What is the price of saving lives?
- A case-study on strategic pricing of fire safety products

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Abstract

This thesis regards pricing, more specifically how to price products no one wish to have use of, but that are invaluable once they come to use. This is a case study that investigates a specific product that is about to enter the market. The product is a fire safety product invented and patented by the company investigated, who also will sell the product. The product is a water-based fluid that due to a cooling effect and can extinguish and prevent fires. This thesis is looking into a product package developed by the company that includes the fluid mentioned above, namely the home defense kit.

Back in the days, pricing used to be a rather simple process where the price used to be based solely on costs. Nowadays, due to technological development, the process of pricing has become more complex. Increased transparency and the ease to order products from anywhere in the world has developed the art of pricing, which now rarely is based only on costs but on the value which it creates for the customer.

The research question of this thesis is as follows:

- **What kind of price models can enable value capturing for products that no one wishes to use?**

To answer the research question of this thesis, existing theories on pricing and price models have been used as well as empirical data in the form of structured interviews with the company’s executive management team as well as with potential customers from the company’s customer segment. The result has shown that it is important to target the right group of customers and then develop a suitable price model for them. Not one single price model can be 100 percent right for all customers and/or environments. On the basis of Olve et.al’s (2013) Price Model Equalizer, the company’s price model has been identified as well as suggestions on alternative price models suitable for specific groups of customers.

Key words: Pricing, price models, price model equalizer, value creation, fire safety products
**Sammanfattning**


Prissättning har tidigare varit något simpelt där priset på en produkt i stort sett endast baserats på de kostnader som uppkommit från det att produkten producerats fram till försäljning. I och med teknisk utveckling och globalisering har prissättningsprocessen komplicerats. Ökad transparens samt lättheten att beställa produkter från vart som helst i världen har medfört att pris numera sällan baseras endast på kostnader utan på det värde produkten i fråga skapar för kunden.

Frågeställningen i denna uppsats lyder:

- **Vilka sorts prismodeller kan skapa värdefängst för produkter som ingen vill ha användning av?**


**Nyckelord:** Prissättning, prismodell, prismodells *equalizer*, värdeskapande, brandsäkerhetsprodukter
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1. Introduction

1.1 The importance of price models

Due to globalization and advancements in information technology, the art of pricing has become increasingly complex in the last decades and setting the right price has become vital for a company’s success (Iveroth et. al, 2013). Globalization has brought the opportunity to charge for a product in many different ways that were not possible before. What is charged for, and how it is charged is fundamental for all organizations. A price was back in the days usually solely based upon costs, something that is not recommended today (Teece, 2010). A price is more than just an interface to the customer, it is also a tool that has a direct impact on the revenue and survival of the firm (Petri et.al, 2018). According to Teece (2010) inciting customers to pay for value is key in a business model and by implementing a differentiated business model a company can capture value between seller and buyer - something that may attract more customers. A company’s price directly affects an organization’s relations, not only with its customers but with all its surroundings. These relationships involve commercial agreements and business contracts (Olve et. al, 2013; Amit and Zott, 2001). Such business contracts intend to explain how payments are connected to different types of achievements (Amit and Zott, 2001) and will lay the foundation to what this thesis refers to as a business model. This thesis investigates the relationship between business models and pricing as well as the importance of price models as a tool for realizing business models. Massa et. al (2017) claim that when a unique price model is implemented, there is a bigger chance for the company to attract new customers and capturing value, but that there is a lack of knowledge in how such price models are effectively designed. Some products are invaluable once they come to use, but yet no one wishes to ever have use of them. Safety products, fire safety, in particular, can save lives, but how much are customers willing to pay for something they wish never to use, and what should the company charge for?

Pricing is fundamental for most organizations and it highly affects consumer behavior (Olve et. al, 2013). As mentioned above, Olve et. al (2013) explain price models as what we chose to pay for, a concept that deepens the analysis of how pricing strategically affects the organization. Price models do not only affect the relationship with the consumers but also with suppliers, employees, and partners. Consumers constantly receive offers on products that are priced accordingly to different price models; monthly membership cards, unlimited data on your phone or subscription services are all meant to increase your consumption of a product thus change your consumer behavior. Key is to find a price model with roles and risks that both consumer and producer are pleased with (Olve et. al, 2013). Westelius and Cöster (2018) argue that despite the importance of price models when it comes to strategic planning and maintaining sound relationships, many companies overlook this and simplifies its pricing process to only look at price levels and/or its customers’ willingness to pay.
Despite the importance of strategic pricing, there are not many studies made on the subject and the ones that are conducted fail to see the bigger picture. According to Piercy et.al (2010), the lack of research on the subject can be described with the classic metaphor where a group of blind people is trying to describe an elephant and they all get an undistorted impression of it though they were all looking at different parts of the animal, one was feeling the trump, one the leg and so on.

The first actual interaction between a product and customer is through the price, which makes pricing for a new product crucial to determining the success of the product (Piercy et.al, 2010). A price set too low will result in loss of potential revenue and the company will risk not covering its costs and profits, and a price set too high will result in missing out on potential sales and market share. The price of a product is placed where the customers’ expectations of value and its willingness to pay meet the cost of producing and delivering the product (Osterwalder & Pigneur, 2012). For the producer, it is necessary to embed the costs for production, distribution etcetera in the company’s business strategy. There is however a risk with solely looking at the internal costs – one shall also consider what the customers’ value (Ax et.al, 2016). This though the customer rarely cares about the costs linked to the product, but the value of it, for them. The art of setting the right price is, therefore, an important factor to succeed with a business.

According to economic theory, pricing on a competitive market is a result of an interaction between consumers and producers where supply meets demand, the price is set at a state referred to as market equilibrium. In business and social sciences, however, pricing is viewed from an inside-out perspective where the price should reflect the company’s products and business strategy (Ax et.al, 2016). The company needs to analyze its business- and price models as well as the environment in which it operates in, to determine what is relevant charging.

1.2 Price models and business models

Pricing is a complex process that can be one of the hardest, yet most important task for a startup company. By analyzing and designing an appropriate price model, a company can determine on what to charge for, and thus also visualize what is distinguished in a company’s price model to examine if this in line with its business model (Osterwalder & Pigneur, 2012). Many researcher’s claims that a company’s price- and revenue models are the most central factors in implementing its business model (Petri et.al, 2018). Thus, a company’s business model also plays an important role in the success of a company.

According to Massa et. al (2017) researchers have not fully agreed on a study definition of what a business model is. This thesis, however, will use the following definition:

- “A business model is a description of an organization functions in achieving its goals (i.e. profitability, growth, social impact...)” (Massa et. al, p. 73).
To define a business model, tend to be a rather simple task for most businesses. However, to take the business model into practice can be a more complex process, especially when it comes to pricing (Westelius & Cöster, 2018). Strategic pricing should be conducted in relation to the environmental factors surrounding the product and go in line with the company’s business model.

The purpose of the business model is to clarify what it takes to succeed with the company’s existing business idea and to reach one’s goals. Moreover, a business model can help the company to explain and visualize the complex reality of the company and its environment and is thus vital for a company’s success, especially for a startup invention (Cohen & Neubert, 2017). What kind of price model that is suitable depends on the product (Petri et.al, 2018).

1.3 Problematization

To develop and sell a product is about creating and capturing value. It’s easy to think that by creating a unique and innovative product, it will sell itself. That is however not the case in today’s marketplace. Having a propitiate business model followed by the right price that is in line with both the business model and what the customers’ value in the product, is vital for creating a commercial success (Piercy et. al, 2010). The question is what to charge for.

