Customer Satisfaction
An Investigation of Trivselhus

Paper within: Bachelor Thesis in Business Administration, JBTC17
Author: Linus Ivarsson
        Alexander Nilsson
        Torbjörn Rimfält
Tutor: Helgi Valur Fridriksson
Jönköping June, 2010
Bachelor Thesis within Business Administration

Title: Customer Satisfaction - An Investigation of Trivselhus

Authors: Linus Ivarsson, Alexander Nilsson, Torbjörn Rimfält

Tutor: Helgi Valur Fridriksson

Date: June 2010

Key Words: Customer Satisfaction, Trivselhus, Construction Companies, Energy Efficiency, Environmental Friendliness, Houses

Abstract

Purpose:
This thesis investigates and analyzes the customer satisfaction over a 10-year time period among Trivselhus customers.

Background:
More companies in the building sector are starting to realize the importance of using customer satisfaction as a tool to enhance their competitive advantage. Customer satisfaction brings several positive aspects to a company, which can contribute to a successful business. It is crucial to fulfill customers’ wants and needs in order to obtain customer satisfaction.

Building a house is one of the largest investments people make in life, with important decisions that can affect their current way of living. Customer satisfaction is, therefore, crucial for a company like Trivselhus, where it is essential to keep their customers satisfied by offering the right products that fulfill their expectations.

Another increasingly important aspect in people’s lives today is the environment. This has now come to affect the house building industries as they have to fulfill customer expectations regarding energy efficiency and environmental friendliness.

Method:
To answer the purpose, primary data have been collected by conducting a telephone survey. The survey was made randomly among Trivselhus customers. From the different theories, important categories that affect customer satisfaction were found. Aspects from all these categories were included in the questionnaire to explain customer satisfaction. The analysis is based on statistical data generated from the survey. Central tendency values and regression analysis makes it possible to explain which variables affect customer satisfaction among Trivselhus customers.

Conclusion:
The outcome of the research signifies, that customer satisfaction among Trivselhus customers has not changed during all the years covered in this research. There are several variables affecting customer satisfaction. These variables are included in different categories; Complaints, Expectations, Service Quality, Energy, Product Quality, and Image. Furthermore, there is not enough evidence to prove that energy efficiency and environmental friendliness affect customer satisfaction geographically.
Kandidatuppsats inom Företagsekonomi

Titel: Kundnöjdhet – En Undersökning av Trivselhus

Författare: Linus Ivarsson, Alexander Nilsson, Torbjörn Rimfält

Handledare: Helgi Valur Fridriksson

Datum: Juni 2010

Nyckelord: Kundnöjdhet, Trivselhus, Byggesektorn, Energiförbrukning, Miljövänlighet, Hus

Sammanfattning

Syfte:
Syftet med uppsatsen är att undersöka och analysera kundnöjdheten bland Trivselhus kunder över en 10 års period.

Bakgrund:
Fler företag inom byggesektorn har börjat inse vikten av att använda kundnöjdhet som ett redskap för att skaffa sig konkurrensfördelar. Kundnöjdhet medför flera positiva aspekter till ett företag, som kan bidra till en framgångsrik affärsverksamhet och det är viktigt att uppfylla kundernas förväntningar och behov för att få kunde nöjd.

Att bygga ett hus är en utav de största investeringar som görs i livet, med viktiga beslut som kan påverka ens levnadssituation. Kundnöjdhet är därför avgörande för ett företag såsom Trivselhus, där det är viktigt att hålla sina kunder nöjda genom att erbjuda rätt produkter som uppfyller deras förväntningar och behov.

En annan viktig aspekt idag är miljön. Det har visat sig att miljön har kommit att påverka byggepremisse även och även angående miljö och energi aspekter.

Metod:

Slutsats:
Resultatet utav studien visar att kundnöjdheten bland Trivselhus kunder inte förändrats under åren som behandlats, men det finns flera variabler som påverkar kundnöjdhet. Dessa variabler är inkluderade i olika kategorier; Klagomål, Förväntningar, Servicekvalitet, Energi, Produktkvalitet och Image. Vidare så finns det inte tillräckligt med bevis för att miljö och energi påverkar kundnöjdheten geografiskt.
# Table of Contents

1 **Introduction** ................................................................. 1  
1.1 Background ........................................................................... 1  
1.2 Purpose ................................................................................ 2  
1.3 Research Questions ............................................................. 2  
1.4 Company Background .......................................................... 3  
1.5 Perspective ............................................................................ 4  
1.6 Delimitations ........................................................................ 4  

2 **Frame of Reference** ............................................................. 5  
2.1 Choice of Theory ................................................................. 5  
2.2 What is Customer Satisfaction? ............................................. 5  
  2.2.1 Positive Aspects ............................................................. 5  
  2.2.2 Negative Aspect ............................................................. 6  
  2.2.3 Customer Expectations .................................................... 6  
  2.2.4 A Salesperson’s Impact, and Affections ............................ 7  
  2.2.5 Impact on Market Share ................................................... 8  
  Figure 1 .................................................................................. 8  
  2.2.6 Handling Complaints ...................................................... 9  
  2.2.7 Customer Satisfaction in Home Building .......................... 9  
  2.2.8 Kano’s Model ............................................................... 10  
  2.2.9 Two Different Approaches ............................................. 11  
  2.3 Definition of Customer Satisfaction .................................... 11  
  2.4 Choice of Measurement ..................................................... 11  
  2.4.1 Home-Buyers Satisfaction Model ................................... 12  
  Figure 2 .................................................................................. 12  
  2.4.2 The EPSI-Model ............................................................ 13  
  Figure 3 .................................................................................. 13  
  2.5 Summary Measurement ..................................................... 14  

3 **Method** .............................................................................. 16  
3.1 Research Approach ............................................................. 16  
  3.1.1 Quantitative Versus Qualitative Research ......................... 16  
  3.1.2 Inductive Versus Deductive Approach ............................. 16  
  3.2 Collecting Data .................................................................... 17  
  3.2.1 Primary and Secondary Data .......................................... 17  
  3.2.2 Sampling ......................................................................... 17  
  3.2.3 Climate Zones ............................................................... 18  
  3.3 Telephone Survey ............................................................... 20  
  3.4 Questionnaire Design .......................................................... 21  
  3.4.1 Introduction Questions ................................................... 22  
  3.4.2 Image .............................................................................. 22  
  3.4.3 Expectations .................................................................... 23  
  3.4.4 Product Quality ............................................................. 23  
  3.4.5 Energy ............................................................................ 23  
  3.4.6 Service Quality .............................................................. 24  
  3.4.7 Complaints ................................................................. 24  
  3.4.8 Word-of-Mouth ............................................................ 25  
  3.4.9 Total Satisfaction .......................................................... 25
4 Empirical Findings ......................................................... 28
4.1 Central Tendency Values ............................................... 28
4.1.1 Introduction Questions ............................................... 28
4.1.2 Image ..................................................................... 29
4.1.3 Expectations ............................................................ 29
4.1.4 Product Quality ......................................................... 30
4.1.5 Energy ................................................................... 31
4.1.6 Service Quality .......................................................... 32
4.1.7 Complaints ................................................................. 33
4.1.8 Word-of-Mouth ............................................................ 34
4.1.9 Total Satisfaction ......................................................... 34
4.2 Regression Analysis ......................................................... 34
4.2.1 2000 – 2001 ............................................................... 37
4.2.2 2002 – 2003 ............................................................... 37
4.2.3 2004 – 2005 ............................................................... 38
4.2.4 2006 – 2007 ............................................................... 38
4.2.5 2008 – 2009 ............................................................... 39
4.2.6 Special - 2 ................................................................. 39
4.2.7 Regression Models Overview ....................................... 40
5 Analysis ........................................................................ 42
5.1 Analysis 2000 – 2001 ....................................................... 42
5.2 Analysis 2002 – 2003 ....................................................... 43
5.3 Analysis 2004 – 2005 ....................................................... 45
5.4 Analysis 2006 – 2007 ....................................................... 46
5.5 Analysis 2008 – 2009 ....................................................... 48
5.6 Analysis Special Group – 2 ............................................. 49
5.7 Summary Analysis .......................................................... 50
5.8 Geographical Analysis ..................................................... 52
   Table 1 ........................................................................... 52
6 Conclusion ...................................................................... 55
7 Discussion ...................................................................... 56
References ........................................................................ 59
Appendices ....................................................................... 62
Appendix 1: English Questionnaire ..................................... 62
Appendix 2: Swedish Questionnaire ..................................... 66
Appendix 3: Question Abridgements .................................... 70
Appendix 4: Questioner Comments ...................................... 73
2000 – 2001 ..................................................................... 73
2002 – 2003 ..................................................................... 73
1 Introduction

1.1 Background

As more companies are starting to realize the importance of customer satisfaction, it has become a vividly discussed topic on what impact it has on a company’s operations (Matzler, Hinterhuber, Bailom, and Sauerwein, 1996). Moreover, Swedish companies in the building industry is beginning to see customer satisfaction as a tool to increase their competitiveness on the market (Sthen and Bergström, 2002). According to several researchers, customer satisfaction occurs when customers expectations are met, or exceeded, and is thus highly depend on the fulfillment of expectations (Fornell, 1992; Herrmann, Huber and Braunstein, 2000; Torbica and Stroh, 2000; Matzler et al., 1996; Johnson and Fornell, 2001). Arguably, it is crucial for companies to understand what the customers demand and need. High levels of customer satisfaction bring several positive aspects to a company; it is believed that customer satisfaction has a positive relationship with economic profit (Anderson, Fornell, and Lehmann, 1994). Moreover, it will lower customer’s price sensitivity (Fornell, 1992), and contribute to the creation of loyal customers, which in turn implies a stable future cash-flow (Matzler et al., 1996). Furthermore, it is recognized that high levels of customer satisfaction imply a healthy company with competitive products, successful management, and loyal employees (Grigoroudis, Nikolopoulou and Zopounidis, 2008).

