Abstract: In times where governments are saving (health) care expenditures, it becomes more difficult for social organizations to finance their organizations. Therefore, it is crucial for those organizations to find possibilities to innovate their business model, in order to increase revenues. Where academic have written a lot about business model innovation in general, not much have been said about business model innovation in the social domain. Therefore, this research tries to investigate how this can be accomplished, using models and theories that were created for business model innovation in general, like the business model concept of Osterwalder et al. (2005). An extensive literature review resulted in a process model for business model innovation in the social domain. This in combination with the Ansoff matrix and supply chain innovation theories resulted in several business model innovations, from which conclusions can be drawn.
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1. Introduction

Interest in social entrepreneurship has been rising for the last decades. This increase of interest has led to increasing attention of researchers (Liñán, & Fayolle, 2015). Entrepreneurship is the process of people serving new markets or finding new ways to do things, where social entrepreneurship includes the same process, in order to fulfill a social mission (Dees, 1998). Within the field of social entrepreneurship, the term social innovation have been discussed often. “Social innovation refers to innovative activities and services that are motivated by the goal of meeting a social need and that are predominantly diffused through organizations whose primary purposes are social” (Mulgan, 2006, p.146). Within the literature related to social entrepreneurship and social innovation, a lot is written about social innovation in general, but no research yet has only focused on business model innovation in the social domain yet. This may be of interest, because, business model innovation helps entrepreneur to connect innovative products or technologies with market needs and the business model may be innovative in and of itself (Massa & Tucci, 2013). That is why this is something that will be addressed in this paper. In order to do so, a case study has been executed at the Viermarken.

De Viermarken is a so called care farm located in Enschede, The Netherlands. A care farm combines agricultural production with health and social services (Hassink et al., 2012). De Viermarken offers employment to physically and mentally limited people that need special care De Viermarken (2016a). Except that De Viermarken is a care farm, it can also be seen as a case of urban agriculture, because it located close to a city and it offers social contributions to society. The concept of urban agriculture can be described as agriculture activities within and around cities. The contributions of these farms to society are the security of healthy nutrition, the development of the local economy, the social integration of disadvantaged people and the management of the urban environment (Van Veenhuizen & Danso, 2007). According to Van Veenhuizen & Danso (2007), these farms can also be profitable on an individual scale, when they produce products with a great demand or when they produce products which distinguishes itself from rural agriculture products.

Due to the worldwide financial crisis of 2008, many countries face difficulties with their national budget. This results in expenditure cuts by governments (Grant & Wilson, 2012). In the Netherlands, this resulted in a reduction of (health) care budgets, leading to care facilities facing problems with financing their organizations (nu.nl, 2016). For De Viermarken this is not a problem yet, but it might become one in the future, because the income they generate from the care they offer, comes from care organizations which are financed by the government. When these organizations have less to spend, this will automatically affects De Viermarken. This, together with the issue addressed earlier makes it important for De Viermarken to generate more income from the agricultural activities.

The main goal of the Viermarken is offering employment and therefor socially integration to, among others, physically and mentally limited people (De Viermarken, 2016a). De Viermarken’s main income comes from the care they offer to these people. This combined with a small subsidy and some income they generate resulting from the agriculture activities, makes the farm breakeven. However, De Viermarken is only allowed to make investments, in for example production facilities or other buildings, with the money they generate from the agricultural activities. So, since this is only a small amount, it is almost impossible to make such investments.

The aim of this research is to get insights in the business model innovation process for companies in the social domain. This study tries to define a model which helps organizations in the social domain to develop a sustainable business model. This will be done by conducting literature research in which most relevant literature related to social innovation and business model development will be discussed. After this literature research, a model will be designed which represents the process of business model innovation in the social domain. Finally a case study will be conducted at De Viermarken in which several
business model innovations will be developed and evaluated on opportunities and limitations, based on internal and external factors. The research question formulated for this research is:

*How can companies in the social domain innovate their business model, in order to guaranty continuity under various external conditions?*

In this research, companies in the social domain refer to organization which combine social and economic value creation (Poon, 2011). Business model innovation refers to the process where an organization reconfigures its existing resources and capture new resources in order to change the business model (Massa & Tucci, 2013). In order to answer the formulated research question, some sub questions are formulated which should help to answer the main question. These sub questions are:

1. What is a business model?
2. What is business model innovation
3. What is business model innovation in the social domain?
4. What are the influential conditions for innovating business models by organizations in the social domain?
5. What are the bottlenecks and challenges for innovating business models by organizations in the social domain?
6. How can innovation strategies be developed for organizations in the social domain?
7. Which patterns can be observed within business model innovation in the social domain?

This research is relevant for theory in two ways. First: it more specifically describes the process of business model innovation in the social domain. Like mentioned before, literature describes the process of social innovation. This is a broad concept and can relate to all processes within the organization, therefor this research focuses on the specific process of the innovation of the business model. The second contribution to literate of this study is the fact that in this study, attention will be paid to business model innovation in the social domain, where earlier, most literature was focused on business model innovation in general or for commercial organizations.

The relevance of this research for practice is that the findings of this research will help organizations to earn revenues from other sources, in order to become less dependent of government funding. Worldwide, governments are cutting on healthcare expenditures as a result of the financial crisis (nu.nl, 2016). This cutting of costs threatens care facilities, like in this case de Viermaken, because their revenues are largely dependent on budgets provided by government.

The rest of the paper is organized as follows. First, a theoretical framework will be presented, where existing relevant literature will be discussed and will be combined in a model, then the research design will be described in the methodology chapter. After the methodology chapter, the current business model will be discussed followed by business model innovations. And this research end with the discussion and conclusion.

2. Theoretical framework

In order to establish a framework for this paper, the most important literature related to business model innovation will be discussed in this chapter. First will be described what a business model is, then a definition of business model innovation will be given, followed by what this means in the social domain, after that, influential conditions for organizations in the social domain will be discussed, than the bottlenecks and challenges will be described. This chapter ends with a model for business model innovation in the social domain, including the findings of this chapter. An overview of the used literature is presented in table 1.
2.1 What is a business model?
A business model describes how a business creates value to its customers (Teece, 2010). It can be seen as a tool for increasing firm performance and value creation (Zott et al., 2011). It is a short description or representation of what value is delivered to customers, how it is delivered and which financial consequences this has (Osterwalder et al., 2005).

The description given so far relates to a business model in general and most research is done in relation with commercial organizations. In a case study, Yunus et al. (2010) compared business models for commercial companies with business modes in the social domain. They found that building business models for commercial companies is comparable with building business models in the social domain. However, they also found some adjustments that need to be made by switching from traditional business model innovation to business model innovation in the social domain. These adjustments include first, commercial organization mainly focus on adding value for shareholders, where the social domain should take all stakeholders into account. Second, commercial organizations measure the added value in terms of economic profits, where social organizations measure the value they add in terms of social profit. Third, the main goal for commercial organizations is maximizing its profits, where for social organizations try to cover the cost of capital (Yunus et al., 2010).

2.2 What is business model innovation?
Before attention will be paid at business model innovation in the social domain, an introduction will be provided about business model innovation in general. Business models seems to be important for organizations, to describe the value that it offers to stakeholders and how this value will be achieved. However, a business model is not something that will last forever. Therefore it is crucial for organizations to innovate their business models (Schneider & Spieth, 2013). Business model innovation is the process where an organization reconfigures its existing resources and capture new resources in order to change the business model (Massa & Tucci, 2013). Business model innovation can for example help companies to break out strong competition or to address new opportunities (Lindgardt et al., 2009). But it can also be linked with technological innovation, in order to create value with the new technology (Teece, 2010). Amit & Zott (2010) developed a framework in which they distinguished 3 vital components of business model innovation: content, structure, and governance. The content refers to the activities that take place within the organization, the structure refers to how these activities are linked and governance is about who performs the specific activities (Amit & Zott, 2010).

2.3 What is business model innovation in the social domain?
So far, business models of commercial organizations are compared with business models of social organizations. The next step would be to describe business model innovation in the social domain. Academics haven’t paid much attention about this topic. Therefore, it could be useful to take a look at innovation in the social domain in a broader sense. This phenomenon is called social innovation. “Social innovation refers to innovative activities and services that are motivated by the goal of meeting a social need and that are predominantly diffused through organizations whose primary purposes are social” (Mulgan, 2006, p.146). The fact that business innovations are mostly driven by profit motives and that social innovation is mostly driven by social motives (Pol & Ville, 2009), is something that should be taken into account during the analysis of business model innovation in the social domain.
2.4 What are the influential conditions for innovating business models by organizations in the social domain?

So far, the definition of business model innovation and its relation with the social domain has been discussed. In the following section, the conditions under with the business model innovation in the social domain takes place will be discussed. These condition should be taken into account during the rest of this research. A distinction will be made between internal and external conditions.

2.4.1 Internal influential conditions

The first relevant internal condition that will be discussed is the fact that innovation in the social domain does not focused on generating income (Pol & Ville, 2009). Like mentioned before, the aim of social innovation lies at meeting social needs (Mulgan, 2006). This is in contrast with business innovation, which is profit-seeking (Pol & Ville, 2009). This factor is something that influences social innovation.

Another internal condition that should be taken into account is organization form or the routines. The form an organization can have an influence the success of innovating. An open structure for example, involves personnel from all layers within an organization, which will results in more commitment and also more input for ideas (Murray et al., 2010). Therefore, scholars argue to decrease the complexity the design of the organizational structure, in order to increase the flexibility, and therefore the innovativeness of the organization (Bock et al., 2012). Also the routines within the organization form influence the innovation process. For example the relationships and expectations within an organization can have influence on business model innovation (Dougherty, 1992).

Culture is the third internal condition to be discussed. An organizational culture is of influence for innovativeness. For example, a creative culture increases the ability of an organization to innovate (Bock et al, 2012). The culture of an organization is crucial for the performance (Cameron & Green, 2015). Therefore, the culture of an organization is something that has influence on the business model and on business model innovation.

2.4.2 External influential conditions

The institutional environment of a social company is an important external condition for social companies. The organization form that a company adopts, for example, is dependent of the environment of the organization (Tracey et al., 2011). One could also think about the fact that most social organizations are financed by governmental funds, which will have an influence on the decision making process. A useful tool to describe the institutional environment is the PESTEL framework. This framework describes six factors that might influence the organization, including political-, economic-, sociological-, technological-, ecological- and legal- factors (Johnson et al., 2008).

Furthermore, networks are important for companies in the social domain (Phillips et al., 2015). For such companies, networks may even be more important than for business companies. This is because in business, the drive to innovate comes from finance, where for social companies, innovation is more often driven by the context (Pol & Ville, 2009).

2.5 What are the bottlenecks and challenging conditions for business model innovation in the social domain?

There are some bottlenecks and challenging conditions for companies to accomplish during a business model innovation process. One of them is that business model innovation probably conflict with the former way of doing business. For companies it is often hard to step away from something that proofed to be successful in the past. This process of eliminating old processes in order to introduce something completely new is called disruptive innovation (Christensen & Raynor, 2013).
Another bottleneck is that the company filters out all the information that is irrelevant for their current business model, this can be seen as a large obstacle to experiment with new business models (Chesbrough, 2010). Discovering new opportunities is one of the first aspects that are important for business model innovation (Lindgardt et al., 2009). According to Chesbrough (2010), it is also crucial for companies to change their attitudes related to experimenting in order to be successful in business model innovation.