It is no longer up to date to only look at costs and from there decide what to charge for a product (Ax et.al, 2016). To decide on the right price, a company need to analyze its business- and price models as well as the environment in which it operates in, to determine what is relevant charging. For example, to set a price on a fire safety product can be difficult though it is a product that no one wishes to ever have to use.

1.4 Research question

To induct an appropriate price for fire safety products for a startup following questions need to be answered:

- What kind of price models can enable value capturing for products that no one wishes to use?
1.5 Purpose

The purpose of this study is to investigate how price models in relation to business models can be assigned for products that no one wishes to have use of, such as fire safety products. Moreover, this thesis aims to increase the understanding of pricing and price models in relation to business models.
2. Methodology

2.1 Choice of methodology

This thesis wanted to investigate a way to develop a price model for products no one wishes to use, fire safety products in particular – for a startup company. To do so, this thesis has been focusing on a specific case regarding the startup company Miraculum Fire and its new product. A qualitative method was chosen to come close to respondents which is important when investigating what they value in a product. Furthermore, this thesis was conducted in the form of a case-study – a research method that contains a detailed and in-depth view of a case (Bryman & Bell, 2012). Yin (2009) describe case-studies as cases that focus on real-life problems and how people and groups deal with them. Even though a case-study does not have to be limited to one case, this thesis is. This due to lack of time and the difficulty of gathering detailed information about an additional organization. According to Yin (2007), researchers must put effort into the design of a case-study to encounter criticism against the research method. The most common criticism against case-studies is the danger of making assumptions when analyzing the results.

A qualitative method offers flexibility though information can be collected during the research is conducted and in conjunction with it (Ford & Hardy, 2011). This gave the author the possibility to control and amend relevant sources of information. A qualitative research approach accepts ambiguity which was needed to answer my research question on a nuanced level. This entails that assumptions based on existing theory could be made, and these assumptions could be amended during the time this thesis was conducted.

2.2 Data collection

To collect primary data semi-structured interviews were used - a form of interviewing where questions are determined and structured prior to the interview, this to capture as high quality as possible (Bryman & Bell, 2012). During the interview questions and answers were recorded to minimize errors in a later stage.

The interview questions were constructed based on selected theories and empirical data. Thereafter, a pilot-study was made on two individuals who received the interview and were asked to come up with constructive criticism regarding the questions and layout of the study, this to minimize the risk of measurement errors (Dahlström, 2000).

To gain a greater understanding and to get an outside-in perspective, research on the company and its environment was done prior to interviews. Bryman and Bell are recommending this type of interview and argue that the more structured a question is – the easier to analyze it.
2.3 Semi-structured interviews

A semi-structured interview can be done either on the telephone or during a physical meeting, the latter is the preferred method according to Bryman and Bell (2012), this though it is easier for the respondent to call off interviews done via telephone. This thesis was using physical meetings when possible to get a closer connection with respondents and to capture things not possible via a phone call, such as body language etcetera. However, there is a downside with connecting too close to respondents. According to Hardy and Ford (2011), research is often affected by the researcher's assumptions and tendency to jump into conclusions though these are likely to affect the respondents. Therefore, it is important to carefully consider what questions to ask though it affects the validity and reliability of the study (Schaeffer & Presser, 2003). By comparing earlier scientific results on similar experimental studies, I hope to have chosen the right type of questions for the context of my research and thus have influenced the respondents as little as possible.

Two different types of interviews where constructed, one for team members in the company to answer, and one specified for potential customers. The interviews were based on four themes: the product, costs, competitors and value capturing through a business model. For every theme, they were a couple of questions relevant to answer the problem of this thesis. No material was given to the respondents prior to the interview. This to avoid that the respondents would do research on the subject and thereby get influenced by other people's opinions/ideas and to get spontaneous answers on the questions. A downside with this, however, is that the respondents could not prepare for the interviews by gaining more knowledge on the themes. Furthermore, the lack of preparation for the interview can have affected the respondents understanding of the questions and misinterpretations are thus possible.

After the interviews were written down the respondents were given the opportunity to comment on the material generated by the interviews to avoid misinterpretations. This is a technique called respondent validation and is used to improve the credibility and validity of the interview (Bryman & Bell, 2012).

2.4 Selection of respondents and organization

A problem regarding most studies is selecting whom to interview and who not to. Most of the times it is impossible to interview the whole population that one wishes for, due to lack of time, money and other recourses (Bryman & Bell, 2012). The decision on whom to interview is of great importance for the reliability and validity of the thesis and was based on this thesis’ research question. When deciding on whom to interview for this thesis, a strategic method was used. That means that respondents were chosen based on their relevance, experience, and knowledge on the topic (Bryman & Bell, 2012).
After interviewing a top executive in the company, snowball sampling was used. Snowball sampling is a non-random sampling method that occurs when earlier respondents supply you with relevant names for further information (Bryman & Bell, 2012). The first person to be interviewed advised me to talk to experts in relevant areas. There is, however, a risk with snowball sampling; one needs to be careful on who is cited to participate though it is likely that whomever the earlier respondents refer you to might be too much alike the respondents themselves and the study’s subjectivity will thus be jeopardized. To increase the depth of the study, potential customers were also interviewed. Six potential customers, all within different subgroups of the company’s customer segment (see figure 2), with high relevance and different backgrounds were selected. Most of these respondents were accessed through the company, also with snowball sampling. However, two of the customer segment groups were found without help from the company though it not yet had contact with these types of customers, or they chose not to participate in the study. Though the customers are not yet official, high discreetness and confidentiality about their positions were taken.

The organization in this thesis, as well as two of the potential customers, was chosen based on a convivence sample, something that Bryman and Bell (2012) describe is based on accessibility or coinitial opportunities. The company in question offered time and recourses, as well as a convenient geographical location.

2.5 Limitations

Variations the company’s fire extinguishing solution has resulted in numerous different products, sold both business to business (B2B) and business to customers (B2C). To limit this study, I was solely looking at the home defense kit product package due to lack of time. The home defense kit will be sold to consumers directly from the company’s website and will contain a barrel filled up with the fire extinguishing fluid, a rotary manual pump, a rubber hose and a hose clamp for the customer to be able to apply the product themselves, as well as a safety blanket. The product package will be presented further in chapter 4.1.

2.6 Data analysis

To analyze collected material, a qualitative analysis of content was made – a method where verbal/written results from a study are gradually analyzed, focusing on different parts in each step (Zhang & Wildemuth, 2009). The interpreting process then results in one or several themes, or line of arguments.

The first step of the analysis of content was to gain an understanding of the bigger picture of the results (Zhang & Wildemuth, 2009). This was done by listening to the interviews directly after they were conducted and thereafter, they were written down, word by word, to later be read multiple times.
Secondly, irrelevant parts of the interview outside of the theme of the study were sorted out. What was then left of the text was subject for further analysis:

- The text was divided into domains, from that meaning carrying elements was be highlighted
- Meaning carrying elements was highlighted and simplified to create codes
- One abstract theme, based on the entire text that was in line with all of the above domains and codes was highlighted

The collected data was also laying the foundation for the settings of Olve et.al's (2013) price model equalizer, a model that aims to help organizations to understand the opportunities of their price models, how they can make possible changes to their offerings and understand what they really are charging for. The price model equalizer contains five different dimensions for companies to analyze what to charge for in their offerings. These five dimensions contains several steps that are, according to Olve et.al (2013) supposed to cover important aspects of how to strategically price products, which furthermore will help determine the existing price model of the company. By studying the result of the equalizer, possible adjustments to the different settings were made.
3. Theory

The purpose of the theory section in this study is to present a framework suitable to determine the price of fire safety products. Since this study regards the pricing of innovative products, the concept innovation needs to be defined. Cohen and Neubert (2017) defines innovation as follow:

- A new idea or method, or the use of new ideas and methods

However, specific theory on pricing of innovative products does not exist, but general theories on pricing and price-setting can improve our understanding on how to determine the price of an innovative product (Schaeffer & Presser, 2003).