Companies operating in the house building industry must regard themselves more as a service organization rather than a manufacturing firm and focus on the whole offering surrounding the actual product (Ozaki, 2003). With a focus on the whole ‘offering’, companies have a higher possibility of getting satisfied customers and thus achieve a competitive advantage and compete successfully on the market in the long run (Torbica and Stroh, 2000).

Trivselhus is a company in Sweden who produce prefabricated wooden family houses. Their responsibility is to supply houses that satisfy customers’ wants and needs. Building a house can be considered a milestone in life and the decisions one takes during that time is very important and can affect peoples and families current way of life. Furthermore, it is one of the largest investments people make, where the average final price on a house provided by Trivselhus is in the range between 2.5 – 3 million SEK (A. Ek, personal communication, 2010-02-23). This gives a perspective on how big the investment is and how important it is to satisfy customers’ every need. Customer satisfaction is, therefore, crucial for a company like Trivselhus, where it is essential to keep their customers satisfied by offering the right products that are up to quality standards.

In the current information society, customer satisfaction is something that gives a high degree of competitive advantage if a company can keep that edge (Burns and Bowling, 2010; Matzler and Hinterhuber, 1998). It is also something that makes the company more productive in the long run, since the costs of actual marketing campaigns could be kept at a lower rate (Fornell, 1992). Furthermore, customer satisfaction will lower the employee turnover since a high level of customer satisfaction will reflect on the salespersons and makes them satisfied as well (Fornell, 1992).
In the digital world that we live in today, one always has the opportunity of getting one’s voice heard. Blogs, notice boards and social networks are today playing a central role in many people’s lives and everyone have the ability to spread their word, and have the ability to form and alter other people’s minds and opinions about specific subjects or objects (Turban, Volonino, McLean, and Wetherbe, 2009). This could, in the point of view of customer satisfaction and Trivselhus, be seen as both a threat and as an opportunity. Looking back at the history of Trivselhus, up to half of all their overall sales has originated from word-of-mouth due to that they have been able to keep their customers satisfied (A. Ek, personal communication, 2010-02-23). It is believed that high levels of customer satisfaction together with perceived quality have a positive relationship with market share in the consequence of a word-of-mouth behavior from satisfied customers (Matzler and Hinterhuber, 1998). Furthermore, Burns and Bowling (2010) agrees that customer satisfaction have a positive effect on a word-of-mouth behavior.

One increasingly important aspect in people’s lives today is the environment. Specifically when it comes to houses, where a high cost for every household is the energy costs. That is why there is an increasing pressure both from customer but also from governments to maximize energy efficiency. 2019 it is decided by the European Union (EU) that all new houses should be more or less self-sufficient (A. Ek, personal communication, 2010-02-23). That adds pressure on house producers to produce products that can fulfill these upcoming criteria’s.

A Swedish governmental authority –Boverket – has divided Sweden up in to three different climate zones (Johansson, 2009). These climate zones represent different geographical part of Sweden, which have different climate conditions and therefore demand special energy requirements (Johansson, 2009).

The authors argue that house manufacturers such as Trivselhus shoulder a great responsibility when it comes to offering and informing both new and old customers about upcoming regulations and products that can increase the energy efficiency in houses. That is why this thesis combines the concept of customer satisfaction together with a geographical perspective of customers’ attitudes towards energy efficiency and environmental friendliness.

1.2 Purpose
This thesis investigates and analyzes the customer satisfaction over a 10-year time period among Trivselhus customers.

1.3 Research Questions
- Have the customer satisfaction among Trivselhus customers changed over a 10-year period?
- What are the main factors that affect customer satisfaction?
- Do energy efficiency and environmental friendliness affect customer satisfaction geographically?
1.4 Company Background

“Trivselhus is one of the leading companies in Sweden producing prefabricated wooden family houses. Our main market is Sweden but we do also export to Norway, Denmark, Germany, Switzerland, the Netherlands and the UK. All our houses are well planned and our aim is to combine good architecture with a maximum of quality, accurate details and the best efficiency when it comes to energy saving and sustainability” (Trivselhus).

Trivselhus has a history that starts 1968. During that year the siblings Peterson started Korsberga Träindustri. During a 20-year period they produced around 5000 houses under the brand Smålands Trivselhus. However, during that period the production mainly consisted of smaller holiday houses (Trivselhus, 2003).

1989 is the year when the company gets a new set of owners who gives the company a new name and the logotype that is used today. Trivselhus i Korsberga AB is the new name. Due to the financial problems that Sweden had during the beginning of the 1990s, the market for small and holiday houses in Sweden went in to a crisis. In March 1993, Trivselhus i Korsberga AB declared bankruptcy. However, it did not take long time before a new company was founded. Trivselhus i Vetlanda AB started of fresh with new facilities and a new chief architect from 1994 that would change the whole concept and the company Trivselhus as we know it today starts its history (Trivselhus, 2003).

During the mid 1990s the market were mainly demanding easier and cheaper alternatives when it came to producing houses. However, Trivselhus choose to offer more exclusive products and among other things introduced their Green Line where there also was an extra focus on energy efficiency. The overall company concept of flexibility soon becomes one of the company’s most valuable comparative advantages compared to some of their main competitors (Trivselhus, 2003).

During 1999 the company got a new owner. From this time, and up until the most recent recession, Trivselhus has been having a steady and healthy growth. The company introduced a variety of new products and put a lot of effort in to producing new and exclusive catalogues to give out to all new potential customers (Trivselhus, 2003).

During the period from 1993 to 2003, the company grew from 23 to 178 employees and the number of delivered houses grew from 31 in 1993, up to 383 houses in 2003. During the same time period, the total turnover went from 21.4 million SEK to 419.1 million SEK (Trivselhus, 2003). As shown in the sampling section 3.2.2., the company’s most productive periods were during the period from 2004 to 2007. The most recent years have been very tough on the company due to the worldwide recession. That meant a loss of almost half of Trivselhus’ sales and the workforce went from around 400 to 225, which they today have in their four different manufacturing facilities and 27 different sales offices around in Sweden (A. Ek, personal communication, 2010-02-23).

In the mid of 2009, the Swedish forest group Södra takes over the ownership of Trivselhus, which, at that point, were on the verge of bankruptcy. The transition period with the new owner has been very smooth and has been very appreciated by the company and all their different stakeholders since Södra have put the company in a much more stable financial position (A. Ek, personal communication, 2010-02-23).
Trivselhus is represented in a couple of other countries around in Europe; however, their main market is still Sweden. The company has chosen a different approach on the international market by creating a niche of special products that are not offered in Sweden depending on some special needs in other European countries. For example, Trivselhus are specializing in government projects such as hospitals and schools in the UK, cheap houses in Germany and very big and exclusive houses in Holland. However, the export only represents about 20% of the total production (A. Ek, personal communication, 2010-02-23).

There are upcoming EU regulations for the year 2019, where a new set of directives regarding energy consumption will be set. With these regulations, the energy consumption of a house will be regulated to consume 0 kilowatt hour per square meter and year. Trivselhus, now with the support of Södra, is working hard with environmental issues and energy-efficiency. They are already today working with the construction of a concept house that will be a plus-energy house. That means that the house by itself will produce more energy than it consumes. This house is set to be constructed some time during 2011 and Trivselhus hope that they will be seen as a company for the future and will be able to offer customers these special, exclusive, and flexible houses. However, now also with a high concern for the environment and houses with a low and efficient running cost (A. Ek, personal communication, 2010-02-23).

Flexibility is a key word within Trivselhus. They are offering their sketches and give their customers inspiration and tips on how to build a new house. Moreover, almost every house that is built is unique, and on average 120 – 130 hours is spent on sketching every house, where there are possibilities for the customers to develop a house that fits their needs. Trivselhus special way of constructing the houses offers the customers the ability to change and alter the houses to fit specifically the customer’s way of living and family constellation (A. Ek, personal communication, 2010-02-23).

1.5 Perspective
This research is conducted from the perspective of the customer in order to provide Trivselhus with valuable information concerning the level of customer satisfaction among its customers. It investigates and analyzes customer satisfaction using existing theories and models.

1.6 Delimitations
Because of insufficient contact details on Trivselhus’ customers from year 1993 up to 1999, the authors decided to limit this research to cover Trivselhus’ customer from year 2000 to 2009. This limitation was also done considering the nature of this research where the time limit makes it hard to conduct a comprehensive marketing research of such large scale. Furthermore, the research was limited to include solely private customers since the authors considered the houses build by companies to be of another character.
2 Frame of Reference

2.1 Choice of Theory

The first part of this chapter presents the general comprehension about customer satisfaction presented by a number of different researchers. Moreover, the chapter discusses what customer satisfaction consists of, and how it contributes to the company in terms of profit and market share. All this information builds the foundation for a definition of customer satisfaction, presented in 2.3. Section 2.4 presents two different models that are used in order to measure customer satisfaction. These models are discussed and summarized and presented in 2.5.

2.2 What is Customer Satisfaction?

Kondo (2001) argues that customers value satisfaction and quality in many different ways. Therefore, the expression ‘no customer dissatisfaction’ does not necessarily go hand-in-hand with ‘customer satisfaction’. Fornell (1992) argues that changes in satisfaction are consequences from past decisions. He continues to explain that quality is judged by the consumer and that the most important measurement of quality is how it affects customer satisfaction (Fornell, 1992). This is further strengthened by Herrmann, Huber and Braunstein (2000), who argue that whether or not a customer considers their purchase to live up to their expectations, i.e. whether the customer is satisfied or not, is dependent on the perceived quality.

According to Anderson, Fornell, and Lehmann (1994), there is a positive relationship between customer satisfaction and economic profit for the company. Arguably, customer satisfaction is an important component in order for the company to be profitable.

Increased global competition has lead to a greater emphasis on customer satisfaction (Johnson and Fornell, 1991). Matzler, Hinterhuber, Bailom, and Sauerwein (1996) argue that there are an increasing number of companies that starts to recognize the importance of customer satisfaction for future business. In attempting to increase customer satisfaction it is necessary to understand what the customer wants before they realize it themselves.

One major challenge that companies are facing is to improve customer satisfaction and keeping their customers satisfied, which becomes a way for companies to differentiate themselves from their competitors (Torbica & Stroh, 2000).