Another common bottleneck in organizations is inertia. Inertia refers to the situation where organizations find it hard to reorient their focus the organization’s culture and the creation of routines (Holmén & Fallahi, 2013). Since changing the scope of an organization is essential to innovate, inertia can be seen as a large challenge for business model innovation.

The bottlenecks and challenging conditions mentioned so far are mainly related to business model innovation in general, but are also relevant for the social domain. There are however also some bottlenecks and challenging conditions which are more specific for the social domain. Social enterprises are not focused on making profit but on value creation. The performance of companies in the social domain should be measured differently, because the outcomes are sometimes qualitative (Murray et al., 2010). It makes it extra difficult that next to meeting social needs, the organization should also be financed, and therefor the financial aspect cannot be ignored.

2.6 Innovation strategies
This part of chapter 2 describes how companies can come up with innovation strategies for their business models. A company can decide to develop its existing markets and products. In order to do so, a company has four alternatives: market penetration, developing the market, developing its products or diversification. From its current situation, a company can decide to penetrate in its existing market or it can decide to increase its diversity in its market or its products (Ansoff, 1957). Diversification relates to the process where an organization increases the range of products or markets it serves (Johnson et al., 2008). The growth strategies as described by Ansoff finally lead to a model better known as the Ansoff matrix, which is shown in figure 2. The four quadrants of the model will now be described in more detail.

Market penetration refers to the strategy where an organization penetrates deeper into its existing market with its existing products. For this strategy, the organization can build on its existing capabilities and does not have to change its scope. When a company decides to diversify its products or its markets, this is called a related diversification, because there are relationships to the existing business. There are two ways in which a company can do this. The first option is product development. Here the company delivers new or improved products or services to the existing markets. The level of innovation of the product can be either incremental or radical. The second option for related diversification is called market development. Here the company offers existing products to new markets. Often, market development includes also some small product developments. Within market development, a distinction can be made between two forms: new users and new geographies. When the company decides to diversify its products as well as its markets, this is called an unrelated or conglomerate diversification, because there is no longer relationship to the existing business. This strategy brings the most radical change compared to the others, because radically increases the scope of the organization (Johnson et al., 2008).
Another business model innovation strategy that can be applied is supply chain innovation. Supply chain innovation is innovation of supply chain management (Flint & Larsson, 2006). Supply chain management can be defined as “the integration of key business processes from end user through original suppliers that provides product, services and information that add value for customers and other stakeholder” (Lambert, Cooper & Pagh, 1998). Examples of areas that are related supply chain management are transportation, inventory, warehousing, packaging, etc. Supply chain innovation is most powerful when it includes the innovation of processes instead of products, because processes are harder to imitate by competitors (Flint & Larsson, 2006).

The final business model innovation that will be assessed for this research is revenue model innovation. Relatively little has been told about this topic in literature. A revenue model is something different from a business model. A business model tells something about how a company delivers value to its customers, where a revenue model describes in what way that company inns its revenues. There are five types of revenue models: the trade model, which refers to a situation where a product is directly sold to the customers; the subscribe model, where a fixed fee is paid in return to use a product or service for a specific period; advertisement model, which is a situation where revenue is generated through advertisements, where the amount of views often states the amount of income; the auction model, a revenue model where people can place a bid, and the person with the highest bid gets the product or service; and finally the freemium model, where customers can use the product or service for free, but can also those to pay for extra services (Investormatch.nl, 2016).

2.7 Process model

The theory described so far leads to a process model for business model innovation in the social domain, which is presented in figure 1. A process model refers in this paper to a model existing of process properties, which are essential for a specific purpose (Smirnov et al., 2012). The model starts with the internal and the external factors, which influence the existing business model. Which leads to the fact that the business model should be evaluated. The evaluation will be done by using the eBusiness Model by Dubosson-Torbay et al. (2002). This model is applicable for this research, because E-business modeling has the same objectives as enterprise modeling in general (Dubosson-Torbay et al., 2002). This framework is designed according to the balanced score card approach, which is an approach that shows the performance of an organization from four different perspectives (Kaplan & Norton, 1995). It splits the components of the business model of Osterwaldet al. (2005) into four aspects, namely: product innovation, customer relationship, infrastructure management and financial aspects. Per aspect, three indicators are given about how the aspects can be measured. Based on the evaluation should be decided whether it is important to innovate the business model. When this is the case, some new business ideas should be generated, where the strategies described in chapter 2.6 could be useful. A business model in this context means the execution of a market opportunity, but can for example also imply a process improvement, which improves the efficiency. These business ideas should then be evaluated for their feasibility and the value they will add. This will be done using the same method as will be used for evaluating the existing business model, but for the financial aspect, an annual prediction will be made there were possible. When one or more of the new generated business ideas appear to be feasible and are likely to add value to the existing business model, these ideas should be implemented, which lead to the actual business model innovation. After the final step, the whole process starts over again. This model will be used during this research as a guideline, where the described steps will be executed in order to come up with some recommendations about how De Viermarken can innovate their business model.
Figure 2. Process model for business model innovation in the social domain.

Table 1. Literature overview.

<table>
<thead>
<tr>
<th>Concept</th>
<th>Definition</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business model</td>
<td>A short description or representation of what value is delivered to customers, how it is delivered and which financial consequences this has</td>
<td>Osterwalder et al. (2005); Teece (2010); Yunus et al. (2010); Zott et al. (2011)</td>
</tr>
<tr>
<td>Business model innovation</td>
<td>The process where an organization reconfigures its existing resources and capture new resources in order to change the business model</td>
<td>Amit &amp; Zott (2010); Lindgardt et al. (2009); Massa &amp; Tucci (2013); Schneider &amp; Spieth (2013); Teece (2010)</td>
</tr>
<tr>
<td>Social innovation</td>
<td>An innovation with the goal to meet a social need</td>
<td>Mulgan (2006); Pol &amp; Ville (2009)</td>
</tr>
<tr>
<td>Internal influential conditions</td>
<td>Conditions that influence the business model that come from inside the organization including the aim of social innovation, routines, organization from and organization culture</td>
<td>Bock et al. (2012); Cameron &amp; Green (2015); Dougherty (1992); Mulgan (2006); Murray et al. (2010); Pol &amp; Ville (2009)</td>
</tr>
<tr>
<td>External influential conditions</td>
<td>Conditions that influence the business model that come from outside the organization including the institutional environment and networks</td>
<td>Johnson et al. (2008); Phillips et al. (2015); Pol &amp; Ville (2009); Tracey et al. (2011)</td>
</tr>
<tr>
<td>Bottlenecks and challenging conditions for business model innovation in the social domain</td>
<td>Factors that influence business model innovation in the social domain including conflicting practices, filtering information, inertia and performance measures</td>
<td>Chesbrough (2010); Christensen &amp; Raynor (2013); Holmén &amp; Fallahi (2013); Lindgardt et al. (2009); Murray et al., 2010</td>
</tr>
</tbody>
</table>
### Innovation strategies
Strategies for companies to innovate their business models including market penetration, product development, market development, diversification, supply chain innovation and revenue model innovation
Ansoff (1957), (Johnson et al. (2008); Flint & Larsson (2006); Lambert et al. (1998)

3. **Methodology**
In the following chapters, the process of business model innovation in the social domain will be investigated. For this research is chosen to conduct a case study, because a case study is one of the best ways to bridge qualitative evidence to mainstream research (Eisenhardt & Graebner, 2007). According to Schneider & Spieth (2013), case studies are often used in the business model innovation literature, because these researcher are characterized by their qualitative nature. Also, Yin (2013), mentioned that a case study should be used in order to answer a how question, which is the case in this research. The case used in this research is, as described earlier, the business model innovation process at De Viermarken.

3.1 **Research procedure**
The process model developed in the theoretical chapter will be used as a guideline for the design of this research. Before innovation of the business model will be discussed, it is important to describe the current business model of De Viermarken. This is done based on the components of the business model canvas of Osterwalder et al. (2005). Also a description will be given from the internal and external influential conditions, which may affect the business model in the future.

After an image of the business model is created, the performance of this business model will be evaluated. The performance measurement is based on a framework designed by Dubosson-Torbay et al. (2002), as described in chapter 2.

Based on the model of Ansoff, as described in the theoretical framework, and the other mentioned innovation strategies, some business model innovations will be designed. These innovations can be divided into six different strategies. The first innovations will be related to market penetration. Here the focus is on how De Viermarken can increase their sales, without diversifying. The second type of innovations that will be investigated are innovations that related to products development. More specific, here will be looked at how De Viermarken can innovate it product within the existing market. Thirdly, the research will focus on market development. This focuses on how De Viermarken can broaden its customer base, by serving the existing products. The fourth business model innovation type to be investigated is the diversification strategy, relating to innovations where De Viermarken serves a new market with new products. The fifth type of innovations that will be investigated are related to supply chain innovations. Innovations related to this describe how De Viermarken can innovate its key business processes. The final strategy is related to revenue model innovation, which is about the way revenues are collected.

The possibilities for De Viermarken to innovate will result into new business models. These business models will be measured in terms of feasibility and the value it will add. This measurement will be done by using the earlier described framework of Dubosson-Torbay et al. (2002).

3.2 **Research setting**
The case that will be studied in this paper is the case of De Viermarken. Like mentioned before, De Viermarken is a care farm located in Enschede, the Netherlands, which offers employment to physically and mentally limited people by combining agricultural production with health and social services De Viermarken (2016). The main activities of De Viermarken include the cultivation of diverse crop, the care taking of some animals, the production of several goods, like for example bread and jam, and selling most
of the products in their shop, located on the property of the farm. The farm employs 9 people (6,83 FTE’s), who take over 119 clients. These clients have a disability which can be either physical or mentally, but they can also be at De Viermarken, because they need some other special care (De Viermarken, 2016b).

De Viermarken is a good case for this research, because most of the income of the farm comes from governmental funding, and since most governments are cutting budgets related to (health) care due the financial crisis of 2008 (Grant & Wilson, 2012), this might become problematic for De Viermarken in the future. This is something that other care facilities might face as well. Another issue for De Viermarken is the fact that any investment they want to make (in for example production facilities or accommodations for the clients), has to be paid from the income they generate from the sales of their agricultural products. Since this income is not sufficient enough for De Viermarken to make their required investments, they have the government to ask for a subsidy, which makes them even more dependent. The combination of the described issues makes this situation a relevant case for this research.

3.3 Data collection
Yin (2013) names six sources to collect data for a case study, including: documents, archival records, interviews, direct observations, participant observation and physical artifacts. He also stresses the importance of collection evidence from multiple sources, in order to increase the construct validity (Yin, 2013). In this research, four ways of data collection were be used. The first source is through interviews and the second source are documents. These two sources complement each other, because documents help the interviewer to prepare the interview, and interviewees can lead the interviewer trough the document to illustrate the provided information (Blumberg et al, 2011). The other two data collection techniques are observations and surveys. All the techniques will now be discussed in more detail.