3.1 Strategy research on creating and capturing value

Competitive advantages can be created both externally – through the strategic placement on the market, or internally – through the resources and competencies of the company (Johnson et.al, 2011). A momentous framework regarding the external way of creating competitive advantage is Porters (1980) five forces. Porter argues that company leaders often are narrowminded regarding their strategy thus missing out on external factors other than competitors that affect the company's competitive advantage. Porters five forces contain five different factors that a company should consider maximizing its competitive advantage in its industry. The framework helps identify the attractiveness to operate in a certain industry based upon five different external factors:

- The threat of new entrants
- The threat of substitute products
- Bargaining power of buyers
- Bargaining power of suppliers
- Rivalry among existing competitors

By creating prerequisites to meet these five forces, a company can capture the value in the given industry from the position that is the least exposed to the forces that affect the company's profitability (Porter, 1980).

In the early 90s, a trend of shifting research from a focus on external- to internal factors started (Johnson et.al, 2011). As a complement to the industry-related way of gaining competitive advantage, an internal approach was now taking ground, where competitive advantage was thought to be created within the company. This approach would later be the foundation of the resource-based view (Johnson et.al, 2011).
The basic theories on how to create a competitive advantage are described above. To create competitive advantage, however, does not guarantee profitability but must be appropriated to do so (Peteraf & Barney, 2003). According to the external, industry-oriented, approach, there is an understanding on how the value created by competitive advantage should be appropriated though Porter (1980) states that by creating prerequisites to meet the industry-specific forces, the company automatically gain prerequisites for a greater profitability from the position that is the least affected by the forces.

In the internal, resource-based approach, however, the way of capturing value from the competitive advantage is not given though according to Johnson et.al (2011) profitability does not automatically guarantee competitive advantage. This though it does not matter what resources and competencies the company hold if they do not stand out from its competitors. Peteraf and Barney (2003) define competitive advantage as "a company's ability to create a higher financial value than the average competitor in the industry which in it operates". Moreover, Peteraf and Barney state that the financial value is created by a company during the provision of a good or service, and that it is the difference between the customers' perceived benefit and the financial costs for the company.

In the external approach, it appears from Porters five forces how external factors within the industry will determine on the price level and thus on how the allocation of value between seller and customer will form since the company will strive to position itself in the position in the industry which is the least affected by the five forces (Porter, 1980). This can also be achieved if the company set up defense mechanisms against the threats from the external factors and thereby create opportunities to appropriate a larger part of the value themselves.

3.2 Value creation in business models

Critics against this view have been the foundation for developing business models. Business models are developed to operationalize value creation and value capturing in praxis and are of big help when a company is to decide where to position itself for as good prerequisites as possible. A business model does not need to be seen as a replacement but rather as a complement to preexisting theories.

A business model is based upon the company’s mission statement, namely thoughts and ideas on how the company should generate profit. The word business model is often carelessly used; therefore, the definition of the concept varies. However, this thesis will use Massa’s et.al’s (2017, p. 73) definition of the concept:

- “A business model is a description of an organization functions in achieving its goals (i.e. profitability, growth, social impact...)”

Business models are used to describe and classify businesses, both for entrepreneurial use and by management teams, as a tool for further development of the business. Already existing
business models can be used as best practice by management when developing a business but can also in some cases be used for accounting purposes (Peteraf & Barney, 2003).

A business model shall not solely describe how the company should generate profit, but also be a framework on how to capture long-term value for the company, its customers and partners. A business model should be about explaining, understanding and designing a business within the environment in which it operates (Massa et.al, 2017).

Businesses are not to be seen as isolated from its surroundings. Every business is in constant contact with the environment in which it operates, a concept that Olve et. al (2013) call for business ecology. A company’s business ecology consists of its surrounding elements, such as customers, partners, and other social institutions. According to Olve et. al, implementing your business model makes it easier to navigate your surroundings and thus your company.

### 3.3 Pricing

The process in which a company decides on what to charge for its products is called pricing. As stated in the introduction of this thesis, pricing is a fundamental process that is of great importance for the organization though it affects its relations not only to its customers but also to its partners, suppliers and sometimes even its internal relationships, thus pricing is a part of the organizations economic governance (Westelius & Cöster, 2018). Because of the strong influence, the company’s ecology has on its pricing, pricing decisions should be reconsidered and revised often though the world is constantly changing (Peteraf and Barney, 2003).

Piercy et.al (2010) and Westelius and Cöster (2018) argue that despite the importance of strategic pricing, many organizations pay little effort on applying it properly to their products and that there is a lack of research on the subject. According to Cohen and Neubert (2017), there is no specific theory on strategic pricing for innovative products, but general theories on pricing can help to build an understanding on what factors that plays important roles on pricing decisions. Schäder (2006) states that a price is a competition tool with a double function; it is the strongest factor in how much surplus a company will make, thus how much profit it will make as well as a tool to attract customers. The price is the easiest competition tool to copy from competitors. Due to this double function, it is of great importance to be cautious when pricing products (Hinterhuber, 2003). Most pricing decisions involve many complex considerations, both on short, medium and long term. Studies show that customers rarely are fully aware of what the market price of a product is but use an approximate average price as reference (Schäder, 2006).
3.4.1 Price models

Business models describe how value is created, but without well-altered price models, that identify qualifications for value creation or value capturing, there is a risk that the business model is not taken into practice (Iveroth et. al, 2013). As mentioned in the section above, globalization and advancements in information technology have made the art of pricing increasingly complex (Iveroth et. al, 2013). Globalization has brought the opportunity to charge for a product in many different ways that were not possible before. Olve et. al (2013) explains price models as what we chose to pay for, a concept that deepens the analysis of how pricing strategically affects the organization.

A model that analyses the different components of a price model is the price model equalizer developed by Olve et. al (2013) (See figure 1.1). The price model equalizer is meant to be a tool for organizations to enable them to understand and possibly amend their offerings and what they actually charge for. The name equalizer comes from the parable with a stereo equalizer where the sound is equalized to alter the frequency response of an audio system with help of linear filters to create the best sound experience possible. In the same way, the price model equalizer wants to adjust the price model so that it will be in line with the position of the organization or the existing business ecology.

The price model equalizer has five dimensions who describes the different components of a price model. By adjusting the controls, the settings change and thereby enables an analysis of how the price model contribute to enabling the business model of the organization. The five dimensions also have several different levels that Olve et. al (2013) argue covers most of the important aspects regarding strategic pricing.
The five dimensions of the price model equalizer are as follows:

**Scope** is the first control of the equalizer presented by Olve et. al (2013). The central questions of this control are what the core of the product is and what the surrounding offer is. On the top of the scale, the product is a system, or package of some kind (for example an all you can eat buffet) that are priced together as one item, while a product positioned on the bottom of the scale is one single attribute (a la carte).

Consequences of packaging/unbuilding should be subject for a sensitivity analysis which is a job for the company's controller while market assessments and presuppositions are usually made by other team members.