2.2.1 Positive Aspects

Anderson, Fornell, and Lehmann (1994) say that companies that strive for high customer satisfaction are more likely to receive larger economic returns. They also recognize that these economic returns are not immediately realized. Matzler et al., (1996) argue that customer satisfaction act as an indicator of future business opportunities, where a satisfied customer is loyal to the company, which implies a stable future cash-flow. This is strengthened by Anderson, Fornell, and Lehmann (1994) who acknowledge that there is a positive relationship between customer satisfaction and profitability.
An increase in customer satisfaction will lower customer price sensitivity since the customers are willing to pay more for goods that meets their expectations (Fornell, 1992; Matzler et al., 1996). Furthermore, Matzler et al. (1996) argues that having satisfied customers decreases the firm’s cost of retaining new customers significantly. Fornell (1992) also finds that customer satisfaction reduces marketing costs for the firm and increase marketing costs for the competitors. Furthermore, it will lower the employee turnover since a high level of customer satisfaction affect salespersons and make them satisfied (Fornell, 1992). Fornell (1992) also finds that customer satisfaction will enhance reputation of the company and reduce the costs for the company in terms of warranty claims and rework. Customer satisfaction is also a meaningful measurement for quality; if quality improvements are made but not recognized by the customers, it is an unnecessary improvement (Fornell, 1992). Furthermore, Grigoroudis, Nikolopoulou and Zopounidis (2008) finds that high level of customer satisfaction indicate a healthy company, since it is result of factors like motivated and loyal employees, successful management, and competitive products.

According to Burns and Bowling (2010), companies are using customer satisfaction as a tool to increase their competitive advantage. This is strengthened by Matzler and Hinterhuber (1998), who say the goal is to reach a high level of customer satisfaction with concern to important product features in order to obtain sustainable competitive advantage.

2.2.2 Negative Aspect

Rust and Oliver (2000) say that a customer that is satisfied with a product or service will raise their repurchase frequency and future expectations. Due to the customers higher expectations it will become more difficult for the firm to satisfy the customers in the next purchase cycle. According to Rust and Oliver (2000), this might damage the company in the long run. A company that raises customer’s expectation to high will get problem with retaining the same customer satisfaction in the future. The company would be better of reducing the expectations and then deliver more than expected (Gavolino and Dahlgaard, 2007). Furthermore, Rust and Oliver (2000) wonder if satisfactions are a suitable goal and argues that companies do not gain advantage by seeking a high level of customer satisfaction when it just raises expectations that are hard to reach and, in turn, increases cost for trying to reach these higher expectations. This is further strengthen by Anderson, Fornell, and Rust (1997) who argue that productivity within the company will be damaged because of the cost and the search after customer satisfaction. Furthermore, in addition to higher cost, the company must add more effort in improving product attributes or overall product design to keep satisfaction at desired level (Anderson, Fornell, and Rust, 1997).

2.2.3 Customer Expectations

Torbica and Stroh (2000) discuss the expectations that a customer forms about the future performance of an item when buying a product or service. After experienced the product or service the customer will evaluate how the product or service measure up to their expectations. If the expectations are met, or exceeded, the customer will be satisfied. On the other hand, dissatisfaction will be the result if the expectation is not fulfilled (Torbica and Stroh, 2000). Johnson and Fornell (2001) argue that satisfaction should increase with age, and that older customers are more pessimistic than younger once, implying that older customers have lower expectations which are easier met. Past quality, as well as past expectations, should have a positive effect on customer satisfaction (Anderson, Fornell, and Lehmann, 1994).
Oliver (1980) argues that customers’ expectations are influenced by the customer’s past experience with the product and brand as well as other symbolic elements of the company that sells the product. According to Fornell and Johnson (1993), there are more accurate expectations among competitive industries. Fornell (1992) argues that customers might be dissatisfied even when expectations are met. This would occur when the customers are forced to buy a product which they perceive as a low-quality product, and when their expectations of low quality are met. Anderson, Fornell, and Lehmann (1994) claim that as customer expectations increase it may have negative effect on customer satisfaction in the short-run, but a positive effect on customer satisfaction in the long-run. This positive effect on customer satisfaction in the long-run is due to the fact that customers evaluate the products with all past expectation and quality information in concern, as well as expectations of future quality. Therefore, firms trying to do a ‘comeback’ from bad reputation in the past should be aware of that it will take time before they will return since the customers evaluate their satisfaction in concern of past experiences (Anderson, Fornell, and Lehmann, 1994).

2.2.4 A Salesperson’s Impact, and Affections

Kapoor and Kulshrestha (2009) argue that products have different meaning to different people and that the role and behavior of the salesperson affects the customer’s emotions and attitude towards the product and the company as a whole. Since the salesperson represent the company and its products, the behavior of that salesperson influence customers’ perception of the company and its products. There is evidence, presented by companies and researchers showing that service quality have a positive effect on profit (Zeithaml 2000). Furthermore, Kapoor and Kulshrestha (2009) argue that it is the responsibility of the salesperson to present the products which fits the customers’ wants, needs, and expectations. Thus, the salesperson plays an important role in customer satisfaction. This is further strengthened by Oliver (1980), who states that expectations are influenced by frontline personnel and personal perceptions, and as stated before, customer satisfaction is by a large extent formed by expectations. Customer satisfaction might therefore be explained more by customers’ affections than by the features and quality of the product itself (Burns and Bowling, 2010). According to Oliver (1980), satisfaction is a result of customers’ expectations that are met or exceeded and dissatisfaction occurs when expectations are not met. In order to investigate customers’ affection towards a product one has to measure stable personal characteristics such as personal traits (Burns and Bowling, 2010).

Customers possess two different disposition which are discussed in the field of customer satisfaction; positive affection (PA) and negative affection (NA) (Burns and Bowling, 2010). Burns and Bowling (2010) explains that NA expresses to which degree the customers express an aversive mood, and PA explains to which extent the customers feel positively engaged, aroused and enthusiastic. Customer satisfaction can generally be explained with PA, but not with NA (Burns and Bowling, 2010). An individual’s disposition will affect their perceptions towards a product; an individual with high NA perceive a product more negatively regardless of the quality of the product (Burns and Bowling, 2010).
2.2.5 Impact on Market Share

According to Fornell (1992), one cannot assume that customer satisfaction is correlated with an increase in market share, and argues that it might even be the opposite case. Trying to increase market share is an offensive strategy whereas creating satisfied customers is a defensive strategy (Fornell, 1992). An offensive strategy is costly for the company that demand resources that might be needed to satisfy customers, and a defensive strategy makes it more costly for the competitor to gain market share (Fornell, 1992). This is further strengthened by Grigoroudis, Nikolopoulou, and Zopounidis (2008), who state that there is no clear relationship between company growth and customer satisfaction. However, Anderson, Fornell, and Lehmann (1994) argue that high customer satisfaction should increase market share in the long run. Furthermore, Matzler and Hinterhuber (1998) say that only a high level of customer satisfaction that has an impact on customer loyalty. They go on by saying that an increase in market share is direct linked to an increase in customer satisfaction and loyalty. It is believed that a high level of customer satisfaction and perceived quality have a positive effect on market share as a result of word-of-mouth of satisfied customers (see Figure 1) (Matzler and Hinterhuber, 1998). This is strengthened by Burns and Bowling (2010) who claim that there is a positive relationship between customer satisfaction and word-of-mouth behavior.

![Diagram](image)

**Figure 1**
(Matzler & Hinterhuber, 1998, p. 28)

However, one cannot be certain of a positive relationship between customer satisfaction and market share (Anderson, Fornell, and Lehmann, 1994). An increase in market share may lead to the possibility of economies of scale, which enables the company to charge lower prices. This in turn will lead to a short-term increase in customer satisfaction. However, economies of scale may have a negative effect on customer satisfaction in the long-run since it might lead to a lower quality of their products. Even though the level of customer satisfaction is decreasing, economic returns may be increasing. Anderson, Fornell, and Lehmann (1994) add that customer satisfaction and market share have a positive relationship in the long-run when it concerns undifferentiated industries with homogenous customers.


2.2.6 Handling Complaints

Companies can gain customer commitment and loyalty through an investment in customer complains handling (Tax, Brown, and Chandrashekaran 1998). Furthermore, Spreng, Harrell, and Mackoy (1995) state that customers are often dissatisfied with the way the companies handle their complaints. Smith and Bolton (1998) argue that a company’s handling of customer complaints is crucial since the company have to both re-establish the customer satisfaction and add force to restore customer’s loyalty, or the customer might turn to a competitor. This is strengthened by Fornell and Wernerfelt (1976) who state that companies should see complaints as a communication tool to enhance loyalty and increase customer satisfaction. Customer who experience a service failure and later receives positive complaints handling show stronger brand loyalty and an improved level of satisfaction. This would not have been the case if the customer had not experienced a failure recovery incident (Smith & Bolton 1998). This is further strengthened by Spreng et al., (1995) who state that in the way the companies handle complaints can give positive influences on the total satisfaction, even more than the original service would have generated. Fornell and Wernerfelt (1976) and Davidow (2003) argue that there is empirical evidence suggesting that effective complaint handling will create positive consumer word-of-mouth communications and enhance loyalty that will have a positive impact on customer retention. According to Davidow (2000), the customers will evaluate their response by the time it takes the organization to respond, and a fast response will affect satisfaction and have positive impact on word-of-mouth.