3.3.1 Interviews
Interviews are very useful for case studies when a key informant for the case is interviewed. Though, it is important not to rely on only a few informants, because this will present a biased picture of the case (Blumberg et al, 2011). Therefore, several informants from different stakeholders were interviewed in this research. This in combination with documents as a source will improve the validity.

The first interviews that were conducted are interviews with two employees of De Viermarken. The employees that were interviewed are responsible for, among others, the agricultural and the sales part of De Viermarken, which makes them interesting to interview. These interviews were conducted in order to get insights into the current business model of De Viermarken, to understand which internal and external factors are changing and how they affect the existing business model. Other reasons why these interviews were conducted are to find out how business model innovations are evaluated and the opportunities that exist to innovate the business model, in order to be able to generate new business model innovations. The interviews are also of interest in recognizing important stakeholders, who might be valuable by innovating the business model. The questions that were asked are based on interviews that were designed by Buliga (2014), Tawakkoli (2015) and Zott & Amit (2007). These researchers designed question for business model innovation and how the performance of these business models can be measured. The questions are combined with questions related to the model of Ansoff (1957), in order to get an overview of the existing opportunities for De Viermarken per quadrant, as described in section 2.7. Also some extra question were added in order to conduct a more compete interview, which fits best to the situation of De Viermarken. The questions that were asked during these interview can be found in appendix A. The interviews are presented in Dutch, since the interviewees and the interviewer are Dutch themselves.

After two of the employees of De Viermarken were interviewed about the existing business model but also about some ideas for innovations, an interview was conducted with a person from the municipality of Enschede, who is responsible for the development of the area where De Viermarken was located.
located in. The purpose of the interview was to receive some ideas about possible activities that can be conducted by De Viermarken and also whether the suggestions of the first interviews were realistic according to the municipality. The interview questions of this interview can be found in appendix B.

Finally, when business model innovations were developed, it is case to find out whether these innovations are realizable for De Viermarken. In order to find out, another interview was conducted with one of the employees of De Viermarken, who also is responsible for most aspects of the organization, including the care and sales activities. This person was chosen to interview, because he or she knows the importance of sales, but also takes the wellbeing of the clients into account, which makes that he or she was able to tell which innovations are realizable or financially interesting. Another purpose of this interview was to gather some missing financial data in order to present a financial overview of the developed ideas. The interview questions that were asked during this interview is presented in appendix C.

3.3.2 Documents
Documents used in a case study can come from a wide range of sources like internal memos and reports and agenda’s. It is important to take in mind that those documents were written with a certain purpose and therefore it is import to consider if and how valuable these documents are (Blumberg et al, 2011). The documents that are used for this research are internal records, like production information and financial reports of De Viermarken; and results from other research. The latter relates to research that has been conducted by research groups commissioned by het Wageler. Het Wageler is the area where De Viermarken is located in. The research by the research groups were conducted in order to investigate opportunities for the area development of het Wageler. In the research, parties located in this area, like De Viermarken, were also included. This is what makes the documents a valuable source for discovering new business opportunities for De Viermarken. Another source that will be used for this research are newspapers. Especially when it comes to discovering new business model opportunities, the regional newspaper can be a valuable source.

3.3.3 Observations
Another source of data came from observations. Observations are the best source to obtain information from people who are not able to express their selves like people who are mentally disabled (Blumberg et al, 2011). Therefor observations is a valuable source to objectively measure how the mentally limited people of De Viermarken responds to business model innovations. These observation were done during the several visits that have taken place during the research and gave an impression of the culture of the organization, but also from the way how the production processes are executed.

3.3.4 Surveys
In order to get a better view of the customers of De Viermarken and about potential customers, surveys are valuable sources, because they are good for measuring attitudes and orientations in large populations (Babbie, 1998). Two surveys are conducted during this research. The first survey was provided to existing customers who visited the shop. In total 18 people filled in the survey. The goal of this survey is to get a better image of who the customers are and what brings them to De Viermarken. The survey that was provided to the customers is presented in appendix D, also the results are shown. The questions in this survey were based on a template of (NetQuestionaires Nederland, 2010). This template is designed for customer satisfaction research and therefor consist some question that are valuable for this research. In order to complete the survey, some other questions were added. This questions included questions about potential business model innovations and whether the customers would be interested in these ideas. The other survey was provided to 22 people who live on a small distance from De Viermarken. This survey’s goal was to understand how well De Viermarken is known to them, what the reputation of De Viermarken
is and whether they are interested in several goods. This survey, including the results, can be found in appendix E.

4. Existing business model of De Viermarken
According to the model presented in figure 1, the existing business model should be described including the influential factors, before business model innovations can be described and evaluated. The information presented in this chapter is gathered by the methods as described in the previous chapter. First the conditions influencing the business model will be discussed, after that a description of the current business model will be provided.

4.1 Influential conditions
The conditions that influence the business model and therefor the process of business model innovation are, as mentioned in chapter 2, divided into internal and external conditions. The internal conditions refer to conditions that take place within the organization itself and the external conditions are the conditions that come from the environment of the organization.

4.1.1 Internal influential conditions
The purpose of this research is to innovate the business model of De Viermarken and thereby generate more income. However, it is important to take in mind that social benefits are in the case of De Viermarken at least of the same importance as financial benefits are. The clients that work at De Viermarken have different kind of limitations. The main reason that they come to De Viermarken is take day-care. This makes that the activities that are executed by the clients may not be too stressful, which means that they cannot fulfil the same tasks compared to employees of commercial companies.

The second internal condition that has to be taken into account is the structure of the organization. De Viermarken is a foundation, which means that it is a non-profit organization. On top of the organization is the supervisory board, who meet four times per year. The supervisory board is represented in the organization by the board of directors, which exists of only one person (the director). The director has the supervision over four assistants, who take care of the activities related to the farm, and four companists, who take care over the care aspect of the organization. Next to that, there is the administrative department and a client counsel in order to facilitate the clients a voice in the organization (De Viermarken, 2015). During the first interviews with personnel of De Viermarken, it became clear that the small amount of employees gave some difficulties in relation to the business model. First it was mentioned that since they have only a limited capacity, it will cause troubles when one the employees will not be present for a longer period, because there is not much capacity to fill up the gap someone leaves behind. Another problem that was mentioned is that the small capacity of human capital can influence the amount of innovativeness of the business model. The personnel has a lot of tasks to do, which makes that they simply do not have so much time to think of possible innovations and implement them. What also an important influential condition is, is the fact that the activities of the clients have to be beneficial for them. So every agriculture activity for example, should also provide care to the client some way. This means that when designing business model innovations, this should always be taken into account.

In terms of culture, there are also several factors that may be of influence for executing the business model activities. One of these factors is the fact that the culture can be described as an organic organization. This has to do with the clients that come to De Viermarken. The composition of the people who come to De Viermarken differs every day and also the mood of the clients differs. This in combination with the dependency of the weather makes it hard to follow the developed planning and therefor things do not always go according to plan. Another cultural factor that should be mentioned is the openness to renewal. During the interviews it appeared that the personnel is very open to innovations. So are the
4.1.2 External influential conditions
The PESTEL framework is a useful tool to describe the environment of an organization (Johnson et al., 2008). The first element of the framework is the political influence. The care offered by De Viermarken is part of ‘de wet maatschappelijk ondersteuning (WMO)’, which is a law that says that people should live at home as long as possible. When people cannot live individually any longer, they can go to care facility like De Viermarken Rijksoverheid (2016). The next element of the PESTEL framework is the economic aspect. The municipality provides the personal budgets to the clients of De Viermarken. With these budgets, clients can pay for the care they receive, like for example the day care De Viermarken offers. As described in the introduction, the Dutch government is cutting costs on healthcare expenditures (nu.nl, 2016). This may probably have consequences for De Viermarken in terms of financing the organization. The municipality of Enschede also provides De Viermarken with funds and other subsidies (De Viermarken, 2015). The third element is the social aspect. Due to the fact that people life longer than they did in the past, the demand for health care in general is growing. This resulted in changes in the health care system of the Netherlands (Ministerie van Volksgezondheid, Welzijn en Sport, 2015). Technology is the next element of the PESTEL Framework. The fact that more and more people need care, results in the developments in the health care that may affect De Viermarken’s way of performing care to its clients. For example, devices are developed that help personnel to monitor more clients, with the same amount of employees (Yang & Rhee, 2000). Also agriculture is subject to innovations. During the last 100 years, technological innovations have changed the agricultural sector in terms of new product development, improvement of efficiency, healthier products, costs reduction and many others (Sunding & Zilberman, 2001). The fifth element of the PESTEL framework includes the environment. The area where De Viermarken is located in, is called het Wageler. This is a green area with a lot of nature, located just outside the city of Enschede. In this area, there are several parties located who collaborate with De Viermarken (De Viermarken, 2015). Finally, the last element includes the legal aspect. There are some standards for the care that they provide, which have to be met (De Viermarken, 2015).

Networks is the other external condition to be discussed. The earlier mentioned area het Wageler is one of the networks where De Viermarken is involved in. Also together with is the municipality of Enschede are some collaborations, like for example providing nature educations to schools. Furthermore has De Viermarken some agricultural collaborations with several organizations (De Viermarken, 2015).

In conclusion, De Viermarken is an organic organization, with a culture that is open for innovation. The government is cutting costs on health care expenditures, which may become a threat in the future, which makes is necessary to innovate, in order to increase the revenues. During the innovations, it should be taken into account that the first priority of De Viermarken has to be the offered care and that the activities that should be executed by the clients may not become too complicated and stressful.

4.2 Business model
In order to describe the existing business model of De Viermarken, the business model canvas of Osterwalder et al. (2005) will be used. This canvas helps to describe a business model by dividing the business model into several components including: partners, key activities, key resources, value propositions, customer relationships, customer segments, channels, cost structure and revenue streams. Each component of the canvas will now be described.

4.2.1 Key Partners
The key partners of De Viermarken have been discussed several times before, so they won’t be discussed in too much detail here. The first key partners to mention are the clients and the organizations who...
represent them. They are the consumers of the care practices that De Viermarken delivers. Another partner of De Viermarken is the municipality of Enschede which provides De Viermarken with funds and other subsidies, but also works together with De Viermarken on different projects. (De Viermarken, 2015). Also the other parties that are located in Het Wageler are important partners for De Viermarken, because they often work together and even have a common foundation.

4.2.2 Key activities
The key activities of De Viermarken exist of stimulating the reintegration in society of people who are mentally or physically limited, people who are physiological vulnerable or who have been unemployed for a long period, by offering them a work place. This work place exists of a farm, where ecological, agricultural, nature- and landscape management, education, recreation and care activities are executed (De Viermarken, 2015). The activities that are executed by the clients are for example taking care of animals, growing vegetables, producing bread and running the shop. The employees of De Viermarken decide together with the clients which activity they will do, to make sure that everyone has a task he or she enjoys.

4.2.3 Key resources
A large part of the key resources of De Viermarken exists of human capital. On the one hand, the resources to provide their clients with the day care is the personnel that is trained to provide this kind of care. On the other hand, the clients who come for the day care to De Viermarken are resources themselves, because most of the activities that are executed during their visit result in deliverables like crops, bread and other products or services. Also the planning is of much importance to De Viermarken, because without a planning, the clients do not know what they should do. In order to execute the agricultural activities, they rent 15 hectare of agricultural ground from the municipality. Also the budget is an important resource for de Viermarken. Next to the revenue they generate from the care- and agricultural activities, they also receive fund and subsidies provided by the government. Finally there are the tools and machinery that are used in order to execute agricultural activities. They have for example a small tractor, they have an oven and they use shovels and rakes.