**Temporal rights** are the second control on Olve et. al’s (2013) price model equalizer. This control regards how long the customer has the right to use the sold product. In this, and the following dimensions contain multiple levels for the control to stop on. On the top of the scale the customer pays every time the product is used (like on a tollway) while the bottom of the scale represents perpetual rights where the customer simply assumes the rights of the product (like most goods that we buy), in between these extremes you find the levels subscription, rent, and lease. The further down you go on the scale, the longer the customer keeps the right to use the product.

This dimension should also be subject to a sensitivity analysis supported by a controller, but knowledge about your customers is also important in this dimension to be able to make
qualified assumptions on dynamic consequences and whether or not your customers are reversible when trying to implement new models. How reversible/irreversible your customers are can depend on their mindset and beliefs but also on the surroundings and environment in which the organization operates controlled by other forces in the business ecology.

**Influence** is the third dimension Olve et. al (2013) presents regards the power balance between buyer and seller when it comes to deciding on a price. On the bottom of the scale, the seller has all the power over the price, and the buyer has to look at an already determined price list. As you go up on the scale, the power over the price gradually switches away from the seller. Price list is followed by negotiation, result based pricing, pay what you want and on the top of the scale there is exogenous pricing where neither buyer nor seller has power over the price, the prices are controlled by external forces.

Negotiation is a commonly used business to business. Result based pricing fits situations where the seller wants to capture customer value rather than just delivering a resource. Another situation where results-based pricing fits is if you want to lower the level of risk for the customer (for example an offer where the buyer gets reimbursed if the product doesn't live up to the standards as promised). An auction is simply a concept where the highest bidder gets to buy the product, commonly used in the real estate business when selling properties.

**Price base** is the fourth dimension in Olve et. al's (2013) price model equalizer, which regards the information on what the price is based upon. The price of a product is usually based on either cost (cost-based price setting), on what the company’s competitors charge for similar products (competitor-based price setting) or on the value which the customer set on the product (value-based price setting) (Johnson et.al, 2011). What market the company operates on decides which pricing strategy that is the best fitting. Cost-based pricing works well on a market with similar products, often in big volumes. Competitor-based pricing works well on mature markets with similar products but with fewer actors and often small volumes whereas value-based pricing works well on any market where the company can access information on what the customers’ value (Hinterhuber, 2003; Johnson et.al, 2011).

The competitor-based strategy is the most commonly used strategy when deciding on what to charge for a product, followed by cost-based price setting and the least frequently used price setting strategy is the value-based price setting (Johnson et.al, 2011). That the latter is the least common pricing strategy used in practice, is unfortunate though many researchers consider it to be the very best pricing strategy though it is directly connected to what the customers value (Hinterhuber 2003; Schäder, 2006). Since the product package studied in this thesis is differentiated and will, to a beginning, be produced in relatively small volumes, this theory section will mainly focus on value-based pricing.

Economic Value Analysis is a type of analysis that is used to understand what potential customers value in a product. It is hard to base a price solely on value, but it must be taken into consideration to set a competitive price. To use this method, the term economic value
needs to be defined. This thesis will use the following definition by Cohen and Neubert (2017):

- “Economic value - the value of an asset calculated according to its ability to produce income in the future.”

Nagle and Holden (1995) suggest a four-step process to quantify economic value:

- Identify the cost of the competing product that is the most valued by its customers. This will be your product’s reference value.
- Identify what factors that differentiate your product from the competing product.
- Determine the value for the customer of these differentiating factors to get the differentiated value.
- Add the reference value and the differentiated value together to determine the total value to the product.

**Price formula** is the fifth and last dimension presented by Olve et. al (2013), it regards how much the price relates to the quantity. On the bottom of the scale, the price is fixed where quantity does not affect the price at all. An example of this is an unlimited data plan on your phone where you pay a monthly fixed fee to use at many gigabytes as you wish. On top of the scale, the price is per unit. An example of this could be a phone plan where you pay per every text that you send, the byte that you use and minute that you talk. In between the extremes of the scale, there are price formulas where parts of the price are fixed, and parts depend on quantity just like some providers offer a certain amount of data for free and an additional fee per unit used if you were to exceed that specific amount.

### 3.4.2 Price levels

A product’s price level is simply how much it costs. It can be a tough task for a company to determine the price level, since a too high price might lead to decreased sales, while a too low price will give you less profit per unit. One way to determine the price of a product is by conducting a competitions analysis, where potential competitors are analyzed (Nagle & Holden, 1995). Both marketing strategies and profitability of similar products are of interest as well as the threat of new entrants. Since the price decision leans on the economic value delivered to the customer, a high value is likely to attract new competitors. The risk will decrease if there is a lack of raw material, distribution channels, loyalty from the customer and so on, and an increase in the opposite circumstances. Current prices, as well as price trends, should be investigated to enable a sound estimation on upcoming price trends (Nagle & Holden, 1995).
There is, however, a risk with focusing too much on competition and forget about the customer experienced value. Peteraf and Barney (2003) argue that differentiation towards customers does not create value by itself, but that differentiation must come from an understanding of the true sources of value for the customers. Research has shown that companies that solely focus on competition when pricing its products are likely to make less profit than those who are strongly customer-oriented (Johnson, et. al, 2012), meaning focusing too much on competitors when deciding on a price level can damage the company’s profitability.
4. Empirics

In this chapter, collected data on the pricing process of the investigated product package will be presented as well as the product itself.

4.1 About the product

The product package is developed by the start-up company Miraculum Fire. The main product is fire extinguishing fluid that can be applied on almost any surface such as paper, fabrics or forest. The inventor of the product is the company's CEO and founder. The company's technology is patented and was developed in the founder's kitchen using minerals and household products such as vegetable oil and vinegar. Using Miraculum Fire's fluid reduces water use though 5 liters of the fluid are needed to extinguish fires that would typically require 26 liters of water. Miraculum Fire's fluid is effective eminently when applied to any surface.

The product is water-based and can be applied in advanced on trees and can thus also prevent forest fires from occurring. The company’s products create a heat barrier through a water-soluble, cooling technology to prevent fires from starting in the first place. When the fluid is used preventatively to coat flammable areas and items, they will not burn, as with other products, but instead, will simply char. If, and when used for treatment once a fire has broken out, the fluid keeps the fire from reigniting. The shelf-life of the product is guaranteed to be at least five years but according to Cederlund, it can last longer than that. Moreover, Cederlund sate that the company does not see any direct substitute product though he believes that the customers will value the sustainability and un-harmfulness of the product highly.

The product is sold as a package, the home defense kit, and the price is not fully decided on yet. The price of the fluid to the customer is approximated to around $15/liter according to Cederlund. The products included in the home defense kit as well as the approximated costs of them are listed below.

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1 This chapter is based on interviews with respondents listed below.

Team member respondents:
Johnson, Robert D; Quality Manager, Miraculum Fire, Houston, Texas. 2019. (20/6).

Potential customer respondents:
<table>
<thead>
<tr>
<th>Product</th>
<th>Cost per piece</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>208 liter Miraculum solution</td>
<td>$15/liter</td>
<td>$3120</td>
</tr>
<tr>
<td>208 liter Drum/Barrel</td>
<td>≈$60/barrel</td>
<td>$60</td>
</tr>
<tr>
<td>1 Rotary Manual Pump</td>
<td>≈$45</td>
<td>$45</td>
</tr>
<tr>
<td>6 ft Rubber Hose</td>
<td>≈$2</td>
<td>$2</td>
</tr>
<tr>
<td>1 Hose Clamp</td>
<td>$1</td>
<td>$1</td>
</tr>
<tr>
<td>1 Safety Blanket</td>
<td>(price not determined yet though the product is not fully developed)</td>
<td>X</td>
</tr>
<tr>
<td>SUM</td>
<td></td>
<td>$3228 + X</td>
</tr>
</tbody>
</table>

Table 1. Summary of Miraculum Fire’s current costs and prices for products included in “Home Defense Kit”

The home defense kit will contain a 208-liter barrel filled up with the fire extinguishing solution. To easily be able to apply the solution on any surface, the product package will contain one rotary manual pump attached to a rubber hose with a hose clamp, so that the customer herself can spray the area she wishes to threat. In addition, the package will contain a thin safety blanked treated with Miraculum Fires solution, which will allow the user to escape from a burning area when wrapped inside the blanket. The total price of the product price will be approximately $3228 + X, where X is the yet unknown cost of the safety blanket.

