?

Questions to nursing home managers

Introduktion

- Vad inbegriper din roll?
- Veldig kort, vad använder ni er av lite för kvalitetsledningssystem?

Vård, omsorg & kvalité

- Vad styr ert kvalitetsarbete (SOS, Kommun, ägare)?
- Hur arbetar ni konkret med den nationella värdegrunden?
- Arbetar ni med individanpassad vård? Hur? Vilka områden blir den individanpassad på? (demens, inkontinens, personliga preferenser i vardagen)
- Största utmaningarna för äldreården idag och framöver? Vad tror du skötarnas utmaningar vara?
- Hur många olika system finns på hemmen? Journalsystem? Kvalitetledningssystem? Individuell vård-system?
- Hur arbetar ni med rutiner för nattvård, inkontinens etc?

Budget

- Hur ser ansvarsfördelningen ut mellan kommun/koncern och hem vad gäller budget? På vilken nivå är budgeten specificerad för EC?
- Hur stort kostnadsfokus har ni inom er kommun/koncern och vården? Hur jobbar ni med kostnadsbesparingar?

Inköp av tjänster

- Har EC rätt att ta eget initiativ till att köpa in en tjänst inom ramen för sin egen budget? Ett exempel kan vara en demensutbildning.
- Om en extern leverantör erbjuder en större kostnadseffektiviserande tjänst till dig som kan vara av intresse för hela organisationen, hur hade processen i organisationen sett ut då?
- Behövs det upphandling i detta fallet? Finns det nån gräns för vilken summa där det krävs upphandling eller inte, eller krävs det i 100% av fallen?

Utbildning

- Vilka utbildningar utför kommunen/koncernen själva på hemmen? Vilka tar ni extern hjälp till?

- (Kan du berätta vilka områden utbildningarna fokuserar på? Både tidigare och i nuläget)
- Vilka är obligatoriska/återkommande varje år?
- Hur avgörs utbildningsfokuset för ert hem? Hur mycket styr kommunen/koncernen och hur mycket styr ni själva?
- Upplever ni att det finns en röd tråd i utbildningarna? Att man upplever att man får ta del av ett strukturerat utbildningsprogram?
- Hur är vanligtvis uppläget på utbildningarna? En dag? Sträcker sig över längre period?
- Hur jobbar ni med att bibehålla kunskapen från utbildningar i organisationen?
- Hur upplever du effekten av dessa utbildningar? Har de bestående effekt?
- Arbetar ni med projektpengar till utbildning på något vis (bidragspengar från staten eller EU tex.) ?
- Upplever du att det finns vissa områden där det finns förbättringspotential hos personalen?
- Om du skulle få 100,000kr – vilka förbättringsområden skulle du satsa på då? Vilka tycker du är viktigast.
- Hur skulle du vilja utforma denna utbildning? (med avseende att optimera effekt och tillvägagångssätt)
- Vad ser du för hinder med att köpa in en utbildning? Budgetmässigt? Organisatoriskt?
- Hur optimera utbildning?
- Upplever ni att det finns en röd tråd
- Är alla dessa olika utbildningar sammanlänkade på nåt vis eller är de mer fristående?
- Finns det några möjligheter att göra de mer sammanhängande? Finns det några fördelar eller nackdelar med att göra detta?

Personal

- Har ni någon långsiktig plan för att höja personalkompetensen på ert äldreboende?
- Arbetar ni med individanpassad utbildning? I vilken mån avgör personens funktion vald utbildning?
- Dokumenterar ni och följer upp vilka utbildningar personalen gått tidigare och anpassar val av nya utbildningar?
- Hur hanteras personalomsättning och kunskapsöverföring?

Certifiering

- Använder ni några tjänster från externa leverantörer idag för att förbättra kvalitén i vården?
 - I sådana fall, varför gör ni det?
 - Vad ser ni för nackdelar samt fördelar med det?
- Hur ger certifiering eller användandet av certifierande tjänster värde för er? Ex. Silvia-stiftelsen.
- Vid upphandling eller anhörigas val av vårdgivare? Eller vid konkurrens mot andra hem?
- Hur jobbar ni med att stärka ert varumärke?
- Har privata leverantörer till er en roll i ert varumärkes arbete?
- Hur ser ni på att samarbeta med privata leverantörer med starka varumärken?

Questions to care givers

Introduktion

- Vad inbegriper din roll?

Vård, omsorg & kvalité

- Hur arbetar ni konkret med den nationella värdegrunden?
- Arbetar ni med individanpassad vård? Hur? Vilka områden blir den individanpassad på? (demens, inkontinens, personliga preferenser i vardagen)
- Största utmaningarna för äldre vården idag och framöver?
- Största utmaningarna för er i vardagen?
- Hur många olika system finns på hemmen? Journalsystem? Kvalitetledningssystem? Individuell vård-system?