4.2.4 Value propositions
The value propositions of De Viermarken can be divided in two fields. On the one hand there is the value proposition for the care that they offer to their clients. This value propositions is: stimulating the reintegration in society of people who are mentally or physically limited, people who are physiological vulnerable or who have been unemployed for a long period, by offering them a work place on an ecological farm with an educative character (De Viermarken, 2016b). Important is that the clients feel safe and enjoy the work they do. These factors should help the clients to develop themselves, should make them feel that they matter and it finally should help to improve their self-esteem.

On the other hand, there is the value proposition of the product that they offer resulting from the agricultural activities. The value it offers is that it are biological produced products and for others it is important to know that they buy something that have helped someone else. So they buy it for charity reasons.

4.2.5 Customer relationships
Also here a distinction can be made between two fields of customers. In the first place, there is the relationship with the clients. They are the ones who receive care from the employees of De Viermarken. Together, they decide what the client want to do and what is good for him or her. The employees also guide the clients while he or she is performing an activity. There are also regularly meetings between the companies who buy care for their clients, also called the ‘onderaanemers’, and De Viermarken. Often, the
clients are also present during these meetings. These meetings are conducted in order to make sure that the clients are satisfied with the care offered to them (De Viermarken, 2015).

The other customers are the customers who buy the products De Viermarken produces. Most of the customers lives closer than 2 km. from De Viermarken, are female, are high educated and on average they have an age of 56. There are customers who get their products delivered and there are customers who visit the shop and thereby have an interaction with the clients. De Viermarken also organizes an open house to get in contact with the neighborhood and to show to people who they are and what they offer. This should help to create understanding to potential customers.

### 4.2.6 Customer segments

Several segment can be distinguished in relation to the products and services provided by De Viermarken. The first segment are the ‘onderaanemers’, who buy care from De Viermarken for their customers. Second, there are the customers who profit from the services that De Viermarken offer. For example the municipality profits from educational facilities offered by De Viermarken (De Viermarken, 2015). Next to that, there are customers who come to visit the shop or get their products delivered. They benefit from the product produced by De Viermarken. There are also companies and restaurants who buy products from De Viermarken and use them for example as an ingredient. Finally, De Viermarken also has a deal with the foodbank. A fixed amount of products will be donated to them.

### 4.2.7 Channels

The products and services of De Viermarken are delivered to the customers through several ways. The care provided is delivered through the multiple times mentioned ‘onderaanemers’. Furthermore, most of the products that result from the agricultural activities are delivered through the shop located at the farm or are delivered at home. Since a few months there is also a possibility to buy the products online. The remaining products are sold to other organizations like restaurants, shops, etc. and are delivered to them (De Viermarken, 2016b).

### 4.2.8 Cost structure

Because the most important part of the income of De Viermarken comes from the care service they offer, more than 78% are personnel costs. The remaining costs are general costs, housing costs, dividend costs, production costs and remaining costs (De Viermarken, 2016b).

### 4.2.9 Revenue streams

The last element of the business model to discuss are the revenue streams. The incomes of De Viermarken come from the ‘onderaanemers’. These organizations have several clients who need day care and buy this at De Viermarken. The care is payed through personal budget financed by the government. So in this case, the income that De Viermarken generates per client is decided by the government. But De Viermarken is also directly dependent of the government in the sense that they annually receive subsidies. Together, the income discussed is more than 87% from the total revenues (De Viermarken, 2016b). So, only 13% of the income come from the products and services that result from the agricultural activities.

The description of the existing business model helps to get an image of what De Viermarken looks like and what activities they perform. The fact that only 13% of all the income of De Viermarken results from the products they produce, means that they are vulnerable, because of the cost savings from the government. It is important to keep in mind that the value proposition as received by the client segment should remain the same, when a business model innovation will be implemented. Therefore it is important to find innovations that has a balance between the amount of income it generates, the value it offers to the clients and the value it offers to the other customers.
4.3 Performance of the existing business model

Now the existing business model of De Viermarken has been described extensively, it is time to assess the performance of the business model. As explained in the methodology chapter, the performance will be measured by using the framework of Dubosson-Torbay et al. (2002). The first performance measure they described is product innovation. Here, products relate to the products and services De Viermarken delivers to all of its customers, for example the care they provide, the crops they grow and the delivery service. The data regarding to this element was gathered through interviews with personnel of the Viermarken. The employees describe that they are working on innovations in terms of growing new developed crops for example. But they believe that the innovativeness of delivering the products to the customers can be improved, for example by creating more brand-awareness. They also argue that there are chances to grow the number of collaborations, with for example restaurants. When it comes to the care side, De Viermarken’s activities are quite static. They offer for quite a long period the same kind care to the same customers segment.

The second performance measure is customer relationships. Like the previous element, the data regarding to this element was also gathered through interviews with personnel of De Viermarken. The relationships with the organizations who represent their clients are quite stable. There are often meetings with them and they do not have any trouble in finding new clients. On the other side, the customers that come to buy the agricultural products are in general old people and the group that comes is not changing or growing. Also the employees of the personnel admit that they do not know them well enough.

Another measure for business model performance is infrastructure management. Data regarding to this element was also gathered through interviews with the personnel. Since the first goal of De Viermarken is to provide care to their clients, it is important to keep the activities easy and not monotonous. Also planning is a very important aspect. This is something that can be improved, especially in terms of communication. This also leads to a slow process of decision making, but in general is the infrastructure of De Viermarken well organized.

The final measure of performance is related to the financial aspects. The data used for this measured was obtained through the financial reports of De Viermarken. The reports show that overall, De Viermarken makes a small profit. The generated income comes from different sources. The largest part comes from the care activities, which is 87% of the overall revenues. This money comes from the ‘onderaanemers’, which are dependent on the personal budgets of their clients, subsidies from the government and from other gifts. On the other side there is the income that comes in through the products and services De Viermarken offers, this counts for 13%. However, the costs of the offered products and services equals €75.259,-, which is more than the €68.531,- that it generates (De Viermarken, 2016b). This means that the performance of the products and services part performs worse than the care part of the business model.

In summary, on the agriculture part of the organization, the net result is negative. Also on other aspects of the business model, there are some possibilities. For example, the audience that visits De Viermarken is relatively old and static, the communication can be improved and there are also some opportunities for product innovation other than the number of crops that are produced. This, in combination with the earlier mentioned external conditions, like for example the decreasing expenditures of the government on health care, makes it important for De Viermarken to innovate their business model. Some suggestions will be provided in the next chapter, in order to try to improve the described situation.

5. Business model innovations

In this chapter, different innovation strategies will be described that are relevant for De Viermarken. The possible innovations are gathered through the conducted interview and surveys, through some documents and through the observations made. As mentioned before, the strategies are divided into six categories.
The performance of the innovations strategies will be assessed based on the framework of Dubosson-Torbay et al. (2002), which has already been described in this paper. For the financial performance calculations was chosen to round the numbers upwards, because it is not possible to exactly predict future expenses and revenues.

5.1 Market penetration
The first category of innovations is market penetration. Which means that a company penetrates deeper into its existing customer segment. During the surveys that was dispersed in the neighborhood, 60% of the respondents that never bought something at De Viermarken said that they didn’t know that De Viermarken has a shop or what products they sell. This means that it would be very meaningful for De Viermarken to improve brand awareness among people who life close to De Viermarken, in order to reach more potential customers. This is confirmed by the fact that 50% those people say that they would be interested to buy biological products. Which means that there is a market potential. Options to do this can be to make the shop more attractive for people who pass by to enter the shop. Also, some signs can be placed on the road with for example seasonal products or special offers, so passer-by’s know what De Viermarken has to offer. But also on other places in the neighborhood De Viermarken can promote itself by placing for example posters or by spreading flyers. This innovation will not affect the infrastructure management, because no new activities should be executed and no new equipment should be purchased. It also has no consequences for the innovativeness, because no new product or service will be offered. It will improve customer relationship because it is likely to attract new customers, existing customers will come back more often and it improves the communication with the customers. (Dubosson-Torbay et al., 2002). The final measure of this business model innovation is the financial measure. The expected financial numbers are presented in table 2. For the costs, some optional strategies are chosen, like for example an online marketing campaign on Facebook, a monthly advertisement in the local newspaper and a sponsorship for a local sport club, but it is also possible to choose other strategies, which will result in other costs. In order to calculate the expected incomes, the data derived from the surveys was used. First is decided how many of the respondents have never hear of De Viermarken or have never visited the shop. This is in total 30%. 50% of these people said that they would be interested in buying biological products at De Viermarken. If these people can be reached by marketing campaigns and will spend on average the same amount of money as existing customers do, this can lead to a potential extra income of 16%, which equals €8400 euro annually. This will result in 3200 euro of extra profit every year. However, this extra profit can only be realized when the production can be expanded, because now almost everything that is produced is sold. Therefore, this innovation will only add value when it will be used in combination with other innovations that increase the production.
Another option for De Viermarken to penetrate deeper into the existing market is to extend the opening hours. 38% of the respondents that never visits De Viermarken, is willing to visit the shop when it is open during the weekend and also 38% is willing to come in the evening. The latter appeared to be less realistic during the second interview with an employee from De Viermarken, because the personnel costs will be too high. However, when this innovation will be combined with the tea facility innovation, which will be presented later on, than it is more attractive to open the shop also on Saturday during the summer period (from Easter to 1 September), because there will already be an employee present for the tea facility. This means that clients will be able to run the shop. It is also important to mention that this innovation is only effective, when it is executed in combination with one of the business model innovation where the production capacity will be increased. This innovation will probably not affect the infrastructure and innovativeness performance because it does not require new assets or activities and there are also no new products or services introduced that offer new value to the customers. However, like the previous mentioned innovation, it will have a positive effect on customers relationships, because it helps to better serve the customers, since it is will become easier for customers to find a time to visit De Viermarken (Dubosson-Torbay et al., 2002). When it comes to the financial performance, a calculation is made of the potential extra annual revenue that can be gained when the opening hours will be expanded during the summer period, which is shown in table 3. The calculations are based on the assumption that customers will spend on average as much on Saturday as they do during the rest of the week and that the production capacity will be improved. The revenue per hour is multiplied by the extra hours that the shop will be open. Also the fact that according to the surveys, 52% more visitors are willing to visit the shop on Saturday compared to the amount of visitors that visits the shop on weekdays, is taken into account. Therefore, the extra income that will be generated is multiplied by 152%. In the end, this innovation can lead to an increase in revenue of €5000.