Cederlund has no reference measure on how much fluid is needed to treat a certain area, however, he recalls that a 280 m² house required 150 liters of the fluid, which leaves us with the estimate that 0.5 liters of the fluid are needed per m² (see table 2).

<table>
<thead>
<tr>
<th>Liters of Miraculum used</th>
<th>Size of treated area (m²)</th>
<th>Liter/m²</th>
</tr>
</thead>
<tbody>
<tr>
<td>150</td>
<td>280</td>
<td>0.5357… ≈ 0.5</td>
</tr>
</tbody>
</table>

Table 2. Calculation of how much product is needed per square meter.

4.2 Pricing

The company has not yet decided on a price out to customer but are in the process of doing so. Johnson states that the company strives to use value-based pricing but that they do not have enough knowledge about its customers to do so yet. However, Cederlund states that a market survey or similar are planned to be conducted in the near future. The production

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2 The company wants to offer a reusable barrel that can be sent back to the company to be refilled for a charge. All equipment except for the fluid itself will be reusable.
process of the fluid is secret and none of the respondents are aware of either the costs of the production nor the exact ingredients it contains. Therefore, Cederlund states that it is tricky to set a cost-based price. The company does not want to set the price too high so that it will lose potential customers to competitors, not only for monetary purposes but also to make as many homes in the US as safe as possible. However, the company also wants to make money out of its product. To properly price its products is one of the company’s biggest upcoming challenges according to Johnson.

How much a customer is willing to pay for a product varies. Respondent A and D are willing to pay a high price to keep property and valuables safe whereas respondent B, C, E, and F have a higher price sensitivity. The interviews with the potential customers show that the respondents that were aiming to use the product on larger areas such as their houses, are willing to pay a higher price compared to respondents that are planning on treating smaller areas such as furniture or kitchen counters. Another finding is that the higher the approximated yearly income of the household the higher willingness to pay, with exception from respondent F that had a relatively high income compared to willingness to pay.

When it comes to what rights that should come with the purchase of most respondents would prefer perpetual rights for the current product package (respondent B, C, and D). Respondent A would prefer a subscription with a higher service included to guarantee quality. Respondent E would prefer either a subscription or rent, but with convenience as the main reason.

4.3 Miraculum Fire’s business model

Even though the company does not have any explicit business model yet, Crabtree states that the company’s ultimate goal is to keep all Americans, their homes and their loved ones safe from fires. To accomplish that the company will focus on the source of the problem, namely, to prevent fires. Keeping its customers safe also includes protecting them from inhaling harsh chemicals, which they can do through their product is environmentally friendly.

By preventing fires, the company is hoping to make the customers feel safer during high-risk seasons such as the dry summers in the south, and during the candle-lit holidays. By having a barrel with the product at home, the customer can treat its house when needed, for example in case a wildfire breaks loose. The home defense kit will be sold directly on Miraculum Fire’s website as well as in selected retail stores to a set price.

Even though Miraculum Fire has not done a proper market survey, the closest rivalry product that the company has heard of is a liquid developed by Fire Retardant Coatings of Texas, also known as FRC. However, FRC does not offer any product package alike Miraculum Fire’s Home defense kit and all of FRC’s various forms of fire-retardant liquids does not have environmentally friendly certificates. Besides that, the average price of FRCs products is slightly higher than Miraculum Fires. Moreover, the company states that Miraculum Fire’s
product is user-friendly and that the Miraculum Fire’s website is up to date, unlike its competitors. Miraculum Fire sees the fact that their solution is environmentally friendly thus completely harmful for humans to inhale as their biggest competitive advantage. None of the interviewed potential customers mentioned that they have heard of FRC before, but respondent D is aware of products similar to Miraculum Fire’s, but these products are to the respondent’s awareness, not environmentally friendly.

Another rivalry product once a fire has broken loose is water, the most common way of distinguishing big fires. Water is at least in direct costs, a much cheaper way of extinguishing a fire. Water is usually taken from surrounding lakes, then dumped on fires via airplanes or helicopters, the same way that Miraculum potentially would be applied on wildfires, meaning more fuel and time consumed would be required when extinguishing a fire with water versus Miraculum. Johnson argues that water can substitute Miraculum in case of a fire but not as prevention for it. However, Cederlund states that just seven gallons (26.5 liters) of Miraculum are needed to extinguish fires that would typically require 176 gallons (666 liters) of water to do the same job. Respondent E also mentions the city’s fire department as an alternative. Johnson, however, means that the fire department is to be seen as a compliment rather than substitute though Miraculum Fire’s solution can protect the material from catching on fire longer, which gives the fore department those extra minutes to reach the fire in time to extinguish it.

Miraculum Fires product is not yet out on the market, which makes it difficult to say if they have succeeded in creating and capturing value yet. All team member respondents agree on that communication with potential customers and clients is key to help them capture value. This will be done out at conventions, exhibitions and by networking in general. They are convinced that by demonstrating their product, which is done both live and via video link, people will see the value in the product. Respondents A-F has all seen the demonstration and would, depending on the price, be willing to purchase the product. Since the solution is patented the company hopes to be able to capture value by selling a product that cannot be found elsewhere and set the price accordingly. At the same time, Crabtree points out that Miraculum Fire has dangerous competitors even though their product might not be exactly the same, tough it still can be a substitute for Miraculum’s solution. Therefore, Crabtree argues that competitors always should be studied for Miraculum Fire to capture value. Respondent F and C mention that if the product is too expensive, they are not interested in buying it but that they would not turn to a substitute product but would rather be without any fire safety product. None of the respondents see any direct weakness with the solution itself. It must be said that the potential customers do not yet know the price of the product and that they see a concern if it would be set too high. However, respondents A, B, C, and E express a concern about how to apply the solution properly.

Value capturing is dependent on how the company price its products. Cederlund points out that even if the company is confident about their product, they have to look further into what price level is suitable for the product to capture value. Thomas states that value capturing also
is about reaching out to the right customers, and the right investors and thereby save valuable resources.

The interviews with the potential customers show that all respondents value the functionality and unharmfulness the most, whereas respondent A, B, and F also highly value the fact that the product is environmentally friendly.

4.3.1 Customer segment and key activities

According to Thomas, VP marketing at Miraculum Fire, the customer segment is broad not to miss out on any potential customers. The ultimate goal is to reach everybody with a disposable income, this though everyone is risking coming in contact with fire in one way or another. However, the company has narrowed down its customer segment into some groups of target customers to be more specific. These groups of customers are Americans who have been impacted by wildfires, heads of household (mothers in specific), Americans who celebrate Christmas, parents of college students, baby boomers caring for elderly parents and influencers (see figure 2). The latter is targeted in hope that he or she will spread the word of mouth in its channels, a cheap, effective and up to date way of marketing your product. Miraculum Fire will also participate and are currently participating, in various exhibitions

![Figure 2. Miraculum Fire's customer segment](image-url)
and competitions, as well as nominating its founder for prices and as a speaker at various events, this to spread the word about the existent of Miraculum Fire. Cederlund states that the company is putting a lot of effort into networking in this early stage, and that is in fact how most respondents (A, B, C, E, and F) came in contact with the company.