2.2.7 Customer Satisfaction in Home Building

It has become increasingly important for companies in the house building industry to be more customer-centric (Ozaki 2003). Sthen and Bergström, (2002) argue that companies on the Swedish building market have realized the importance of spending more attention on customer satisfaction as competition increase. To understand what customers want and what they are willing to pay for the product has been the critical issue for companies in order to understand their customer’s needs, in order to offer correct functional requirements. This is a new way of thinking for the house building industry that must see themselves as service organizations more than manufacturing firms (Ozaki 2003). According to Torbica and Stroh (2000), companies have to make sure that their customers are satisfied in order to have competitive advantage and to compete successfully in the long run. The extent of customer satisfaction comes from the ‘total offering’ and not only from a part of the offering. Due to this, all parts of the offering must be designed, produced and delivered as a total package of product and services (Torbica and Stroh, 2000). Furthermore, Ozaki (2003) says that many researchers emphasize the importance of a deeper understanding of customer’s requirements in order to satisfy their customers and attain a successful business. In order to understand the level of customers’ satisfaction it is necessary for companies to have a continuous and regular evaluation of customer satisfaction (Torbica and Stroh, 2000). This requires a high-quality communication flow within the company as well as between the company and customer (Ozaki, 2003). Ozaki (2003) finds three important issues regarding the focus of customers among house building companies in order to obtain a higher level of customer satisfaction; first, a highly efficient service policy. Second, to provide a customized house with features built upon a certain standard of quality, which will meet the customers’ expectations and needs. Third, to have an efficient information flow within the company, this enables customers’ requirements to reach the recipient.
2.2.8 Kano’s Model

There are two views on quality; must-be quality and attractive quality (Kondo, 2001). Kondo (2001) argues that attractive quality is often hidden, while must-be quality is obvious to the customer. Attractive quality is the most important when it comes to satisfy customers. It easily becomes surplus, and the quality that seems to be excessive to manufacturers but is demanded by the customers often leads to new technology (Kondo, 2001). Kondo (2001) claims that there is a relationship between must-be quality and attractive quality. He goes on by saying that a product that has received many complaints might still be more attractive to customers and sell more than a product that has received few complaints, simply because it is more appealing to customers. Without companies’ efforts to provide customers with attractive quality, customer satisfaction would not be attainable (Kondo, 2001). By fulfilling the required quality expected by the customers does not necessarily result in higher customer satisfaction (Matzler et al., 1996).

Matzler et al. (1996) use Kano’s model in order to detect what type of product requirements yields the higher customer satisfaction. Kano’s model distinguishes three types of requirements which influence customer satisfaction (Matzler et al., 1996).

These requirements are:

1. **Must-be requirements**: requirements that the customer takes for granted, if these are not fulfilled, the customer will be dissatisfied and are no longer interested in the product. However, if these requirements are fulfilled, the customer satisfaction will not increase (Matzler et al., 1996).

2. **One-dimensional requirements**: usually demanded by the customer. The customer satisfaction is proportional to the level of fulfillment of the requirements. That is – the higher the level of fulfillment, the higher customer satisfaction, and vice versa (Matzler et al., 1996).

3. **Attractive requirements**: Additional requirements that are not demanded or expected by the customer. If these are fulfilled, the customer satisfaction will be more than proportional. If these requirements are not fulfilled, the customer will not be dissatisfied (Matzler et al., 1996).

Matzler et al. (1996, p. 16) state that a company should: “[f]ulfill all must-be requirements, be competitive with regard to one-dimensional requirements and stand out from the rest as regards attractive requirements.”

The advantages for organizing the requirements according to Kano’s model are many; it helps companies since it indicates what product requirement has greatest impact on customer satisfaction and enables the company to focus on their product development regarding the most important issues (Matzler et al., 1996). Furthermore, it makes the process of customer-tailored solutions easier since the company already has an idea of what customers expect and want.
2.2.9 Two Different Approaches

Anderson, Fornell, and Lehmann (1994) recognize two different approaches to customer satisfaction; cumulative and transaction-specific. Transaction-specific customer satisfaction evaluates the satisfaction based on a specific purchase or occasion in the past. The cumulative approach makes a collective evaluation based on the total experience of the product or service over time. Anderson, Fornell, and Lehmann (1994) argue that this makes cumulative satisfaction more interesting than transaction-specific satisfaction since it can act as an indicator for a firm’s current and past performance. This research is going to focus on the cumulative satisfaction since the respondents are asked to take past experiences into consideration when answering the survey.

2.3 Definition of Customer Satisfaction

Taking the all information presented above into consideration, the authors define customer satisfaction as something that is highly dependent upon the fulfillment of customer’s expectations (Fornell, 1992; Herrmann, Huber, and Braunstein, 2000; Torbica and Stroh, 2000; Matzler et al., 1996; Johnson and Fornell, 2001). Customer’s expectations, in turn, originate from their past decision as well as their symbolic view of the company of which they are planning to make a purchase from (Oliver, 1980; Fornell, 1992). Furthermore, customer expectations are influenced by the company’s front-line personnel as their actions represent the whole company as well as its products (Oliver, 1980; Kapoor and Kulshreshtha, 2009).

High level of customer satisfaction is an indication of a healthy company (Grigoroudis, Nikolopoulou, and Zopounidis, 2008). The authors argue that companies should strive to obtain a high level customer satisfaction since it ultimately brings loyal customers that are less price-sensitive as they are willing to pay more for products that meets their expectations (Fornell, 1992; Matzler et al., 1996). This enables companies to focus more upon product development rather than marketing expenses since loyal customers are likely to bring the company a steady future cash flow (Matzler et al., 1996). Loyal customers will also contribute to an increase in market share in the long run, through a positive word-of-mouth behavior (Burns and Bowling, 2010; Anderson, Fornell, and Lehmann, 1994; Matzler and Hinterhuber, 1998).

2.4 Choice of Measurement

In order to investigate customer satisfaction, the authors use suitable theoretical frameworks that explain how to actually measure it. Theories that explain what the different elements of satisfaction are and to interpret how they affect customer satisfaction are also used.

Sweden was the first country to measure customer satisfaction on a national level. The measurement was called the Swedish Customer Satisfaction Barometer (SCSB), and was conducted annually beginning from 1989 (Fornell, 1992). The SCSB was intended to work as a complement to productivity measures, where productivity focuses on the quantity of output whereas SCSB focus on the quality aspect as observed by the buyer (Fornell, 1992). The intentions of the SCSB were to provide companies with industry comparisons, comparisons over time, predictions of long-term performance, and answers to specific questions.
According to Fornell (1992), researcher has not yet come to a consensus on a unified method to measure customer satisfaction. One can identify three aspects within all existing methods; general satisfaction, confirmation of expectations, and the distance from the customer’s hypothetical ideal product (Fornell, 1992).

2.4.1 Home-Buyers Satisfaction Model

![Home-buyers satisfaction model](image)

**Figure 2**
(Torbica and Stroh, 2000, p. 34)

Satisfied customers are essential in order for a company to compete successfully in the long run, and the company needs to measure its level of customer satisfaction continuously (Torbica and Stroh, 2000). Torbica and Stroh (2000) argue that construction companies mostly focus upon the product itself, neglecting the importance of the service surrounding it. It is of importance for the company to realize what feature of their product has greatest impact on customer satisfaction since a small correction of such feature might lead to high increase in the level of satisfaction. Torbica and Stroh (2000) present a model with the intention to detect important features concerning home buyer customer satisfaction.

The model (Figure 2) explains that product and service performance determine customer satisfaction, were product represent the actual house and the service represent the service provided before, after, and during the building process. Torbica and Stroh (2000) explain that the satisfaction of home-buyers is reached when the customer’s wants and needs of the product and service are fulfilled. Furthermore, the model express that the factor of home-buyer satisfaction goes beyond the product itself, and builds more upon the experiences around the purchase (Torbica and Stroh, 2000). This implies that it is not solely the house that is included in the price, it is also the whole experience surrounding the purchase. As seen in the model presented by Torbica and Stroh (2000), the product can be broken down to two parts; the house itself and the house design, were house design is a feature which determines house-buyer satisfaction to a large extent. Torbica and Stroh (2000) conclude that home-buyer satisfaction is defined by three parts: house design, the house itself, and the service surrounding.

This model is constructed in order to measure home-buyers’ satisfaction. Even though this model is useful in detecting customer satisfaction, the EPSI-model presented in the next section is more in-depth and goes into greater detail regarding the elements of customer satisfaction.
2.4.2 The EPSI-Model

The American Customer Satisfaction Index (ACSI) is a well-known and recognized measurement of customer satisfaction and product quality, as it relates the measurers of quality to consumer behavior (Kondo, 2001). Inspired by the Swedish Customer Satisfaction Barometer (SCSB) and the American Customer Satisfaction Index (ACSI), a unified measurement of customer satisfaction for Europe was developed (Eskildsen and Kristensen, 2008). The European Performance Satisfaction Index (EPSI) (Figure 3) was introduced in 2000 after a one-year long pilot study conducted in 11 European countries (EPSI Rating, 2010). The model is managed by the European Foundation for Quality Management (EFQM), the European Organization for Quality (EOQ), and the academic network International Foundation for Customer Focus (IFCF) (Eskildsen and Kristensen, 2008). Furthermore, a technical study supported by the European Commission was conducted prior to the pilot study. The intention of the EPSI model is to provide a result that is relevant, reliable, valid, and with financial implications for the future (EPSI Rating, 2010). The EPSI model explains perceived value, customer satisfaction, and customer loyalty, which are determined by image, expectation, product quality, and service quality. The circles in the figure represent the latent variables and the arrows represent the connections between the variables (EPSI Rating, 2010). Since all of these variables are defined as latent, they have to be explained by measurable variables in order to be able to investigate them sufficiently (Eskildsen and Kristensen, 2008). At least three measurement variables are given to each latent variable in order to receive more precise estimates. The EPSI framework uses standard questions in order for the results to be sufficient across different industries. In order for the results to be reliable and valid, it needs data from at least 250 customers and the data should be collected via telephone interviews. Moreover, the model is analyzed through Partial Least Squares (PLS), which is seen as superior to other techniques when regarding prediction on customer satisfaction and loyalty (Eskildsen and Kristensen, 2008).
When looking at this model, one can identify that customer satisfaction is affected by the perceived image, expectations, product quality, and service quality. This view is aligned with the researcher’s opinions that customer satisfaction is dependent on fulfilled expectations (Fornell, 1992; Herrmann, Huber and Braunstein, 2000; Torbica and Stroh, 2000; Matzler et al., 1996; Johnson and Fornell, 2001). The customer’s symbolic view of the company i.e. image, is also a part of customer satisfaction (Oliver, 1980), as well as front-line personnel, i.e. service, which plays an essential part in formation of customer’s attitude towards the company and its products (Oliver, 1980; Kapoor and Kulshrestha, 2009). Therefore, the authors claim that the EPSI-model is a valid model of measurement since it is aligned with the theories presented in previous sections.