<table>
<thead>
<tr>
<th>Annual Costs</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Online marketing campaign</td>
<td>€ 1.400,00</td>
</tr>
<tr>
<td>Advertisement in local newspaper</td>
<td>€ 3.500,00</td>
</tr>
<tr>
<td>Sponsorship local sport club</td>
<td>€ 300,00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>€ 5.200,00</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Potential extra annual gross income</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total revenue shop 2015</td>
<td>€ 61.158,99</td>
</tr>
<tr>
<td>Revenue costs shop 2015</td>
<td>€ 23.584,00</td>
</tr>
<tr>
<td>Gross profit shop 2015</td>
<td>€ 37.574,99</td>
</tr>
<tr>
<td>% of people that do not know De Viermarken</td>
<td>9%</td>
</tr>
<tr>
<td>% of people that have never visited De Viermarken</td>
<td>22%</td>
</tr>
<tr>
<td>Potential customers among participants</td>
<td>31%</td>
</tr>
<tr>
<td>% of people that is willing to buy biological products</td>
<td>50%</td>
</tr>
<tr>
<td>Potential interested customers</td>
<td>16%</td>
</tr>
<tr>
<td><strong>Total revenue shop 2015</strong></td>
<td><strong>€ 8.400,00</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Potential extra annual gross profit</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total revenue shop 2015</strong></td>
<td><strong>€ 8.400,00</strong></td>
</tr>
<tr>
<td><strong>Potential extra annual gross profit</strong></td>
<td><strong>€ 3.200,00</strong></td>
</tr>
</tbody>
</table>
Table 3. Financial prognosis of expanding opening hours.

<table>
<thead>
<tr>
<th>Annual Income</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total revenue shop 2015</td>
<td>€ 61.158,99</td>
</tr>
<tr>
<td>Revenue costs shop 2015</td>
<td>€ 23.584,00</td>
</tr>
<tr>
<td>Gross profit shop 2015</td>
<td>€ 37.574,99</td>
</tr>
<tr>
<td>Total ours open</td>
<td>1771,5</td>
</tr>
<tr>
<td>Gross profit per hour</td>
<td>€ 21</td>
</tr>
<tr>
<td>Extra opening hours (Saturday)</td>
<td>156</td>
</tr>
<tr>
<td>Potential extra visitors during the weekend</td>
<td>152%</td>
</tr>
<tr>
<td><strong>Potential extra annual revenue</strong></td>
<td>€ 5.000,00</td>
</tr>
</tbody>
</table>

The farm activities executed by the clients of De Viermarken directly deliver a large amount of different products like eggs and vegetables. In contrast, the amount of goods that is processed is limited to four different products, while these processed goods gain relatively more incomes. This in combination with the fact that local product gained more popularity during the last years, makes it interesting for De Viermarken to develop more processed products than they do now. Also 33% of the respondents said that would be interested in buying local processed products. This rising popularity of local goods is largely based on the fact that, among others, the origins of the products are known and that those products have a strong local designation (Vijn et al., 2013). One of the products that De Viermarken already produces is jam. During the second interview with an employee of the Viermarken, it became clear that there is enough capacity to increase the production of jam three times. Therefore, jam is used as an example for processed goods, but in the future, also other processed products can be an option. This innovation does not have an impact on innovativeness, because it will only expand the production of something they already offered. It will improve customer benefits, because more customers can now buy the jam, because there is a lower change of running out of stock, so it improves the quality of the customer relationships. The innovation will not have any effects on the infrastructure management, because they are already producing jam. They will only increase the volume (Dubosson-Torbay et al., 2002). In 2015, the revenue on jam was €1.488,04. Assuming that the distribution of sales of 50 g, 250 g and 440 g jars will remain the same, this means that the annual revenue will be about €4.500,-, when the numbers of sold products will be multiplied by three. The profit margin for jam is 41% of the revenue. This means that the potential profit will be €1.300,- and increases with €900,-. An overview of the calculation can be found in table 4.

Table 4. Financial prognosis of developing more processed goods.

<table>
<thead>
<tr>
<th>Revenue jam 2015</th>
<th>€  1.488,04</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profit margin</td>
<td>41%</td>
</tr>
<tr>
<td>Total cost price of jam</td>
<td>€  1.055,35</td>
</tr>
<tr>
<td>on jam 2015</td>
<td></td>
</tr>
<tr>
<td>Profit on jam 2015</td>
<td>€  432,69</td>
</tr>
<tr>
<td>Potential revenue of jam</td>
<td>€  4.500,00</td>
</tr>
<tr>
<td>Profit margin</td>
<td>41%</td>
</tr>
<tr>
<td>Total cost price of jam</td>
<td>€  3.200,00</td>
</tr>
<tr>
<td>Potential profit on jam</td>
<td>€  1.300,00</td>
</tr>
<tr>
<td>Potential increase of revenue</td>
<td>€  3.000,00</td>
</tr>
<tr>
<td>Potential increase of profit</td>
<td>€  900,00</td>
</tr>
</tbody>
</table>
5.2 Product development
An innovation related to product development is keeping cows for meat production. At the moment, De Viermarken has several donkeys, sheep, goats, deer, ponies and some buffalo’s. De Viermarken takes care over these animals in exchange for a small fee. However, no other income results directly from keeping those animals. For this research, the option for keeping animals for their milk production was investigated. This appeared not to be feasible, because they have to be milked every day and De Viermarken is only open 5 days per week. Another reason that make it impossible to keep animals for their milk production is that a milking machine needs to be purchased, which is too expensive when you keep only a small amount of animals. And milking by hand is too difficult and too time consuming for the clients to execute. An option that remains is keeping animals for meat production. During the second interview with an employee of De Viermarken, it appeared that this is something where De Viermarken is open for, as long as the animals fit within the landscape. Also the municipality is open for an increase of animals in het Wageler, because it improves the liveliness of the area. A breed that would fit into the area is the Hereford. This breed also has the advantage that it could be outside during the whole year, so it does not require any investments in a stable. After some research, it appeared that having calves is financially the most attractive option. This innovation has a positive effect on the value received by customers, because a new product means a larger assortment, so customers can be served better. It also has a positive effect on innovativeness, because a new product will be offered to customers, which also means that a new value can be offered to the customer. It will not harm the infrastructure management, because De Viermarken already has some animals, so keeping calves will not mean that the clients have to execute new activities and they also have the resource already (Dubosson-Torbay et al., 2002). In table 4, the financial prognosis of this innovation is presented. The income and costs per calf that are used, are based on quantitative information livestock handbook (Wageningen UR Livestock Research, 2010). The costs include the purchasing investment, food, healthcare, energy, water interest and possible damage when a cow got sick or dies. Furthermore, an initial investment needs to make for the fence. This and also the payback period is presented in table 5. For the calculation, an amount of 8 calves was used, but this number can also be changed. Every calf stays at the farm for a bit longer than 6 months, which means that every year 1,8 calf can be placed per spot (Wageningen UR Livestock Research, 2010). Therefore, the annual profit per calf was multiplied by 1,8, in order to get the annual profit per spot per year. The size of the meadow has to be about 4 hectare, which means an investment in 800 meter of fence. It was estimated that the costs of this investment will be €800. Compared to the annual result, the payback period is a little bit more than 1 year.
Table 5. Financial prognosis of keeping calves.

<table>
<thead>
<tr>
<th>Initial investments</th>
<th>€</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fence</td>
<td>800,00</td>
</tr>
<tr>
<td>Total</td>
<td>800,00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Income per calf</th>
<th>€</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meat</td>
<td>620,00</td>
</tr>
<tr>
<td>Total</td>
<td>620,00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Costs per calf</th>
<th>€</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase</td>
<td>145,00</td>
</tr>
<tr>
<td>Food</td>
<td>383,00</td>
</tr>
<tr>
<td>Healthcare</td>
<td>9,00</td>
</tr>
<tr>
<td>Energy, water, etc.</td>
<td>23,00</td>
</tr>
<tr>
<td>Interest</td>
<td>10,00</td>
</tr>
<tr>
<td>Damage due to failure</td>
<td>6,00</td>
</tr>
<tr>
<td>Total</td>
<td>580,00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Result per calf</th>
<th>€</th>
</tr>
</thead>
<tbody>
<tr>
<td># of calves per spot</td>
<td>1,8</td>
</tr>
<tr>
<td># of calves</td>
<td>8</td>
</tr>
<tr>
<td>Total annual result</td>
<td>600,00</td>
</tr>
</tbody>
</table>

| Payback period | 1,3 year |

5.3 Market development

In order to broaden its scope, De Viermarken can try to attract another customer segments to the farm. In the interview with the person from the municipality of Enschede, he suggested that it might be interesting to have a small amount of animals like for example goats. These goats are likely to attract families with small children, because they want to pat them. It could also be interesting to sell food for those goats, so that those children can feed the animals. Also the milk they produce results in more income. Next to the direct income it generates, it may also be valuable because it brings extra people to the farm who might also visit the shop, which also leads to extra income. Another advantage of this innovation is that it improves the appearance of the park. Also this innovations will be assessed based on the model of Dubosson-Torbay et al. (2002). First, this innovation improves the innovativeness of De Viermarken, because it will offer a service that delivers a new value proposition, because children can now pat and feed them. Also the milk is a new product that can be sold. Second, this innovation will improve the customer relationships, because it is likely to attract a new group of customers and it enlarges the number of different product sold. Third, in terms of infrastructure management, it will not bring practices or resources that are new to De Viermarken, because they already have chickens and buffalo’s, so they have some experience in taking care of animals. When it comes to the financial performance of this innovation, goats require a high investment, because goats need high fences and an air-tight stable. Also a small milking machine should be purchased. It was estimated that this together will cost more than €6000,-. The goats also need to be purchased, they cost about €50,- each. For the calculations, a number of 6 goats were chosen. The annual costs per goat are €300,- and exist of food, litter, cattle costs, water, gas, electricity, manure costs, failure damage and interest. The annual income per goat is about €600,- and come from litter sales in the shop to children who like to feed them, milk sales, lamb sales and emission goats. Assuming that De Viermarken buys 6 goats, the payback period will be 3,6 years. Off course, when the number of goats increases, the payback period will become shorter. The numbers used in this calculation are based on the ‘KWIN-V’ rapport (Wageningen UR Livestock Research, 2010) and are adjusted...
for biological goats based on ‘Kostprijsberekening biologische geitenmelk’ (Govaerts & Van Eekeren, 2008). An overview of the calculation can be found in table 6. When this idea was presented during an interview to one of the employees of De Viermarken, he or she told that it was not possible to keep goats, because he or she thought that the goats needed to be milked by hand, because a milking machine was only for large scale farms. However, he or she was not aware of the existence of a milking machine that is designed for small scale farms. This makes the innovation financially more attractive and makes it also during the weekend easier to milk them, because it does not cost much time now to milk them. With this information, this business model innovation is something that can be reconsidered by De Viermarken.

Table 6. Financial prognosis of keeping goats.