4.3.2 Key partners

Miraculum Fire has hired various independent contractors. One of the contractors with the most influence, particularly in Miraculum Fire’s current early stage, is the marketing firm BigCheese.TV. BigCheese.TV has developed a launch strategy and thus a plan on how to reach the targeted audience states Cederlund.

BigCheese.TV is supposed to contact potential influencers. Here mom-bloggers/ Instagrammers or influencers with a green/sustainable niche are chosen. When contacting the influencers, different approaches are implied. The influencer might be offered a negotiated monetary compensation, or free samples and/or giveaways to give out to its followers. A contract is to be signed by both Miraculum Fire and the influencer prior to a campaign.

Moreover, Miraculum Fire has also collaborated with the Austin fire department. The product has been tested by firemen in various situations. Miraculum Fire also captured this on video to use for marketing purposes.

Collaboration with other businesses has also started. One of America’s biggest furniture suppliers is interested, and so is one of the biggest carpet suppliers and one of the world’s leading security companies. The names of the companies cannot be displayed though nothing is signed yet. The security company just experienced two big explosions at chemical plants that had disastrous consequences for the surrounding environment. Not only the chemicals burning where so toxic that people living in the area had to be evacuated, when extinguishing the fire toxic foam was used that now has been washed out in nearby waters contaminating the shore thus fish, seafood and plants living there.
5. Analysis

In this chapter, the collected empirical data will be compared and analyzed. Within the framework from the theory chapter, several factors that the respondents have used when developing their business model can be identified. This thesis will use Olve et al.'s (2013) price model equalizer as a tool to investigate and analyze Miraculum Fire's existing price model and to come up with possible suggestions for developments in it.

5.1 Capturing value through business models

An organization's business model should describe how the organization aims to create and capture value within the business ecology in which it operates. Both value creation and value capturing depend on the price model applied by the organization. Miraculum Fire has not yet developed an explicit business model, something that is highly recommended to do. It is the price model that identifies the conditions for value creation and value capture, and without it, there is a risk that the business model is not taken into practice. However, the company has considered ways in which they want to create and capture value, as well as how they want to distribute their product, reach out to customers, what partners to collaborate with etcetera.

According to Porter (1980) and his theory about the five forces, value is captured when a company positions itself where it is the least affected by the forces. Miraculum Fire has patented its product and is thereby using something that Porter (1980) refers to as a defense mechanism against threats from external factors. This will allow the company to create opportunities to appropriate a larger part of the value themselves. Both threats of rivalry among existing competitors and threat of new entrants should be rather low thanks to the patent, at least in the near future, that is if we assume all competitors are playing by the rules.

As Crabtree mentioned, there are always rivals, even though they might not have the exact same product. Miraculum’s fluid could be substituted, for example, against FRCs products regardless if they are as environmentally friendly as Miraculum, however, even this force should be rather low, if Miraculum targets the right customer segment and if the price is set right. A too high price might result in a higher threat of less efficient substitute products such as water. Since Miraculum Fire’s solution is made out of organic products that can be found in the household, the bargaining power of suppliers should be low. So far, the market seems attractive. However, bargaining power of buyers is yet unknown, and potential predictions will be uncertain though no market survey is conducted, and it might be one of Miraculum Fire’s biggest challenges. The currently suggested price of the home defense kit is appropriate $3200, and individuals are targeted. For an average American, that is a rather high amount to pay for something they wish never to use. There is a risk that, no matter how good the product is, people will not buy it if the price is set too high. All potential customers that were interviewed mention that a too high price will discourage them from purchasing the
product. This shows how important the price model is, for a company to put its business model into practice.

5.2 Miraculum Fire’s price model

Figure 1. Miraculum Fire’s current price model equalizer, Olve et al (2013)

With the help of the price model equalizer, the current price model applied by Miraculum Fire on their product *home defense kit* can be identified. The product is a package, or a system, that includes various fire safety products for your home, which puts the product rather high up on the first control, **scope**, but not all the way up though it’s the package does not include any services (see figure 3).

When it comes to who owns the rights of the product, **temporal rights**, it is a little more indistinct on where on the second control Miraculum Fire’s Home defense kit should be positioned. The company has not fully decided if they want to give some kind of discount on the fire-resistant fluid to customers that already purchased the home defense kit or not. However, this specific product will not be offered as a full subscription as it is for now, but something that you buy one time and then owns the full rights to it, which will place the second control all the way down on perpetual (see figure 3).
This product will be sold directly to the customers and the price will not be negotiable, therefore, the third control will be placed at list price on the influence switch (see figure 3).

**Price base.** The fourth dimension, can use Nagle and Holden’s (1995) economic value analysis as a tool. The first step in determining the value of the product from the customers perspective is to identify the cost of a reference product, as explained earlier in the thesis, a reference product or reference value is the best alternative to the product from the customers perspective. Since Miraculum Fire's product is first in its line identifying a reference product was not self-evident. What is used on the market today, however, is various foams and powders with high levels of toxic chemicals. The most similar product known is a liquid developed by Fire Retardant Coatings of Texas also known as FRC.

What differentiates the two products is that FRC does not offer any product package alike Miraculum Fire's Home defense kit and all of FRC's various forms of fire-retardant liquids does not have environmentally friendly certificates. Despite this, the average price per liter is higher at FRC. The value for the customer can be seen as higher for Miraculum Fire's products though they are completely environmentally friendly. Moreover, Miraculum Fire carries different product packages, like the Home defense kit, which is to benefit the customer.

Pricing is a fundamental process that is of great importance for a company’s success (Westelius & Cöster, 2018) therefore, Miraculum Fire should put effort in to pricing its product package properly. The company has not yet put a final price on its product package but have the ambition to imply value-based pricing. Research shows that value-based pricing is the most successful pricing strategy but that it requires a lot of information about its customers (Hinterhuber, 2003). The company might not yet be in a state where they can imply value-based pricing though they, according to themselves, do not know their customers enough. However, the company is planning on conducting market surveys etcetera to collect needed information about its customers to be able to base their price upon what their customers value. However, the company wants to spread its product to as many homes as possible and can therefore not charge too much for its product. There are costs connected with production and R&D that must be taken into consideration for the company to be profitable and for customers not to substitute Miraculum Fire’s product against something else. The company wants to sell its product to make as much profit as possible without losing potential market share – something that speaks for a competitor-based price. Despite this, I have placed the fourth control on a value-based price base (see figure 3) though this is the company’s goal that they are currently working towards and since they are not yet done with the pricing of its product package.

**On price formula.** Miraculum Fire's product will be placed on "purchase volume + per unit" (see figure 3) though the purchase volume will be fixed as a start (208 liters). However, the barrel and spray equipment is reusable, and refills can be purchased.
5.3 Customer segment

Miraculum Fire is targeting a very broad segment of customers, something that can obstruct the marketing of the product. Even though most companies probably want to reach out to as many customers as possible, putting “everyone” as a target group is almost like putting “no one” when it comes to marketing. To succeed, it would be wiser for Miraculum Fire to be more specific as marketing is something that requires a lot of time and money. Moreover, different customers are highly likely to require, and value, different factors. This entails that these different types of customers require different treatment and a different kind of relationship with the company. This also concerns the key activities the company is planning though the company hardly can reach out to “all Americans with a disposable income” through the same activities/channels.