2.5 Summary Measurement

Since the EPSI-model covers several important variables concerning customer satisfaction, the authors decided to use the EPSI-model as a foundation when investigating customer satisfaction. The Image variable is important since it influence customer satisfaction in terms of symbolic elements of a company, which in turn affect customers’ expectations (Oliver, 1980). Furthermore, customer satisfaction is dependent on the fulfillment of customers’ expectations (Fornell, 1992; Herrmann, Huber and Braunstein, 2000; Torbica and Stroh, 2000; Matzler et al., 1996; Johnson and Fornell, 2001), which justifies the variable Expectations.

The variable concerning Product Quality is also important, which is strengthened by Matzler and Hinterhuber (1998) who say that product features is important in order to obtain high levels of customer satisfaction as well as competitive advantage. The authors argue that the design of the house is also included in the Product Quality variable, which is shown in the Home-Buyer Satisfaction model (Figure 2). Torbica and Stroh (2000) argue that house design determines home-buyer satisfaction to a large extent, making it an important part of the Product Quality variable. Furthermore, construction companies should consider themselves more as a service organization (Ozaki, 2003), and focus more upon the experience surrounding the product since service is an important factor in customer satisfaction (Torbica and Stroh, 2000). This strengthens the fact to include the Service variable when measuring customer satisfaction.

An important factor within the Service variable is complaint and how the company handles complaints. If a customer experience a service failure, it is crucial for the company to handle customers’ complaints efficiently in order to retain the customers trust. If a company succeed in handling customers’ complaints in an efficient manner, it is likely that the level of customer satisfaction will increase even beyond the level the customer had before the failure occurred (Spreng et al., 1995). Therefore, the authors would like to emphasize that complaints and the handling of complaints constitutes an important part of the Service variable.
Moreover, Torbica and Stroh (2000) argue that companies should not consider the product and the service as two separate parts, and instead focus upon the ‘total offering’ in order to be able to give the customers a satisfactory experience throughout the construction process.

As shown in the EPSI-model, these four variables (Image, Expectations, Product Quality, and Service Quality) will affect customer satisfaction separately as well as the variable Perceived Value, which explains how valuable the customers perceive their purchase to be. The variable Perceived Value will, in turn, affect customer satisfaction as well.
3 Method

3.1 Research Approach

3.1.1 Quantitative Versus Qualitative Research

According to Hyde (2000), the traditional view upon quantitative research is that it examines data which are numbers, and the view upon qualitative research is that it examines data which are words. Brannick and Roche (1997) claim that this understanding of quantitative and qualitative research is incorrect since both of them are dealing with numbers and words. Instead, Brannick and Roche (1997) would like to define quantitative research as something that focus upon the link between several defined attributes concerning many cases, and qualitative research as something that focus on the link between contextualized attributes concerning relative few cases. The two types of research are similar in the way that both concern interplay between ideas and evidence.

The main difference between the two types of research is often the number of participants and how to analyze the answers from the research. In qualitative research, methods of in-depth interviews or focus groups are usually used (Sanchez, 2006). Compared to a quantitative research, the participants have the chance to express their attitudes, behavior and experiences (Sanchez, 2006). In quantitative research, methods such as questionnaires and structured interview can be used on a larger scale of people. The aim of this method is to generate statistics to analyze a larger population (Sanchez, 2006).

The authors decided to use quantitative research to investigate customer satisfaction among Trivselhus’ customers during a period of ten years. The most valid result would be reached if a large part of the population was investigated, something that would have been costly and time-consuming with qualitative research.

3.1.2 Inductive Versus Deductive Approach

Research can be divided into two different approaches; the deductive approach, and the inductive approach. The deductive approach begins with generalizations and is looking to discover if these generalizations applies to specific examples (Hyde, 2000). The inductive approach is in the opposite direction; it begins with observations of specific examples and seeks to establish generalizations (Hyde, 2000). Arguing from observations generally is an inductive way, while basing arguments on factors such as laws, rules and accepted principles generally is deductive (Burney, 2008). The deductive approach can be called the waterfall. It starts with a theory moving to hypothesis, observations to end up with a confirmation. The inductive approach can, on the other hand, be called the climbing hill. It starts up with observations moving to a pattern, tentative hypothesis to end up with a theory (Burney, 2008). Both quantitative and qualitative researchers use deductive as well as inductive approaches when conducting their research (Hyde, 2000).

The authors of this thesis use a deductive approach. The thesis is moving from existing theories in order to make hypotheses, and through observations analyze customer satisfaction among Trivselhus customers.
3.2 Collecting Data

3.2.1 Primary and Secondary Data

A researcher can opt for collecting data from secondary sources or from primary sources. Primary data is data collected for this specific study. Whereas secondary data is data collected by others for the use of their specific purpose (Saunders, Lewis, and Thornhill, 2009). Due to the nature of this study where the intention is to investigate a specific company’s customer satisfaction, the authors have decided to collect primary data in form of a telephone survey.

Secondary data in terms of company information and background history has also been used in this research in order to get a deeper understanding about the company.

3.2.2 Sampling

The authors were supplied with an Excel file from Trivselhus that contained 4357 entries. All that information represents most of the customers that the company had during the time between 2000 and 2010. The entries includes information about: agreement number, agreement date, delivery date, name, social security number, phone number at work, cell phone number, home telephone number, home address, delivery address, delivery town, and deliver county.

Firstly, the authors decided to delete all company customers and only include private persons in the sampling. The total number of customers went down to 3955. The reason to exclude company customer is that the authors considered the houses build by companies to be of another character than private houses.

Secondly, all entries were divided up in to time periods. The authors decided to divide it up in periods of two years. This because most of these houses takes on average 1.5 to 2 years to build from the first contact with Trivselhus until the house is finished (A. Ek, personal communication, 2010-02-23). Due to this information that was given by the company, it was decided that this decision would not alter the overall and general conclusion of this research.

Following is the number and percentage of houses represented from each time period:

2000 – 2001: 343 ≈ 9.5 %
2002 – 2003: 786 ≈ 19.9 %
2004 – 2005: 1064 ≈ 26.9 %
2006 – 2007: 1081 ≈ 27.3 %
2008 – 2009: 638 ≈ 16.1 %

Thirdly, as further explained in 3.2.3, the list was divided up according to the three different climate zones that Sweden has (Johansson, 2009). In Climate Zone 3 one could find the majority of houses produced by Trivselhus during the last ten years. Following are the number and percentage of houses represented from each climate zone:
Climate Zone 1: 53 ≈ 1.3 %
Climate Zone 2: 265 ≈ 6.7 %
Climate Zone 3: 3599 ≈ 92 %

Due to the low frequency of houses that have been built in Climate Zones 1 and 2, the authors decided upon a ratio that in each time period there should be at least one participant from Climate Zone 1 and two from Climate Zone 2. In some cases, where the randomly selected people in each time period did not fulfill these criteria’s it was manually taken care of that the criteria’s of the climate zones was fulfilled in each time period. The authors still argue that the final sample is fully random, due to the total number of customers and the low frequency of houses from Climate Zone 1 and 2.

Fourthly, as the total sample was divided up in time periods and sorted by climate zone, every entry was given a random number by using the =Rand() function in Microsoft Office Excel 2007. To make sure that the sample will correlate with the central distribution theorem and to be normally distributed, a sample size of 30 from each time period was collected, since 30 is the rule used to be able to statistically analyze the data set (Aczel & Sounderpandian, 2009).

Sorted by their random number given by Excel, the list was used until 30 participants from each group were reached. Due to the five periods, each including 30 people, the final number of participants that will take part in the research will be 150 people.

If, for some reason, the authors have to replace some of these randomly selected individuals, it is of importance to find as similar sample replacement as possible in order to still capture the randomness of the original sample. The information about the individuals that is known to the authors is the location of where the house is built and at what time it was constructed. This means that the closest sample replacement to get is in the same year and in the same climate zone.

3.2.3 Climate Zones

“The National Board of Housing, Building and Planning – Boverket – is the central government authority for town and country planning, management of land and water resources, building and housing” (Schultz, 2009).

When making the sampling for the research, the authors used the three different climate zones that Boverket has established (Johansson, 2009). Since Boverket is an official central government authority it is a credible source and though there are some other definitions on how Sweden’s climate zones could be divided the decision to take use of Boverket definition was made.

Boverket’s own definition and arguments to why there are different climate zones in Sweden follows:

“Climate Zones have been introduced to allow for the setting of more suited demands to the building's energy requirements with respect to temperature conditions at the site. The reason is the different climatic conditions that exist in our elongated country. Climatic Zones go from North to South I, II and III respectively. Three climate zones are found to be sufficient since they are covering the minimum requirements of society” (Johansson, 2009).
The zones are divided up as followed and as pictured on the map:

**Climate Zone 1**: Norrbottens, Västerbottens and Jämtlands County.

**Climate Zone 2**: Västernorrlands, Gävleborgs, Dalarnas and Värmlands County.

**Climate Zone 3**: Västra Götalands, Jönköpings, Kronobergs, Kalmar, Östergötlands, Södermanlands, Örebro, Västmanlands, Stockholms, Uppsala, Skåne, Hallands, Blekinge and Gotlands County.