<table>
<thead>
<tr>
<th>Initial Investment</th>
<th>€</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goats purchase</td>
<td>300,00</td>
</tr>
<tr>
<td>Fence costs + housing</td>
<td>4.800,00</td>
</tr>
<tr>
<td>Mini milking machine</td>
<td>1.300,00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>6.400,00</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Annual costs per goat</th>
<th>€</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food</td>
<td>180,00</td>
</tr>
<tr>
<td>Litter</td>
<td>20,00</td>
</tr>
<tr>
<td>Cattle costs</td>
<td>30,00</td>
</tr>
<tr>
<td>Water, gas, electricity</td>
<td>20,00</td>
</tr>
<tr>
<td>Manure costs</td>
<td>30,00</td>
</tr>
<tr>
<td>Failure damage</td>
<td>10,00</td>
</tr>
<tr>
<td>Interest</td>
<td>20,00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>300,00</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Annual income per goat</th>
<th>€</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales of litter</td>
<td>180,00</td>
</tr>
<tr>
<td>Sales of milk</td>
<td>420,00</td>
</tr>
<tr>
<td>Sales of lambs</td>
<td>10,00</td>
</tr>
<tr>
<td>Emissions goats</td>
<td>3,00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>600,00</strong></td>
</tr>
</tbody>
</table>

| Profit per goat                         | € 300,00|
| Potential extra annual gross profit     | € 1.800,00|
| Payback period                          | 3,6     |

During the interviews with the employees of De Viermarken, it became clear that there was not enough capacity for example for picking the strawberries. It was estimated that about 50% of all the strawberries were rotten before they were plucked. This means that when extra capacity could be created, there is a potential to double the strawberry sales. An option to do this is to let customers pluck the strawberries themselves. This will on the one hand bring another customer segment to De Viermarken, namely a group of people who likes to pluck fruits themselves. On the other hand, it increases the production level of strawberries without extra costs. At the moment, this innovation is only possible for strawberries, but in the future it might can also be applied to other fruits. This innovation will have a positive effect on the performance of product innovation, because a new service will be delivered to customers. It will not have an effect on the infrastructure management, because this innovation will not lead to new activities or resources for the employees and the clients of De Viermarken. It will have a positive effect on the customer relationship performance, because it will lead to a higher availability of strawberries, which means that
the customers can be served better. Also, now customers can receive value from plucking their own fruits, which was not possible before (Dubosson-Torbay et al., 2002). When it comes to the financial performance, the innovation will not bring extra costs for De Viermarken. There is already some personnel available who can provide the customers with small instruction and who can weigh the strawberries afterwards. The only drawback is that customers do not pluck as efficient as experienced employees do. According to a farmer who also has field where customers can pluck strawberries by themselves, 20% of the strawberries goes lost due to the fact that customers do not pluck as efficiently as possible, this is taken into account during the calculation of the potential extra annual income, as presented in table 7.

<table>
<thead>
<tr>
<th>Sales of strawberries in 2015</th>
<th>€ 1.617,38</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extra sales with maximal capacity</td>
<td>€ 1.617,38</td>
</tr>
<tr>
<td>% that gets lost due to customers plucking</td>
<td>20%</td>
</tr>
<tr>
<td><strong>Potential extra annual income</strong></td>
<td><strong>€ 1.300,00</strong></td>
</tr>
</tbody>
</table>

### Table 7. Financial prognosis for the sales of self-plucking by customers

#### 5.4 Diversification

The final category of the Ansoff Matrix includes diversification. These are innovations that require a new set of practices and capabilities offered to a new group of customers. A possible innovation within the diversification category is opening a tea garden. This is something that is also supported by the employee of the municipality. Since this year, De Viermarken hires an extra location, which can be used to execute new care activities. However, there was also some space left within and around this location that could be used for other activities. This tea garden offers a new service to customers, which will result in more income. It also improves the quality of the area het Wageler, which makes it more attractive for people to come to the park. By offering a new value proposition to a new customer segment, it will improve the innovativeness. It also positively affects the appearance of the area, which is positively related to the quality of the customer relationships. When it comes to infrastructure management, this innovation means that the new location should be arranged for the tea garden and it also requires new skills and resources, therefore it has a negative effect (Dubosson-Torbay et al., 2002). During the second interview with an employee of the Viermarken, it became clear that the largest disadvantage of this innovation would be that new personnel is needed, which will bring high costs. A solution to this will be that offering this service will be combined with offer care to clients. The clients can serve the customers, prepare tea and can even grow their own tea plants. This activities can also be combined with the other activities that will be offered in this location. This means that the costs of the extra employee can be paid with the money that is generated by offering care and that the tea garden will not have to deal with personnel costs. The employee also told that it was an option to offer this care on Saturday, which mean that the innovation can be combined with the innovation of expanding the opening hours. The costs to hire the location are €1000,- per month. The employee told that the most interesting days to open this tea garden would be Wednesday in the afternoon, Friday in the afternoon and Saturday, 26 weeks a year. This means that the garden will be open for 390 hours per year, while the rest of the facility will be used for 2187,5 hours per year for other activities. This means that the hire costs can be allocated for 15% to the tea garden, because it will also be used for 15% of the time. Therefore, the annual allocated rent will be €1800,-. According to Firmfocus.biz (2016), per sold drink in catering facilities, there is a profit margin of 51%, when personnel costs and rent are excluded. This is done because the rent is already known and there will be no further personnel costs. In order to be breakeven, the €1800,- should be covered by the 51% profit margin. An overview of the financial prognosis of this innovation is presented in table 8.
Due to the financial difficulties by governments, they need to save expenditures. The municipality of Enschede is for example cutting on the expenditures for landscaping in Het Wageler. It is not possible for De Viermarken to execute this kind of tasks, because tasks like mowing the grass and trimming the trees require specific capabilities and tools that are not available to De Viermarken. Also the municipality does not have any money available for this kind of practices, since they are saving money. However, the interviewed employee of the municipality suggested that there is likely to be a budget to buy flower seeds, which can be planted by clients of De Viermarken. This innovation will improve customer relationships since it improves the appearance of het Wageler, which has a positive impact on branding, which is a relationship measure (Dubosson-Torbay et al., 2002). It also has a positive effect on product innovation, since a park with nice flowers offers more value to the customers. Financially, there are no direct benefits for this innovation, since it will not lead to extra sales. There are however some indirect financial benefits, because when the appearance of the park improves, it is likely that it attracts a larger audience, who might also visit the shop of De Viermarken. The personnel costs of this innovation are also low, because the supervisors are already available, they only have to be positioned to somewhere else. Therefore, when the costs of the required materials and instructions are relatively low, De Viermarken is likely to benefit from this innovation in a financial way. After this idea was introduced to one of the employees of De Viermarken, he or she told that this idea was not realistic, because then one of the employees had to leave the terrain of De Viermarken with at least six clients, and he or she thought that it is not possible to find six clients that are willing to do this kind of activities.

### 5.5 Supply chain innovations

In the surveys that were spread among customers of the shop, there were 13 questions about the performance of the offered product and services. The factor with the lowest score is the diversity of the products. In order to enlarge the range of products offered in the shop, De Viermarken can start a cooperation with other care farms or comparable organizations. This cooperation means that they exchange their products with products of others. This means that they can focus on a limited amount of
crops to produce and still offer a large variety of products in their shop. During one of the interviews with an employee of De Viermarken, the employee told that he or she thinks that it is difficult to execute, because it will bring to many issues related to the infrastructure. According to the employee, there is no capacity to deliver or pick up goods with the current van, which means that a new one should be purchased. Also, there are not so many comparable organizations near to De Viermarken, which means that collaborations should be established with organizations that are located a further away. When it comes to innovations measures, this idea brings a lot of innovativeness, since on one hand it brings different parties together and on the other hand it improves the range of products, which means that there are new products available for sale which delivers more value to the customers (Dubosson-Torbay et al., 2002). This idea has also a positive effect on customer relationships, because more different products means that the customer has more choice, which make that they can better serve the customers (Dubosson-Torbay et al., 2002). Because the employee was not enthusiastic about the idea, the financial information is not available in much details. In order to come to a financial prognosis, some estimations are used. An overview of the prognosis is presented in table 9. Because the current van has no more capacity, a new van should be purchased. The total investment is estimated on €6,000, assuming that a second-hand van will be purchased. This calculation is made assuming that the collaboration will include three parties, which means that every party involved should invest €2,000. The annual costs are estimated to be €5,000, including gasoline costs, maintenance costs, insurance costs, tax, and other costs. This would mean that the annual costs will be €1,666,67 per organization. Which is also the breakeven revenue.

Table 9. Financial prognosis for exchanging products.

<table>
<thead>
<tr>
<th>Initial Investment</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase van</td>
<td>€ 6,000,00</td>
</tr>
<tr>
<td># of participating organizations</td>
<td>3</td>
</tr>
<tr>
<td>Investment per participating organization</td>
<td>€ 2,000,00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Annual Costs</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Transportation costs</td>
<td>€ 5,000,00</td>
</tr>
<tr>
<td>Costs per participating organization</td>
<td>€ 1,666,67</td>
</tr>
<tr>
<td>Breakeven revenue</td>
<td>€ 1,666,67</td>
</tr>
</tbody>
</table>

5.6 Overview

An overview of the innovation strategies and their measures can be found in table 10, where ‘+’ means it has a positive effect on the corresponding component, ‘−’ means it has a negative factor on the corresponding component and ‘+/−’ means it has a small or no effect on the corresponding component. When a row is colored red, this means that according to De Viermarken, this idea is not realizable. It is important to mention that the described business model innovations are most efficient when they are used in combination, because they strengthen each other. For example, creating more brand awareness if only effective when there will be more products available.
Table 10. Overview of the performance measures of the innovations strategies.

<table>
<thead>
<tr>
<th>Innovation strategy</th>
<th>Product innovation</th>
<th>Customer relationship</th>
<th>Infrastructure management</th>
<th>Potential annual financial performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Create more brand awareness</td>
<td>+/-</td>
<td>+</td>
<td>+/-</td>
<td>€ 3,200,-</td>
</tr>
<tr>
<td>2. Expand opening hours</td>
<td>+/-</td>
<td>+</td>
<td>+/-</td>
<td>€ 5,000,-</td>
</tr>
<tr>
<td>3. Processed goods</td>
<td>+/-</td>
<td>+</td>
<td>+/-</td>
<td>€ 900,-</td>
</tr>
<tr>
<td>4. Keeping calves</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>€ 600,-</td>
</tr>
<tr>
<td>5. Keeping goats</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>€ 1,800,-</td>
</tr>
<tr>
<td>6. Self-plucking</td>
<td>+</td>
<td>+</td>
<td>+/-</td>
<td>€ 1,300,-</td>
</tr>
<tr>
<td>7. Tea garden</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>X</td>
</tr>
<tr>
<td>8. Floral maintenance</td>
<td>+</td>
<td>+</td>
<td>+/-</td>
<td>+/-</td>
</tr>
<tr>
<td>9. Exchanging products</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>X</td>
</tr>
</tbody>
</table>

6. Conclusion and discussion
The purpose of this research was to find out how organizations in the social domain could innovate their business model. In order to do so, regular business model innovation literature was reviewed. This literature is mainly focused on business model innovation for commercial innovation. Therefore, it was also useful to review social innovation literature, which is about any innovation within an organization in the social domain. The literature review led to a process model which describes the necessary steps for social organizations to innovate their business model. After the process model was developed, a case study at De Viermarken was conducted using the model. After the need for innovation was recognized and the existing business model and internal and external factors were measured, nine business model innovations were developed using the developed process model in combination with the Ansoff matrix, supply chain innovation and revenue model literature. The developed innovation strategies were also measured in terms of innovativeness, infrastructure management, customer relationships and financial performance.