If Miraculum Fire, despite this, wants to reach out to a rather broad group, adjustments in its offer could be made. Since different types of customers have different needs and requirements, one way to reach out to a broader market is to adjust what attributes are offered. As a suggestion, I will present two additional potential settings on the price model equalizer, aimed to target specific customer segments.

5.4 Alternative price models for Miraculum Fire

In the following section, two alternative price models will be presented. One of the proposed price models is a luxury version of Miraculum Fire’s home defense kit (see 5.3.1), whereas the other price model is a budget version (see 5.3.1).

5.4.1 Premium package

Since the accumulated price of all products in the product package the home defense kit is rather high (approximately $3228 + x), people with a high income is to be targeted. Also, the customer segment advised is homeowners, since they have better use of the products that people living in an apartment complex. That is if Miraculum Fire do not want to lower its price to gain market share, but thereby also make less profit per package sold (a proper calculation of what would be most profitable for the company regarding mark up price and sold quantity cannot be made without knowing the costs of producing the product). My proposal of a premium package of Miraculum Fire's home defense kit has the following settings on the price model equalizer:
Figure 2. Potential Price Model - Premium, Olve et.al

The **scope** of this potential product package is a system. Apart from the Miraculum fluid and the application gear etcetera this package also includes a service where a person from the company would come to the customers home and treat whatever the customers wished to be treated for them.

The temporal rights would be a subscription where the customer could choose between either a yearly touch up or one that would come every 6 months depending on preferences and what areas that wish to be treated. There would also be an option to have areas treated more often on the dryer periods of the year (summer), and not at all or less often in the wintertime.

On the influence attribute, the control would still be on the price list. If big business’s wants an area treated it is possible that the control would go a little towards negotiation.

This package would be a bit pricier since it's a service included as well. This though it is assumed that high-income customers would value the service where they don't themselves have to put time and effort into spraying the product on their homes and belongings. Therefore, the fourth control, price base, is set on customer value. The customer is also likely to value the fact that they do not have to store a 208-liter barrel on their property but instead having the product delivered and taken away at the time of the service.
At the fifth and last attribute, **price formula**, the control would be placed at “purchase volume + per unit”. This though it would be a minimum charge covering equipment etcetera plus a charge for how much product that is used and how many working hours it takes to treat the home.

### 5.4.2 Light package

This is a cheaper package with apartment owners/tenants as targeted customers. The package will include less product that the two versions above but will be both cheaper and easier to store. The light package will not include the 208-liter barrel but a smaller container with around 40 liters of the fluid. Since it doesn't make sense for the typical apartment owner/tenant to treat any outside area, this package is aimed to be used indoors, in areas such as couches, carpets, and beds.

![Figure 3. Potential Price Model - Light, Olve et.al](image)

The **scope** of this potential product package is an attribute, the product package light will be sold as it is with no extra services or offers. This is to keep the price as low as possible for the customers and to spare them from a lot of extra product taking up space when storing.
The temporal rights for the light product package will be perpetual, the customer will by the product once and then own it from then on.

The third control, influence, will once again be placed at the price list.

For the light product package, the price will mostly be based upon competition. Here the company wants to reach out to the customer with a lower willingness to pay and to do so the price needs to be set considerably lower than in the package above to gain market share, therefore, the price base control will be placed at competition.

The price formula of the fifth control will be fixed. The customer buys the product once, including 40 liters of Miraculum, the application equipment, and the fire blanket. This will leave the light home defense kit at a price of approximately $650.

5.5 How the choice of price model will affect the business model

There are several factors, apart from the price and the direct content, which differentiates the premium package from the light package. For example, different customer segments are to be targeted for different packages, which require different key activities. The customer segment for the premium package is likely to value a good service above a low price, whereas customers interested in the light package might be more open to put in some time and effort to get a lower price, which will result in less resources needed from Miraculum Fire.

The premium package will contribute with even cash flow due to the subscription, whereas the profits from the light package will be more uncertain and most likely also uneven. The light package might be sold in a higher volume, but to a lower price with a lower profit per unit. The luxury of the premium package, however, will require more resources in the form of money, labor, expertise and time. For the customers to pay a high price, a good service will be required, not only at the moment of the application but at all times. Peteraf and Barney (2003) describe value creation as something that happens when good service is provided, as the difference between financial costs for the company and received benefit for the customer. For the premium package, a closer more personal customer contact might be required. For a premium customer, it might make sense for the company to customize the offer, to satisfy the customer completely. For example, the customer could be free to choose when and how often they want the service. The higher profit per unit will make this possible, whereas the light package is simplified to make it more affordable, but it will thereby also be less adjustable.

As mentioned earlier in this thesis, the price model is one of the most important building blocks to take the business model into practice. Miraculum Fire is aiming to conduct customer surveys to increase their knowledge about their customers, something that is needed to base its price on customer value. The company could also look into other ways of getting to know their customers, such as interacting with them during their key activities. However, it surprised me that Miraculum Fire did have such a broad customer segment. Even though a company naturally wants to have as many customers as possible, having a too broad customer
segment will make it harder to reach the customer, which can end up hurting the company. This might be something that the company will amend in a later stage though the product is not launched yet. Given that the current business and price models are executed, Miraculum Fire might have problems reaching all customers in their proposed customer segment though different tactics, key activities and key partner’s etcetera are likely to be needed for reaching different groups of customers. Miraculum Fire’s customer segment might need to be narrowed down to reach its potential customers and to create a sound relationship with them and to thereby capture value. A smaller customer segment will result in customized key activities fit for the new customer type. Even new key partners might be needed. As Piercy et. al (2010) state, having a great and innovative product can easily fool the innovator that the product will sell itself, which rarely is the case. This might be a trap that Miraculum Fire can fall into if they are not being cautious. How good a business acts, is not measured by size but rather by value capturing and value creation.

The two suggested price models above are targeting two different types of customers, both within Miraculum Fire’s excising customer segment. The two different price models end in two different business models, which shows how much a price model is affecting the business model. A price model that conflicts with other factors in the business model, such as the customer segment, in this case, is likely to cause problems for the company, such as lower profit and customer value.

To avoid this, besides adjusting its customer segment, Miraculum Fire should try to understand what its customers value. A step in the right direction when gathering information to imply value-based pricing could be for the company to follow Nagle and Holden’s (1995) four-step process to quantify economic value. Miraculum has so far reached two out of four steps. The company has gathered information about costs and reference value as well as identified what factors that differentiate its product from its rivals. However, the company has not yet determined the value for the customers of the product package’s differentiating factors to get a differentiated value. After that, the company should add the reference value and the differentiated value together to determine the total value of the product.

When the company has collected information about its customers and finalized its price model, it is of great importance that they keep reviewing and amending it. This even though the price model might seem to work perfectly at the moment. Customers and the rest of the company’s ecology are constantly changing their needs, wants and opinions just like the rest of the world. Looking back in time, the pricing process was completely different due to past circumstances, therefore we can predict that the process of pricing products will change just as much in the future.
6. Conclusions

This chapter presents the conclusions that have been made based on the study. Thereafter recommendations on future research will be made.

6.1 Capturing value through a price model

When I started conducting this case study, I had little knowledge about the company Miraculum Fire as well as about the increased complexity of pricing new products overall. By investigating the company and by, with help of the price model equalizer, identifying the company’s current price model, I was able to see how Miraculum Fire tried to position itself and thereby I could come up with suggestions on how the company could amend its price- and business model to target different customer segments. This is applicable on other companies as well. My findings and recommendations for an early stage company that is trying to find a price model that enables value capturing are as follows:

- A price model needs to be customized to fit the ecology in which the company operates to maximize value capture. No price model fits all companies.
- To be able to design an effective price model, information about the company’s customers and their values need to be investigated.
- Collected information about customer value will result in a narrowed down customer segment. Thereby, customization of the business-and price model will be enabled. This will make it easier for the company to meet their customers’ needs and thereby also enable value capturing.
- Price- and business models need to be subject to constant change to be up to date and to maximize value capturing and value creation.