(Saint-Gobain Isover AB, 2010)

Since Trivselhus is a company that mainly operates in the southern parts of Sweden the authors found, as presented in the sampling section 3.2.2, that around 90% of all the houses that Trivselhus have construct during the last ten years is included in Climate Zone 3. However, since Sweden has such different climates, especially if one would compare directly from north to south, the authors found it important to include this in their research. Especially when it comes to the research question that concerns the environment and energy efficiency the answers and findings from the research could differ due to the geographical climate differences that Sweden offers.
3.3 Telephone Survey

For this research, the authors decided upon using the method of conducting telephone interviews. Conducting telephone interviews and marketing researches through the use of telephone is something that in the past decades have grown tremendously (Gillham, 2008). There are, however, some aspects that one has to be aware of before deciding to use this method. According to Gillham (2008), some of the negative aspects of conducting interviews or marketing research by telephone can be summarized by:

1. A general dislike or distance towards ‘the factor of irritation’ and undesirable communication
2. There is no use of ‘none verbal elements’ such as the ability to read body language
3. The interviews can only last under a limited time

Another potential problem or issue when using this method is the ethical problem and the invasion of privacy. The ethical problem is foremost present in face-to-face interviews and occurs when the interviewer and the interviewee affect each other as a result of ethical differences (Bryman and Bell, 2007). Even though ethical problems could be a potential bias in telephone interviews, it is significantly less present than in face-to-face interviews (Bryman and Bell, 2007).

The managers at Trivselhus have provided the authors with contact information and given the authors the right to use this information in order to contact their old customers. The authors have also been given the right to use the name Trivselhus when conducting the research.

When calling people, one always faces the problem of calling at ‘a bad time’ or facing ‘the factor of irritation’. There are a couple of ways of managing these issues in order to minimizing them. Gillham (2008) suggests that before conducting telephone interviews, it might be appropriate to either send out a presentation letter where the main points of the research are presented, or in advance make shorter preparation calls where a time can be booked. However, due to the fairly short and structured form of this research, the authors have decided to use neither of those preparation methods. The decision was based on the time and costs involved in using those preparation methods. Sending out a presentation letter would be both costly money wise, and the authors may face the issue that the planned sampled people might no longer be living at the addresses that is provided on the information list. The reason why the authors have decided to not make preparation calls is simply because it might end up requiring as much time as the intended average time of the whole interview. There is also a possibility of receiving less spontaneous responses if the participants are too well prepared (Gillham, 2008).

Due to the nature of this study, the inability to read body language when conducting the research via telephone is less of a problem since the authors are focusing on a quantitative study where the participants will answer giving a number ranging from one to six. However, the authors do not have the ability to detect whether the participant understand the question correctly, which could be a problem if it turns out that the different participants answer the questions based on different grounds (Bryman and Bell, 2007). Furthermore, the authors are well aware of the fact that each telephone interview can only last a short period of time and have taking this in to consideration when developing the questionnaire.
In the same way as the negative aspects, Gillham (2008) has summarized the positive aspects of making telephone interviews as following:

1. It can combine the advantages of sample surveys and deeper interviews
2. Have some quality aspects in common with the face-to-face interview
3. No geographical limits
4. Different degrees of interview structures are possible

As Gillham (2008) mentions, telephone interviews offers the possibility to combine positive aspects of sample surveys and deeper interviews, which makes it possible to conduct deeper interviews to a lower cost than face-to-face interviews. Furthermore, telephone interviews have some aspects in common with face-to-face interviews where it makes it easier to detect emphasis regarding different questions and understand the participant’s feelings and attitudes, compared to written surveys such as e-mail surveys (Gillham, 2008). Through the telephone, one has the ability to effectively reach a random sample of people from different geographical areas

The only real option instead of conducting telephone interviews, is to send out e-mails. However, there are two main negative aspects of this method, where the main problem is simply the contact information. Since this research include old customers of Trivselhus ten years back, and from the first couple of years the contact information is simply not sufficient enough. The second negative aspect is that one can only assume that around 20% of the people who are asked will answer the questionnaire (Neuman, 2005 cited in Saunders et al. 2009). This would be a problem since there were a limited number of customers during the first years in the contact information received from Trivselhus. The authors might therefore end up with not enough participants in order to complete the survey. Telephone interviews, on the other hand, have a response rate around 70 percent (Hox and De Leeuw, 1994; Yu and Cooper, 1983). Furthermore, if the interviewer expresses confidence and engagement during the persuasion of participation, the response rate might increase even more (Durrant, Groves, Staetsky, and Steele, 2010).

To conclude, the authors made the choice to conduct their research by using the method of telephone interviews mainly due to limited contact information and a high response rate. Another reason is that it enables the authors to have greater control of the pace of the research. As mentioned above, some of the face-to-face advantages such as the detection of attitudes and feelings can also be used when asking people by telephone which can help the authors to more thoroughly answer their research questions and analyze their findings.

3.4 Questionnaire Design

The telephone survey was constructed as an interviewer-administered questionnaire with rating and closed end questions (Saunders et al., 2009). Many researchers argue that when conducting a survey, oral interviews is the best method due to the high response rate and that the interviewer has a chance to explain possible confusions (Brannick and Roche, 1997; Matzler et al., 1996; Seimiatycki, 1979).
The telephone survey was conducted during evenings and afternoons when it was assumed that the response rate would be highest. To prevent misunderstandings the authors informed the participants about the purpose of the survey. The survey questions existed of category questions and numeric rating questions with an equal distance with a rating scale from 1-6 (Saunders et al., 2009). The scale was constructed in a way that number 1 represent bad/extremely dissatisfied, and 6 represent the highest value excellent/extremely satisfied, this was told to the participants before the questionnaire started. The scale from 1 to 6 is used in order to make the participants to take a stand regarding the questions asked.

The questionnaire was constructed by partially using an earlier survey performed by the company IMA Marknadsutveckling AB on assignment of Trivselhus. This was done to obtain appropriate questions regarding housing construction. The EPSI model was used in order to incorporate the concept of customer satisfaction in to the questionnaire. Questions regarding Energy were added to include energy efficiency and environmental aspects. Furthermore, the Home-Buyer Satisfaction model (Figure 2) was also included when constructing the questions.

3.4.1 Introduction Questions

As an introduction, the survey began with gathering general information about whether the participant currently live in their Trivselhus-house, if this was the first time they built a house, how many people lives in the house today, and through whatever media they first came into contact with Trivselhus.

1. Is it correct that you live in a Trivselhus?
2. Was it the first time that you did build a house?
3. How many live in the house today?
4. Through which media did you first come in contact with Trivselhus?

3.4.2 Image

In the Image category, the authors wanted to find out how Trivselhus customers perceived the company before the purchase of their house. Oliver (1980) says that customers’ expectations are influenced by their symbolic view of the company. Furthermore, Fornell (1992) and Herrmann, Huber, and Braunstein (2000) argue that satisfaction is achieved when the company lives up to the customers’ expectations. And the customers’ expectation depends upon how they perceive the quality of the company to be.

5. To which degree did you perceive Trivselhus trustworthiness before the purchase?
6. To which degree did you perceive Trivselhus competence before the purchase?
7. How affordable did you find Trivselhus to be before the purchase?
3.4.3 Expectations

For a customer to be satisfied it requires that expectations are met by the company (Fornell, 1992; Herrmann, Huber, and Braunstein, 2000; Torbica and Stroh, 2000; Matzler et al., 1996; Jonsson and Fornell, 2001). As a result of this, the authors have chosen the following questions in order to find out what level of expectation the customer had prior to the purchase. It is important for the company to know what customers expect in order to fulfill their expectations.

8. What were your expectations on Trivselhus service?
9. What were your expectations on Trivselhus flexibility?
10. What were your expectations on your house regarding energy consumption and environmental friendliness?

3.4.4 Product Quality

Product Quality deals with how satisfied the customer is with the end-product and the construction process. A high rating from the participants indicate that the customer is satisfied with the product i.e. expectations are met. The authors have chosen questions about Build Quality, Design, and Material Quality. Matzler and Hinterhuber (1998) say that unique product features is important in order to reach a high level of satisfaction, which in turn place a part in obtaining a sustainable competitive advantage. The question regarding how customers value the final product in relation to the sum they have invested was added since the authors wanted to see how the customers perceive the product in relation to the money spent.

11. How satisfied are you with looks and design of your house?
12. How satisfied are you with the materials and its quality?
13. How satisfied are you with the building quality and the house as a whole?
14. How satisfied are you with options and flexibility during the shaping of your house?
15. How satisfied are you with options and flexibility during the construction of your house?
16. How do you value the final product in relation to the sum that you have invested?

3.4.5 Energy

The category Energy was added by the authors as the investigation will include how energy efficiency and environmental friendliness affect customer satisfaction geographically. The questions were constructed regarding how well Trivselhus succeeded to fulfill their customers’ expectations regarding energy.

17. How satisfied are you with the energy consumption of your house?
18. How environmentally conscious do you find yourself to be today?
19. How environmentally conscious did you find yourself to be when you built your house?

20. To which degree did environmental friendliness and energy consumption play a part during the construction of your house?

21. Did Trivselhus supply any special information or offers concerning environmental friendliness and energy consumption?

22. How big of a role would environmental friendliness and energy consumption played if you had built your house today?

23. How willing are you to pay extra for these attributes?

24. Are you aware of that you have energy efficient components such as doors and windows in your house today?

25. If Yes – was it a conscious choice or a proposal given by Trivselhus?

26. If No – In the eventuality of changing these components would you choose a more energy efficient option?

27. If Yes – where would you go to purchase these components?

### 3.4.6 Service Quality

According to Oliver (1980) and Kapoor & Kulshrestha (2009), customer satisfaction is influenced by frontline personnel due to that their behavior represents the whole organization and the product. Torbica and Stroh (2000) argue that it is not enough to focus only on the product, instead the focus should be on the total offering including the service surrounding the product. The service part is relevant due to the fact that the house constructing company must put more effort in to their service. The questions were constructed with concern to how well Trivselhus fulfilled the customer’s expectations regarding service quality.

28. How satisfied are you with availability to obtain information before agreement in form of catalogs and webpage?

29. How satisfied are you with availability to get into contact with the company and obtain information before the start of the construction?

30. How satisfied are you with information and contact during the construction?

31. How satisfied are you with the treatment and contact with your responsible salesperson?

32. How satisfied are you with the coordination and communication between Trivselhus, entrepreneurs and you as the customer?