In conclusion, the existing literature on business model innovation for commercial organizations could be useful for business model innovation in the social domain. However, the theories and models should be adjusted, because business models in the social domain should be approach differently. This has to do with the fact that the added value is not measured in terms of economic profits, but in social profit, that all stakeholders are important and that the main goal for social organizations is not to maximize the profit, but to cover the cost of capital. The wellbeing of the clients who receive care is considered to be most important. But, since social organizations also need to finance their organization and receive less income from the government, financial performance becomes more important. Therefore, a balance should be found between the wellbeing of the clients and the activities that generate revenue, in order to become less dependent of the governmental expenditures. This makes it hard to find innovation strategies. That is also why during this research, the infrastructure measure brought the most difficulties. During this research, it appeared to be interesting to look at current trends and demand of (potential) customers. After some possible innovations are discovered, they should be checked whether they also maintain or even improve the wellbeing of the clients.

The research also led to some recommendation for De Viermarken, which may also be valuable for social organizations in general. All the suggested business model innovations that were developed during this research were generated together with employees and other stakeholder of De Viermarken. All the ideas were introduced to De Viermarken in order to find out whether they thought it was realizable. Three of the nine suggested innovations were not realizable according to the employees. Most of the suggestions made by the employees are close to the existing activities. Only the tea garden innovation is an innovation which includes offering a completely new value to the customers with new required
materials and skills. It is not sure whether these suggestion together will bring enough extra income to survive in the future, due to changing external conditions. Therefore, it will be recommendable for De Viermarken to broaden its scope and look for innovations that are more different to the existing business model. Maybe not everything is directly realizable, but maybe are on the long term. For example, the product exchange innovations may now bring some infrastructure related problems, but can be profitable when some information has been gathered and some thought have been shared with other interested parties.

The combination of business model innovation and innovation in the social domain is something that has not been done before, which makes this research a contribution to the existing literature. Another important contribution of this research to the literature is the fact that the Ansoff Matrix and other types of innovating strategies were described. This has the advantage that opportunities form different perspectives have been taken into account, which leads to a more complete plan for business model innovations. This research has also contributions for practice. The developed process model can be valuable for organizations in the social domain who are willing to innovate their business model. This is a relevant topic, because due to the financial crisis, government are saving expenditures, which means that organizations in the social domain are having financial troubles (nu.nl, 2016). Also the described internal and external factors might be interesting for organizations who are willing to innovate their business model. This research also shows that it is important for the social domain to broaden its scope and not only try to focus on the current practices and market segments.

This research has some limitations, which might be of interest for future research. One of the limitations is that this study uses a single case study. In order to improve the validation of the findings of this research, it might be of interest to conduct a comparable study with multiple cases. Another limitation is the fact that the performance of the developed innovations is only measured based on estimations and expectations. It might be interesting in the future to conduct a study were the performance of the business model innovations are measured after they have been implemented in the organization. The developed business model innovations are mainly focused on expanding existing activities. For future research, it may be interesting to also focus on supply chain innovation and revenue model innovation. Finally, this research was about business model innovation in the social domain. The case study in this research was conducted at a care farm. This means that it is not sure that the findings are also true for other organizations in the social domain. Therefore, it might be interesting for future research to look at business model innovation in the social domain at other organizations than a care farm.
References


Appendix A: Interview questions for the first round of interviews at de Viermarken

Introduction
1. Wat is uw functie binnen de Viermarken. Hoe lang werkt u hier al? Heeft u ook een andere functie binnen de viermarken vervuld?

Existing Business Model
2. Wie is de klant van de Viermarken? Is klant segmentatie relevant? (evt. toelichten) Zo ja, wat zijn deze segmenten?
3. Wat is de waarde die de Viermarken biedt aan zijn klanten? Waar is de klant bereid voor te betalen?
4. Wat is de waarde die de Viermarken aan zijn cliënten biedt?
5. Waarin onderscheid de Viermarken zich met andere zorgboerderijen?
6. Waarin onderscheid de Viermarken zich met andere kwekerijen en biologische groentewinkels?
7. Zou u kunnen omschrijven welke diensten de Viermarken levert naast de producten die worden verkocht in de winkel?
8. Wat zijn de belangrijkste processen voor de winkel/kwekerij?
9. Wat zijn de belangrijkste resources voor de winkel/kwekerij?
10. Wat zijn de belangrijkste activiteiten m.b.t. de zorg?
11. Welke middelen zijn hiervoor belangrijk?
12. Wie zou u omschrijven als de belangrijkste stakeholders van de Viermarken?
13. In welke mate hebben deze of andere stakeholders invloed op de bedrijfsvoering van de Viermarken?
14. Op welke manier worden de producten verkocht aan de klant, anders dan via de winkel?
15. Wat zijn de belangrijkste kosten die worden gemaakt bij het verbouwen van de groenten en het produceren van de andere producten?
16. Wat zijn de belangrijkste kosten die worden gemaakt bij het verlenen van zorg aan de cliënten?
17. Kunt u aangeven per hoeveel cliënten er een personeelslid nodig is? Wat is de maximale capaciteit van een personeelslid?

Changing internal and external factors
18. Welke veranderingen zijn er gaande binnen de organisatie die nu of in de toekomst gevolgen hebben voor het uitoefenen van de huidige diensten?
19. Wat zijn de gevolgen hiervan?
20. Welke veranderingen zijn er gaande buiten de organisatie die nu of in de toekomst gevolgen hebben voor het uitoefenen van de huidige diensten?
21. Wat zijn de gevolgen hiervan?

Business model innovation
22. Vinden er binnen de Viermarken veel vernieuwingen plaats of is het erg statisch (m.b.t. het genereren van inkomsten)? Zo ja, wat zijn deze vernieuwingen?
23. Wordt hierbij een bepaald patroon gevolgd? Zo ja, welke?
24. Staat de cultuur van de Viermarken open voor vernieuwingen? Hoe komt dat?
25. Heeft het personeel veel vrijheid in het doorvoeren van vernieuwingen? Kunt u dat uitleggen?
26. Welke kansen liggen er in de huidige markt, met de huidige producten en middelen, om de afzet te vergroten? (efficiency)
27. Denkt u dat er mogelijkheden liggen voor de Viermarken om het aanbod van producten en diensten te verbreiden? Zo ja, welke mogelijkheden ziet u?
28. Denkt u dat er mogelijkheden liggen voor de Viermarken om met het huidige aanbod van producten en diensten een breder publiek te kunnen bereiken? Kunt u dit toelichten?
29. Ziet u mogelijkheden om totaal andere werkzaamheden te verrichten en daarbij een totaal andere markt te bedienen? Zo ja, welke mogelijkheden zijn dat volgens u?

Evaluation of new business models
30. Zijn er bepaalde eisen waar de werkzaamheden van de cliënten aan moeten voldoen?
31. Hoe wordt het succes van een product of dienst gemeten? (alleen op basis van cijfers?)
32. Wat is belangrijk voor de Viermarken als er nieuwe diensten of producten zouden worden geproduceerd?

Measuring existing business model
Infrastructure management
33. Hoe zou u de moeilijkheidsgraad van de transacties die de cliënten uitvoeren omschrijven?
34. Zorgt het huidige business model ervoor dat er veel fouten worden gemaakt? Wat zijn deze fouten?
35. Hoe wordt er in het huidige business model geswitcht tussen grote en kleine hoeveelheden van transacties? Of komt dit niet voor?
36. In hoeverre zorgt het huidige business model ervoor dat het personeel wel overwogen beslissingen kan nemen
37. In hoeverre vindt u dat de transacties transparant zijn (informatie, producten en services kunnen gecontroleerd worden)
38. In hoeverre is de benodigde informatie is voor iedereen beschikbaar?
39. In hoeverre vindt u over het algemeen het huidige business model efficiënt?

Product innovation
40. In hoeverre brengt het huidige business model verschillende partijen samen?
41. In hoeverre brengt het huidige business model verschillende producten, services en informatie samen?
42. In hoeverre is het uitvoeren van de activiteiten van de cliënten vernieuwend?
43. In hoeverre vindt u het huidige business model vernieuwend?

Customer relationship
44. Hoe worden nieuwe klanten geworven?
45. Hoe worden relaties met klanten onderhouden?
46. Hoe worden klanten betrokken bij de Viermarken?
47. Hoe veel van de klanten komt regelmatig terug?
48. Hoe worden relaties met de onderaannemers onderhouden? Hoe worden nieuwe cliënten geworven?

Finalizing
49. Heeft u zelf nog opmerkingen?
Appendix B: Interview questions for to the employee of the municipality of Enschede

1. Wat is uw functie binnen de gemeente Enschede. Hoe lang werkt u hier al? Heeft u ook een andere functie binnen de gemeente vervuld?
2. Wat zijn uw werkzaamheden met betrekking tot het Wageler?
3. Kunt u omschrijven wat het Wageler is en wat het te bieden heeft?
4. Hoe ziet het publiek eruit dat op het Wageler af komt?
5. Welke rol speelt de Viermarken hier in?
6. Wie zijn de grootste belanghebbende voor het Wageler?
7. Welke partijen zijn betrokken bij de ontwikkeling van het Wageler?
8. Wat zijn de toekomst plannen voor het Wageler?
9. Op welke manier denkt u dat de Viermarken hierbij aan kan toedragen?
10. Welke factoren kunnen mogelijk van invloed zijn op de toekomst plannen van het Wageler?
11. Wat heeft dit voor gevolgen?
12. De gemeente is momenteel aan het bezuinigen op het groen onderhoud. Zo ook in het Wageler. Denkt u dat deze taken deels kunnen worden overgenomen door de Viermarken?
13. Zou hier dan ook eventueel een vergoeding tegen over staan? Zo ja, welke?
14. Ziet u nog andere kansen voor de Viermarken om zich te ontwikkelen in het Wageler?
15. Hoe zijn over het algemeen uw ervaringen met de Viermarken?
16. Heeft u zelf nog opmerkingen?
Appendix C: Interview questions for the second round of interviews at de Viermarken

1. Zou het financieel mogelijk zijn om de uitstaling van de winkel te verbeteren?
2. Waar zou dit geld dan vandaan moeten komen?
3. Hoeveel weken/dagen is de Viermarken jaarlijks open? (of wanneer niet?)
4. Is er een mogelijkheid dat de winkel ’s avonds wat langer openblijft of dat de winkel ook in het weekend open gaat?
5. Hoeveel personeel zou er dan aanwezig moeten zijn?
6. Hoeveel zou dit extra per uur kosten?
7. Wordt het personeel in het weekend dubbel uitbetaald?
8. Brengt dit nog andere kosten met zich mee?
9. Zou het logistiek haalbaar zijn voor de Viermarken om een samenwerking aan te gaan met een of meerdere andere zorgboerderijen om producten uit te wisselen om zo het assortiment te vergroten?
10. Is hier voldoende productie afzet voor?
11. Welke handelingen brengt dit met zich mee?
12. Welke kosten zijn hier aan verbonden?
13. Zou het mogelijk zijn om (meer) streekproducten zoals jam te produceren?
14. Welke investeringen moeten hier voor worden gedaan?
15. Waar zou dit geld vandaan moeten komen?
16. Welke extra handelingen brengt dit met zich mee?
17. Wat kosten deze handelingen?
18. Zijn er voldoende capaciteiten aanwezig zijn om bijvoorbeeld enkele geiten te houden?
19. Zou dit ook financieel mogelijk zijn? Zou dit gesubsidieerd kunnen worden?
20. Welke handelingen brengt dit met zich mee voor het personeel?
21. Wat zijn de kosten hiervan?
22. Zouden er ook melkgeiten gehouden kunnen worden?
24. Zou het mogelijk zijn om in of rond het boerderijtje achter op het terrein een horeca gelegenheid te openen?
25. Zouden hiervoor nog verdere investeringen gedaan moeten worden?
26. Hoe hoog zouden deze investeringen zijn?
27. Zou hier geld beschikbaar voor worden gemaakt vanuit de gemeente?
28. Wat betekent dit voor de personele kosten?
29. Wat zou een realistische afzet zijn?
30. Wat voor een marge zou hier op zitten?
31. Wat zijn mogelijke openingstijden? Ook in het weekend?
32. Heeft u zelf nog opmerkingen?
## Appendix D: Survey provided to customers of De Viermarken