Utbildning

- När hade ni er senaste utbildning?
 - Vad handlade den om
 - Vad var det för upplägg
 - Hur mycket kommer ni ihåg av den?
 - Vad hade den effekt på ert arbete i den dagliga verksamheten?
- Vad tycker ni om att få utbildning?
- Hur ofta får ni delta i utbildningar?
- Har ni årligen återkommande utbildning? Vilka är det i så fall?
- Vilken möjlighet till utbildning upplever ni att ni har?
- Vilka hinder upplever ni finns för utbildning?
- Upplever ni att det finns en röd tråd i utbildningarna? Att man upplever att man får ta del av ett strukturerat utbildningsprogram?

Upplägg

- Vilken typ av upplägg har de utbildningar ni får? Är det en intensivdag eller utspritt över en period?
- Vilka moment brukar utbildningar bestå av? Teater, föreläsning, frågor, test, filmer, praktik, reflektion?
- Hur ser ni på delvis nätbaserad utbildning på hemmet eller hemma?
- Skulle ni vara villiga att lägga exempelvis en kvart i veckan under en utbildningsperiod?
- Hur ser ni helst att en utbildning organiseras? i form av upplägg, innehåll, tid på dagen?
- När har ni som mest respektive minst arbetsbörda?

Effekt

- Upplever ni att ni får användning av den utbildning ni får i ert vardagliga arbete?
- Hur jobbar ni för att bibehålla den kunskap ni får genom utbildning? Följer man upp utbildning efteråt med upprepning osv?
- Förändras rutiner i verksamheten efter utbildning?
- Hur upplever du effekten av dessa utbildningar? Har de bestående effekt i vardagen?

Förbättringsområden

- Vilka områden upplever ni att ni skulle behöva utvecklas och lära er mer?
- Om ni fick välja en valfri utbildning vilken skulle ni välja att delta på då?
- Ser ni personliga möjligheter med att ha gått vissa utbildningar? I form av lön, ansvar, personlig utveckling, kan ge bättre vård, bemöta brukare bättre
- Ger utbildning effekt i form av högre kvalitet för brukaren och effektivitet i ert arbete?

Personal

- Har ni en individuell plan för kompetensutveckling och för vilka utbildningar ni gått?
- Hur ser ni på möjligheten att gå utbildningar som certifierar er?
- Får ni utbildning inom olika specialområden beroende på er roll eller ansvar?
- Hur hade ni sett på ett register för registrering av vilka utbildningar ni gått som förklarar tydligt vilka utbildningar ni gått, innehåll samt er kompetensprofil som är oberoende av er arbetsgivare för att underlätta er konkurrens och bakgrund i löneförhandlingar samt anställningar.
- Hur upplever ni att personalomsättningen är?
- Hur gör ni idag för att överföra kunskap till nyanställda?
- Använder ni profilerade utbildningar som Silvia utbildningen, eller ABC demens som certifiering vid jobb ansökningar eller löneförhandling?

Questions internal interviews at SCA

General questions about service

- Can you please describe your position and responsibilities? And also if you are active in any particular projects current or managing any particular projects currently?
- There is a lot of different definitions of “service”. What does the word “service” mean to you and what do you mean when you are talking about services within SCA?
- Can you sense any difference in attitude towards services in general at SCA during the last years?
- We have understood that SCA has moved towards “offering good incontinence care” instead of only focusing on the products, for example. What is the background to these decisions? And what is the purpose of these decisions?
- What are the future plans for SCA when it comes to framing their offers, will they be even more service focused? Why/why not? Where are these types of discussions held and where are these types of decisions being made?
- What challenges do you see with moving towards a more service based company?
- Are there any market trends or signals in the market that are in favor or against moving toward more service?
- What is your personal opinion about this transition towards more service focus?

- What do you think is required internally to move towards more focus on services and even to start charging for some of them?
- What pros and cons do you see with starting to charge for service?
- What are the main benefits of moving towards providing services according to your perspective?

TENA Solutions specific questions

- How much knowledge and insight do you have of TENA Solutions? What the offer is today and what the innovation team is working with currently?
- What is your opinion on the development of TENA Solutions so far (from the start in 2004)? In your opinion how does the current TENA solutions offer look like on the European market today?
- And what possibilities do you see for the future?
- How much is TENA Solutions discussed in the “executive category team” or in upper management in general? Is TENA Solutions and the charging for service a significant issue of your work?
- What is your opinion on starting to charge for TENA Solutions services? What’s your assessment of the general opinion in upper management of this?