### 3.4.7 Complaints

According to Spreng et al. (1995), companies can influence and increase customer satisfaction through an effective handling of complaints. The questions regarding complaints and handling complaints is added because it is interesting to see how it impact customer satisfaction.
33. Have you had any problems with your house?
34. If Yes – Did you make any complains?
35. If Yes – How satisfied are you with Trivselhus handling of your complaints?

3.4.8 Word-of-Mouth
Trivselhus reach many of their customers through word-of-mouth, which means that loyalty is something that Trivselhus is dependent on (A. Ek, personal communication, 2010-02-23). Researchers have found a positive relationship between word-of-mouth and increased market share (Matzler & Hinterhuber, 1998). Burns & Bowling (2010) argue that there is a positive relationship between word-of-mouth and customer satisfaction.

36. Have you or could you recommend Trivselhus to others?
37. If Yes – Do you know if anyone after that has built a Trivselhus?

3.4.9 Total Satisfaction
This question was included since the authors wanted to find how satisfied Trivselhus’ customers were with the ‘total offering’, including all aspects of the experience before, during, and after the purchase.

38. How satisfied are you totally with Trivselhus as a house provider when all the aspects are weight in?

3.5 Data Analysis
This section will present the different types of statistical analysis methods. They vary from descriptive statistics to multiple regression models. Concerns regarding skewness and significance level are also explained. Microsoft Office Excel 2007 and Statistical Package for Social Science (SPSS) are the tools used in order to analyze the data.

3.5.1 Descriptive Statistics
Based on this quantitative research, the data will be statistically analyzed using descriptive statistics. The data gathered from the research was put in an Excel sheet for the purpose of this analysis. Some of the questions that were asked were in from of Yes or No. In all of those questions Yes were giving the number 1 and No 0, this was done in order to be able to draw statistical conclusions on the answers. The descriptive analysis gives information about everything from central tendency, to standard deviations and variance, which later can be used to analyze the data and draw conclusions on the problem at hand. Since the authors are only interested in finding the average value from each question, it is only the central tendency values that are used when analyzing the data.

3.5.2 Skewness
When measuring central tendency, one can choose from three different measures; mode, mean, and median (Acelz and Sounderpandian, 2009). If a data set is symmetrically distributed, all the three central tendency measures are the same. However, if the distribution is leaning more towards the right than to the left, or vice versa, the distribution is skewed (Acelz and Sounderpandian, 2009). For a skewed distribution, median is the central tendency to use since it is least affected by the extreme values in the data set.
3.5.3 Multiple Regression Model

Due to limitations in Microsoft Office Excel 2007, the authors chose to use SPSS when performing the regression analysis.

Regression analysis is useful when it is of interest to understand the relationship between a dependent variable and an independent variable (Aczel and Sounderpandian, 2009). However, it could be the case that several independent variables contain information that can explain the dependent variable. In such a case the model is called a ‘Multiple regression model’. A multiple regression model is used in order to find how a dependent variable can be explained by a combination of other independent variables (Aczel and Sounderpandian, 2009). Logically, by using multiple independent variables it will result in more precise predictions of the dependent variable. This is true to a certain degree. As more and more independent variables is included in the model, one get a perfect fit which leaves no degrees of freedom for error and this might end up allowing no chance of variation (Aczel and Sounderpandian, 2009). This problem and the solution are further discussed in the section below.

3.5.4 Multiple Coefficient of Determination

In order to understand what affect the independent variables in a multiple regression has on the dependent variable; a multiple coefficient of determination is used. This coefficient is $R^2$ and it measures the proportion of the variation of the dependent variable that is caused by the combination of independent variables (Aczel and Sounderpandian, 2009). In other words, $R^2$ measures how good the fit is between the regression model and the data. However, there is limitations regarding $R^2$; it will continue to increase along with an increase in independent variables which will result in poor predictions as it appears to be a good fit between the model and the data. As mentioned in the previous section, this leaves no room for variance. Therefore, it is better to use adjusted $R^2$ which is corrected for degrees of freedom and gives a more reliable indication, solving the problem of inadequate variance (Aczel and Sounderpandian, 2009).

3.5.5 Significance Level

Significance level is denoted $\alpha$ and is used in order to reject different hypothesis, and whenever the p-value falls below the selected $\alpha$, the hypothesis is rejected (Aczel and Sounderpandian, 2009). However, there is always a risk to reject a true hypothesis, which is known as a ‘type I error’. As long as one follow the policy of always using a significance level, it is definite that the maximum probability of ‘type I error’ is no more than $\alpha$ (Aczel and Sounderpandian, 2009). Furthermore, a ‘type II error’ occurs when a false hypothesis is accepted, which is more likely when higher significance level is used. Setting the significance level will therefore affect the probability of both type I and II errors, and the problem is to find a compromise between the probabilities of the two different errors. The standard values to use for $\alpha$ is 0.1, 0.05, and 0.01 (Aczel and Sounderpandian, 2009). There is also a possibility to mathematically calculate the risk of the two errors and find the ultimate compromise, but that is impractical and almost impossible to do (Aczel and Sounderpandian, 2009).

Intuitively, one could argue that a significance level of 95% is the most reasonable to choose since it is the middle choice of the three standard values, it is also the level used in this research.
3.6 Method Problem

In this section, the authors discuss problems that have arisen during the research process.

Problems that can arise within telephone interviews are that the participants might misinterpret the questions. In order to prevent misinterpretations from the participant, the authors can help and explain potential problems. Furthermore, problems within telephone interviews are that the participants can be in a surrounding which affects their answers. In the case that the participants seemed to be busy, the authors suggested to return at a more appropriate time to conduct the survey.

Another problem that can arise is the misunderstanding of the participants’ interpretation of the grading system of the questionnaire. A 4 in the rating scale can mean that the participant is extremely satisfied, while for others it just means they are satisfied. In order to eliminate misinterpretation of the system, the authors explained the grading system. Even after the author’s explanation, it should not be taken for granted that the participants will remember the explanations due to the length and the structure of the questionnaire. This because of the questions sometimes goes from being a rating question to move over to Yes or No questions. The choice of having a scale of 1 to 6 was due to the fact that the authors wanted the participants to take a position regarding the questions asked.
4 Empirical Findings

4.1 Central Tendency Values

In this section, the different central tendency values will be presented. The values are created by using the descriptive statistics function in Microsoft Office Excel 2007. This section is divided up after the different types of questions that were asked in the questionnaire. They are divided up in the following categories: Introduction Questions, Image, Expectations, Product Quality, Energy, Service Quality, Complaints, Word-of-Mouth and Total Satisfaction. Each question is measured seven times, first following the 5 different time periods that were included in the research. Also together with one special group and one total group where all the answers for all periods were included, independent on from which time period.

The Special Group -1 is compiled by customers who had made some kind of complaint to Trivselhus. It was decided to specify this group in order to see the central tendency mainly on the question about handling complaints and to be able to compare the total satisfaction value from this group with the total group.

As mentioned, the different time periods include 30 customers each and thus the total group includes 150 customers. The Special Group -1 includes the 52 customers from the research that have made some kind of complaints.

The values presented are, depending on the type of question, either mean, median, or mode. Mode is the type of central tendency that is used for qualitative questions. Mean and median are used for the quantitative questions. Depending on the skewness calculated by the descriptive statistics together with the count of each group determines which of the two to use.

The questions in this section have been abridged. However, they have the same numbers as in the questioner design (section 4.3). To see the full question and the abridged versions at the different parts in the thesis see Appendix 3: Question Abridgements.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Live in Trivselhus?</td>
<td>1 =Yes</td>
<td>1 =Yes</td>
<td>1 =Yes</td>
<td>1 =Yes</td>
<td>1 =Yes</td>
<td>1 =Yes</td>
<td>1 =Yes</td>
</tr>
<tr>
<td>2. First time build?</td>
<td>1 =Yes</td>
<td>1 =Yes</td>
<td>1 =Yes</td>
<td>1 =Yes</td>
<td>1 =Yes</td>
<td>1 =Yes</td>
<td>1 =Yes</td>
</tr>
<tr>
<td>4. Which media, first time contact?</td>
<td>10 =Other</td>
<td>7 =Internet</td>
<td>7 =Internet</td>
<td>7 =Internet</td>
<td>3 = Trade Magazine</td>
<td>7 =Internet</td>
<td>7 =Internet</td>
</tr>
</tbody>
</table>

Qualitative questions and optional meanings of the numbers
Q1: 0=No, 1=Yes
The findings from the first couple of introduction questions do not reveal any information that is of importance for this research. Most people that were involved in this research did still live in their Trivselhus-house and were first-time builders. The total median of how many people that live in the houses is 4. The most frequent media of first time contact were overall the internet. Interesting though is the two outliers 2000-2001 and 2008-2009. During the first time period most people had some other alternative to the 9 different that were given, or they could not remember or specify through which media they made the first time contact. During the last period, 2008-2009, trade magazines were the most frequent answer.

### 4.1.2 Image

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5. Degree of Trustworthiness?</td>
<td>4.97</td>
<td>5</td>
<td>4.97</td>
<td>5</td>
<td>5.2</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>6. Degree of Competence?</td>
<td>5.1</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>7. How Affordable?</td>
<td>4.53</td>
<td>4.53</td>
<td>4.1</td>
<td>4</td>
<td>4.53</td>
<td>4.08</td>
<td>4.34</td>
</tr>
</tbody>
</table>

The questions regarding the Image of the company show a constant impression over all the presented groups. Question 5 and 6 have no real outliers and have a total median of 5. This indicates that the Image gives a picture of a reliable, trustworthy and competent company. However, on question 7 the overall score from the individual groups and the total are lower. With a ranging score from 4 to 4.53 it indicate that the customers from the beginning had an image of a more high-end company with more expensive products, that in comparison to their competition was not as affordable.