<table>
<thead>
<tr>
<th>Hoe tevreden bent u over:</th>
<th>Zeer tevreden</th>
<th>Tevreden</th>
<th>Neutraal</th>
<th>Ontvreden</th>
<th>Zeer ontevreden</th>
<th>n.v.t.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. De kwaliteit van de producten</td>
<td>44%</td>
<td>50%</td>
<td>6%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>2. De aantrekkelijkheid van de producten</td>
<td>25%</td>
<td>75%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>3. De innovativiteit van de producten</td>
<td>38%</td>
<td>31%</td>
<td>31%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>4. De toegevoegde waarde van de producten</td>
<td>44%</td>
<td>31%</td>
<td>19%</td>
<td>0%</td>
<td>0%</td>
<td>6%</td>
</tr>
<tr>
<td>5. De houdbaarheid van de producten</td>
<td>38%</td>
<td>38%</td>
<td>25%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>6. De prijs-kwaliteitsverhouding</td>
<td>44%</td>
<td>38%</td>
<td>13%</td>
<td>6%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>7. De marktconforme prijzen</td>
<td>38%</td>
<td>31%</td>
<td>19%</td>
<td>13%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>8. De bereikbaarheid/verkrijgbaarheid/voorradiigheid van de producten</td>
<td>13%</td>
<td>69%</td>
<td>6%</td>
<td>6%</td>
<td>0%</td>
<td>6%</td>
</tr>
<tr>
<td>9. De breedte van het assortiment</td>
<td>19%</td>
<td>38%</td>
<td>44%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>10. De klantvriendelijkheid</td>
<td>88%</td>
<td>13%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>11. De vakbekwaamheid/deskundigheid</td>
<td>63%</td>
<td>19%</td>
<td>19%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>12. De aanwezige kennis</td>
<td>38%</td>
<td>44%</td>
<td>19%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>13. De mate waarin er tijd voor u genomen wordt</td>
<td>75%</td>
<td>25%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>
14. Hoe vaak komt u gemiddeld bij De Viermarken?

- Meer dan 3 keer per week (0%)
- 2 à 3 keer per week (6%)
- 1 keer per week (56%)
- 1 keer per 2 weken (6%)
- 1 keer per maand (11%)
- Minder dan 1 keer per maand (17%)
- Weet ik niet/ geen mening (6%)

15. Hoe vaak als u De Viermarken bezoekt, koopt u ook iets?

- Altijd (82%)
- Vaak (6%)
- Soms (12%)
- Zelden (0%)
- Nooit (0%)

16. Wanneer u iets koopt, hoeveel producten koopt u dan gemiddeld per bezoek?

- 1-2 producten (29%)
- 3-5 producten (65%)
- 5-10 producten (6%)
- Meer dan 10 producten (0%)
17. Waarom kiest u om iets bij De Viermarken te kopen? (U kunt meerdere opties kiezen)

- Voor de biologische producten (35%)
- Voor het goede doel (26%)
- Voor het ruime assortiment (0%)
- Voor de unieke producten (5%)
- Voor de prijs (2%)
- Ik kwam er toevallig langs (7%)
- Het is dichtbij (12%)
- Ik ken een of meerde mensen die werkzaam zijn op De Viermarken (9%)
- Anders namelijk: (7%)
  - Omdat ik graag lokale producten koop"
  - "Wij hebben iedere week een groente pakket (bezorging). Hier zijn wij zéér tevreden over! Helaas niet vaak de mogelijkheid om in de winkel te kopen"
  - "Gezellig knus winkeltje"
  - "Voor het groentepakket in de eerste plaats. Nu ook voor biofruit"

18. Wat is uw leeftijd?

- Leeftijd: (av. 56 year)
- Wil ik niet zeggen

19. Wat is uw geslacht?

- Man (29%)
- Vrouw (71%)

20. Wat is uw hoogst genoten opleiding?

- WO – doctoraal of master (18%)
- HBO/ WO – bachelor of kandidaats (59%)
- HAVO en VWO bovenbouw/ WO en HBO propedeuse (6%)
- MBO (6%)
- MAVO/ eerste 3 jaar HAVO en VWO/ VMBO (theoretische en gemengde leerweg) (0%)
- LBO/VBO/VMBO (kader– en beroepsgerichte leerweg) (6%)
- Basisonderwijs/ geen onderwijs (0%)
- Wil ik niet zeggen (6%)
21. Hoe dicht woont u bij De Viermarken?

☐ Minder dan 500 m. (6%)
☐ 500 m. – 1 km. (29%)
☐ 1 – 2 km. (35%)
☐ 2 – 5 km. (18%)
☐ Meer dan 5 km. (12%)

22. Heeft u zelf nog opmerkingen?

- “Prima plek”
- “Tevreden klant!”
- “Heel fijn. Blijf lekker innovatief. Dank jullie!”
- “Het eerste deel kan ik niet beantwoorden.”
- “‘n unieke plek met unieke mensen.”
- “Wij halen elke week een groente pakket en daar zijn we erg blij mee, maar er zou soms iets meer afwisseling in de producten kunnen zijn.”
- “Je vergat te zeggen voor welke opleiding je afstudeert”
- “In het tweepersoonspakket zijn de porties groenten dikwijls véél te klein (voorbeeldje: 1 maiskolf, die weegt inderdaad 500 g. Dat is met blad en kolf!”
Appendix E: Survey provided to people living in the neighborhood of De Viermarken

1. Heeft u ooit gehoord van De Viermarken?
   - Ja (91%)
   - Nee (Ga verder met vraag 8) (9%)

2. Bent u wel eens bij De Viermarken geweest?
   - Ja (76%)
   - Nee (Ga verder met vraag 7) (24%)

3. Hoe vaak brengt u een bezoek aan De Viermarken?
   - Meer dan 3 keer per week (0%)
   - 2 à 3 keer per week (0%)
   - 1 keer per week (0%)
   - 1 keer per 2 weken (6%)
   - 1 keer per maand (6%)
   - Minder dan 1 keer per maand (63%)
   - Weet ik niet/ geen mening (25%)

4. Hoe vaak als u De Viermarken bezoekt, koopt u ook iets?
   - Altijd (13%)
   - Vaak (31%)
   - Soms (44%)
   - Zelden (6%)
   - Nooit (6%)

5. Wanneer u iets koopt, hoeveel producten koopt u dan gemiddeld per bezoek?
   - 1-2 producten (87%)
   - 3-5 producten (13%)
   - 5-10 producten (0%)
   - Meer dan 10 producten (0%)
6. Waarom kiest u om iets bij De Viermarken te kopen? (U kunt meerdere opties kiezen)

☐ Voor de biologische producten (40%)
☐ Voor het goede doel (28%)
☐ Voor het ruime assortiment (0%)
☐ Voor de unieke producten (4%)
☐ Voor de prijs (0%)
☐ Ik kwam er toevallig langs (16%)
☐ Het is dichtbij (8%)
☐ Ik ken een of meerde mensen die werkzaam zijn op De Viermarken (4%)
☐ Anders namelijk: (0%)

**Ga verder naar vraag 13**

7. Hoe beoordeelt u over het algemeen uw ervaringen met De Viermarken?

☐ Goed (47%)
☐ Boven gemiddeld (13%)
☐ Neutraal (33%)
☐ Onder gemiddeld (7%)
☐ Slecht (0%)

8. Wat is de reden dat u nog nooit bij De Viermarken bent geweest?

☐ Ik weet niet wat ze er verkopen (40%)
☐ Ik weet niet dat ze ook een winkel hebben (20%)
☐ Ik heb geen interesse in biologische producten (0%)
☐ Het aanbod is te klein (0%)
☐ De ligging is ongunstig (0%)
☐ Ik vind biologische producten te duur (0%)
☐ Ongunstige openingstijden (0%)
☐ Anders namelijk: (40%)

- “Geen idee”
- “Ik wist niks van De Viermarken”
9. Zou u geïnteresseerd zijn in een winkel in uw buurt waar u verse biologische producten zou kunnen kopen?

☐ Erg geïnteresseerd (0%)
☐ Geïnteresseerd (50%)
☐ Neutraal (50%)
☐ Niet geïnteresseerd (0%)

10. Zou u geïnteresseerd zijn in een winkel in uw buurt waar u streekproducten zou kunnen kopen?

☐ Erg geïnteresseerd (0%)
☐ Geïnteresseerd (33%)
☐ Neutraal (67%)
☐ Niet geïnteresseerd (0%)

11. Zou u bereid zijn om extra te betalen voor bovengenoemde producten in vergelijking tot de producten die u in de supermarkt koopt?

☐ Erg geïnteresseerd (0%)
☐ Geïnteresseerd (67%)
☐ Neutraal (33%)
☐ Niet geïnteresseerd (0%)

12. Zou u geïnteresseerd zijn in om een kleine vergoeding voor een bezorgservice te betalen of zou u de producten zelf ophalen?

☐ Bezorgservice (29%)
☐ Zelf ophalen (71%)
☐ Geen van beiden (0%)

13. Welke tijden zouden voor u gunstig zijn als u zelf de producten zou komen ophalen

☐ Doordeweeks van 9.00 – 16.00 uur (25%)
☐ Doordeweeks ’s avonds (38%)
☐ In het weekend (38%)
14. Wat is uw leeftijd?
- Leeftijd: (59 jaar)
- Wil ik niet zeggen

15. Wat is uw geslacht?
- Man (32%)
- Vrouw (68%)

16. Wat is uw hoogst genoten opleiding?
- WO – doctoraal of master (45%)
- HBO/ WO – bachelor of kandidaats (36%)
- HAVO en VWO bovenbouw/ WO en HBO propedeuse (5%)
- MBO (0%)
- MAVO/ eerste 3 jaar HAVO en VWO/ VMBO (theoretische en gemengde leerweg) (5%)
- LBO/VBO/VMBO (kader- en beroepsgerichte leerweg) (0%)
- Basisonderwijs/ geen onderwijs (5%)
- Wil ik niet zeggen (5%)

17. Heeft u zelf nog opmerkingen?
- “Misschien is de groene route en het wijkbudget interessant om de onderhoud van het groen te doen”
- “Ziet er top uit!”
- “Ze doen het goed, ga zo door.”