6.2 Recommendations for future research

A company’s business- and price model plays big parts when it comes to creating and capturing value. Despite the importance of this, there are not many studies made on the subject. Successful value capturing and value creation through a business model does not happen overnight, nor is a once-successful price- and/or business model everlasting. Value capturing and creation is a continuous process, that the company never should stop reviewing and amending. Therefore, it would be interesting to see the development of the process during the time. To add depth and nuance to the results, several companies could be studied over time.
Another future research recommended is regarding the customers’ willingness to take a risk. When buying something no one ever wishes to use, a risk is taken. What role will the price- and business model play when the customer decides to buy, or not to by the product? By conducting a survey, customers willingness to take risks when it comes to safety products could be done. Depending on the depth of the research, this information could help not only safety and security companies, but it could also be used in educational purposes to teach about risk-taking.

An interesting development directly related to the conducted case-study would be a follow-up study to investigate how Miraculum Fire’s price model works in reality, after that the company has launched their product and it has been out on the market for a while.
7. Bibliography


## Attachment 1

### Respondents

Table 1: Respondents – Team Members

<table>
<thead>
<tr>
<th>Respondent</th>
<th>Position</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cederlund, Hans</td>
<td>COO, Strategic Partnerships</td>
<td>Cederlund has the overall responsible for the company’s operations and day-to-day work with strategic planning and goal setting in focus.</td>
</tr>
<tr>
<td>Interview date:</td>
<td>2019-04-23</td>
<td></td>
</tr>
<tr>
<td>Length:</td>
<td>26 min</td>
<td></td>
</tr>
<tr>
<td>Crabtree, Jason</td>
<td>Vice President Application and Franchise</td>
<td>Crabtree is in charge of making decisions whenever the CEO is not available. Crabtree is also an investor in the company.</td>
</tr>
<tr>
<td>Interview date:</td>
<td>2019-04-24</td>
<td></td>
</tr>
<tr>
<td>Length:</td>
<td>18 min</td>
<td></td>
</tr>
<tr>
<td>Thomas, LisaBeth</td>
<td>Vice President Marketing, Communication and PR</td>
<td>Thomas is in charge of all marketing and communication of the company.</td>
</tr>
<tr>
<td>Interview date:</td>
<td>2019-04-23</td>
<td></td>
</tr>
<tr>
<td>Length:</td>
<td>22 min</td>
<td></td>
</tr>
<tr>
<td>Johnson, Robert</td>
<td>Quality Manager</td>
<td>Johnson is in charge of making sure the product goes through all required tests and certificates needed, as well as ensuring the overall quality of the product.</td>
</tr>
<tr>
<td>Interview date:</td>
<td>2019-06-20</td>
<td></td>
</tr>
<tr>
<td>Length:</td>
<td>13 min</td>
<td></td>
</tr>
</tbody>
</table>
Table 2: Respondents – Potential Customers

<table>
<thead>
<tr>
<th>RESPONDENT</th>
<th>CUSTOMER SEGMENT GROUP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respondent A</td>
<td>American who has been impacted by wildfires</td>
</tr>
<tr>
<td>Interview date:</td>
<td>2019-06-26</td>
</tr>
<tr>
<td>Length:</td>
<td>17 min</td>
</tr>
<tr>
<td>Respondent B</td>
<td>Head of households, especially moms</td>
</tr>
<tr>
<td>Interview date:</td>
<td>2019-06-26</td>
</tr>
<tr>
<td>Length:</td>
<td>13 min</td>
</tr>
<tr>
<td>Respondent C</td>
<td>American who celebrate Christmas</td>
</tr>
<tr>
<td>Interview date:</td>
<td>2019-06-26</td>
</tr>
<tr>
<td>Length:</td>
<td>7 min</td>
</tr>
<tr>
<td>Respondent D</td>
<td>Parent of college student</td>
</tr>
<tr>
<td>Interview date:</td>
<td>2019-06-26</td>
</tr>
<tr>
<td>Length:</td>
<td>16 min</td>
</tr>
<tr>
<td>Respondent E</td>
<td>Baby boomer caring for elderly parents</td>
</tr>
<tr>
<td>Interview date:</td>
<td>2019-06-26</td>
</tr>
<tr>
<td>Length:</td>
<td>10 min</td>
</tr>
<tr>
<td>Respondent F</td>
<td>Influential American (media, bloggers, celebrities)</td>
</tr>
<tr>
<td>Interview date:</td>
<td>2019-06-26</td>
</tr>
<tr>
<td>Length:</td>
<td>20 min</td>
</tr>
</tbody>
</table>
Attachment 2

Guide to Interviews

Information regarding conducted semi-structured interviews

This thesis will investigate what kind of price models that can enable value capturing for products that no one wishes to use, such as fire safety products.

The purpose of the thesis is to look into how price models in relation to business models can be assigned for products that no one wishes to have use of. Moreover, this thesis aims to increase the understanding of pricing and price models in relation to business models.

Participation in this interview is voluntarily. Respondents have the right to stop the interview at any time. Personal information of the respondents, excluding names in agreement with respondents, are confidential information and will only be used for this study and thereafter be deleted. All information retrieved from this interview will only be used in this study. Respondents have been given the chance to read through the transcript interview as well as the thesis,

Potential questions regarding the interview can be emailed to the author on the email address below.

Elin Sjödahl
elinysjodahl@gmail.com
Interview - Team members

1. Background information
   1. Do you agree to the conditions of this thesis, included that the interview will be recorded?
   2. What is your position in the company? What are your responsibilities?

2. The product
   1. Describe the product and the product package.

3. Cost
   1. What are the costs of production?
   2. What is the price of the product?

4. Competition
   1. Who are you considering to be your biggest rival?
   2. What are your biggest challenges?

3. Value capturing through a business model
   1. How would you define the term business model?
   2. What is your company’s business model?
   3. What customer segment are you targeting?
   4. Who are your key partners?
   5. What are your key activities?
   6. How would you define value capturing and value creation?
   7. What is your company doing to capture and create value?

5. Conclusion
   1. Is there anything more that you would like to add?
   2. Can I reach back to you for potential follow up questions?
Interview – Potential customers

1. Background information
   1. Do you agree to the conditions of this thesis, included that the interview will be recorded?
   2. What type of customer are you? (Private/Business)

2. The product
   1. Have you tried/seen a demonstration of how the product works?
   2. Where are you planning on using the product?

3. Cost
   1. How much are you willing to pay for the product?
   2. What is the approximated income of your household?

4. Competition
   1. What would you say is your closest substitute product?
   2. How does the home defense kit differentiate from your other option(s)?
   3. What are crucial factors for you when deciding on what fire protection to use?

4. Value capturing through a business model
   1. What do you value in the product package home defense kit?
   2. How did you first hear about the company?
   3. Would you be willing to pay a higher price for an increased service?
   4. What do you see as the biggest weakness of the product?
   5. Which of following temporal rights would you prefer for the home defense kit?
      - Pay per use
      - Subscription
      - Rent
      - Leasing
      - Perpetual

5. Conclusion
   4. Is there anything more that you would like to add?
   5. Can I reach back to you for potential follow up questions?