### 4.1.3 Expectations

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>8. Expectations Service?</td>
<td>5.17</td>
<td>5.50</td>
<td>5.40</td>
<td>5.13</td>
<td>6</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>9. Expectations Flexibility?</td>
<td>5</td>
<td>6</td>
<td>5.03</td>
<td>5.3</td>
<td>6</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>10. Expectations Energy?</td>
<td>4.17</td>
<td>5</td>
<td>4.57</td>
<td>4.67</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>
Overall, the expectations of the company’s service, flexibility and ability to produce energy efficient houses were very high. In some way, these questions could be seen as rhetorical. When committing to such a big investment as a house, it could be seen as obvious that the expectations are very high. Question 9 regarding flexibility, which have a high score, indicates that flexibility offer by Trivselhus is highly anticipated by their customers. Expectations about the energy consumption and overall environmentally friendliness, is over the years slightly lower, however, one can see that there is an increasing trend.

### 4.1.4 Product Quality

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>11. Satisfied, Looks Design?</td>
<td>5.33</td>
<td>5</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>12. Satisfied, Material Quality?</td>
<td>4.97</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5.23</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>13. Satisfied, Build Quality?</td>
<td>4.97</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>14. Satisfied, Options &amp; Flexibility Shaping?</td>
<td>5.33</td>
<td>4.77</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>15. Satisfied, Options &amp; Flexibility Construction?</td>
<td>4.57</td>
<td>4.53</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>3.90</td>
<td>4.5</td>
</tr>
<tr>
<td>16. Value Final Product/Investment?</td>
<td>5.10</td>
<td>5</td>
<td>4.83</td>
<td>5</td>
<td>4.8</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Questions 11 to 13 cover how satisfied the customers are with the product itself and its quality. The overall score is very high. There are no real outliers, all the scores are quite constant with the only exception of that the look and design question have the total median of the highest value, 6.

Question 14 and 15 show that most of the customers are very happy with the options and flexibility offered by the company. These actual values indicate that Trivselhus have lived up to the expectations that the customers had regarding this matter. The only outlier on question 15 is Special Group -1. Since this group only contains customers that had problems and have made a complaint on something on their houses, this number could indicate that the options and flexibility during the construction was part of the problem.

Question 16 indicates that the customers value their final product high, compared to the financial means that were invested. Compared to question 7, the total score is the same, however, on a year by year comparison, the score on question 16 is higher. This could indicate that the customer in the end got more out of their money compared to the image that they had before the start. Special Group -1 has, however, a score below average, which could be explained by that they have been having problems with their houses and does not find that they got the product they paid for.
## 4.1.5 Energy

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>18. Environmentally Conscious, Today?</td>
<td>4.43</td>
<td>4.3</td>
<td>5</td>
<td>4</td>
<td>4.33</td>
<td>4.25</td>
<td>4</td>
</tr>
<tr>
<td>19. Environmentally Conscious, Build?</td>
<td>3.27</td>
<td>3.53</td>
<td>3.33</td>
<td>4</td>
<td>3.83</td>
<td>3.52</td>
<td>3.54</td>
</tr>
<tr>
<td>20. Degree of Environmental Conscious, Construction?</td>
<td>2.97</td>
<td>3.4</td>
<td>3.33</td>
<td>4</td>
<td>3.83</td>
<td>3.46</td>
<td>3.39</td>
</tr>
<tr>
<td>21. Trivselhus Special Energy Info?</td>
<td>0 =No</td>
<td>0 =No</td>
<td>0 =No</td>
<td>0 =No</td>
<td>0 =No</td>
<td>0 =No</td>
<td>0 =No</td>
</tr>
<tr>
<td>22. Degree, Energy Roll Today?</td>
<td>2.8</td>
<td>4.83</td>
<td>5</td>
<td>4.6</td>
<td>5</td>
<td>4.79</td>
<td>5</td>
</tr>
<tr>
<td>23. Willingness to Pay Extra?</td>
<td>4.07</td>
<td>4.2</td>
<td>4</td>
<td>4.23</td>
<td>3.93</td>
<td>4.08</td>
<td>4</td>
</tr>
<tr>
<td>24. Aware of Energy Components in House?</td>
<td>1 =Yes</td>
<td>1 =Yes</td>
<td>1 =Yes</td>
<td>1 =Yes</td>
<td>1 =Yes</td>
<td>1 =Yes</td>
<td>1 =Yes</td>
</tr>
<tr>
<td>26. (If No, Q. 24) Change to Energy Components today?</td>
<td>0 =No/No Answer</td>
<td>0 =No/No Answer</td>
<td>0 =No/No Answer</td>
<td>0 =No/No Answer</td>
<td>0 =No/No Answer</td>
<td>0 =No/No Answer</td>
<td>0 =No/No Answer</td>
</tr>
<tr>
<td>27. (If Yes, Q. 26) Were Would You Go?</td>
<td>0 =No/No Answer</td>
<td>0 =No/No Answer</td>
<td>0 =No/No Answer</td>
<td>0 =No/No Answer</td>
<td>0 =No/No Answer</td>
<td>0 =No/No Answer</td>
<td>0 =No/No Answer</td>
</tr>
</tbody>
</table>

Qualitative questions and optional meanings of the numbers
Q21: 0=No, 1=Yes
Q24: 0=No, 1=Yes
Q25: 1=Yes Conscious Choice, 2=No Given By Trivselhus
Q26: 0=No/No Answer, 1=Yes
Q27: 0=No/No Answer, 1=Contact Product Supplier, 2=Collect Offers, 3=Visiting Building Suppliers, 4=Contact Trivselhus

Question 17 covers the satisfaction of the energy consumption of the house. Compared to many of the previous questions, the overall score is lower with a median of 4. This indicates that there is still room for improvement on this subject.
Question 18 and 19 are personal questions where the participants are supposed to rank their own environmental consciousness today, as well as during the time that the house was built. Overall, customers that are building a Trivselhus-house are quite environmentally conscious with an overall median of 4. One interesting fact from the research is that the central tendency value is lower during the time that the house was built. This was true in all the different groups, even the latest group that did build their houses quite recently. This could indicate that the move and building process of a house have made the people involved in this research more environmentally conscious.

On question 19 one can see that the overall consideration of environmental friendliness and energy consumption during the building process was low. With a total mean of 3.39 it is one of the lowest scores from the whole research. Question 21 gives a mutual answer from all groups. This question is of qualitative character, and the 0 in this case equals the answer No. This means that most of the participants did not feel that they were given any special alternatives or information about environmental friendly materials and energy consumption.

On the question regarding how big of a role energy considerations will play if the participants built their house today, the score is quite constant around the value 5. However, there is one clear outlier in form of the first group, 2000-2001. There are no clear explanations to why this is the case and what factors that could contribute to this answer. However, on the following question about how willing the participants are to pay extra for these attributes, the total median is 4 without any real outliers. This indicates that there still is a hesitation when it comes to pay extra for energy efficient attributes. Even though it might lower their energy expenses in the long run.

Questions 24 and 25 have a clear trend where most of the customers were aware of that they had energy efficient components in their houses. It was also clear that it was a suggestion made by Trivselhus, due to that the energy efficient components was usually incorporated in the standard equipment. Questions 26 and 27 are depending on 24 and 25 and since most of the customers answer Yes on question 24 there were very few people who actually answered question 26 and 27.

### 4.1.6 Service Quality

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>28. Satisfied, Info Catalogs &amp; Webpage?</td>
<td>4.8</td>
<td>4.27</td>
<td>4.7</td>
<td>5</td>
<td>5</td>
<td>4.15</td>
<td>5</td>
</tr>
<tr>
<td>29. Satisfied, Info Before?</td>
<td>5</td>
<td>4.57</td>
<td>4.63</td>
<td>5</td>
<td>5</td>
<td>4.44</td>
<td>5</td>
</tr>
<tr>
<td>30. Satisfied, Info Construction?</td>
<td>4.3</td>
<td>4.03</td>
<td>4</td>
<td>4.13</td>
<td>4.2</td>
<td>3.5</td>
<td>4</td>
</tr>
<tr>
<td>31. Satisfied Responsible Salesperson?</td>
<td>5.1</td>
<td>3.67</td>
<td>5</td>
<td>5</td>
<td>6</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>
The satisfaction level of the catalogs and webpage that Trivselhus supplies show an overall high score. There are two minor outliers, one of them being 2002-2003. However, there are no extra comments or other information that can explain why the score is lower during that time period.

The questions from 29 to 31 handle the personal communication and the responsible salespersons involved. The satisfaction level about the information before the start of the construction together with the responsible salesperson is equal to a total median of 5. The responsible salespersons do, however, score a slightly higher over the years. Interestingly, the satisfaction level of the information during the construction is lower. This fact is supported by the many different comments that were given and can be seen in Appendix, Questioner Comments. Those comments also support the lower score on question 32 about how well the coordination and communication between Trivselhus, the entrepreneurs, and the customer were working.

4.1.7 Complaints

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>33. Any Problems?</td>
<td>0 =No</td>
<td>1 =Yes</td>
<td>1 =Yes</td>
<td>1 =Yes</td>
<td>0 =No</td>
<td>1 =Yes</td>
<td>0 =No</td>
</tr>
<tr>
<td>34. Complaints?</td>
<td>0 =No</td>
<td>0 =No</td>
<td>0 =No</td>
<td>1 =Yes</td>
<td>0 =No</td>
<td>1 =Yes</td>
<td>0 =No</td>
</tr>
<tr>
<td>35. Handling of Complaints?</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>

Qualitative questions and optional meanings of the numbers
Q33: 0=No, 1=Yes
Q34: 0=No, 1=Yes

Totally, the level of problems and complaints are quite low. However, it is interesting to see that during three of the time periods more than 50 % of the participant has had some kind of problem. Only one of the periods has more than 50 % complaints, excluding Special Group - 1. Special Group - 1 group is as explained only including people that made complaints. The interesting number from that group is the handling complaints, which has the value of 2. Still at a scale from 1 to 6 there is a lot of improvement to make regarding the handling of the customers complaints.
### 4.1.8 Word-of-Mouth

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>36. Recommend Trivselhus?</td>
<td>1 =Yes</td>
<td>1 =Yes</td>
<td>1 =Yes</td>
<td>1 =Yes</td>
<td>1 =Yes</td>
<td>1 =Yes</td>
<td>1 =Yes</td>
</tr>
<tr>
<td>37. (If Yes) Any Build After Recommendation?</td>
<td>0 =No</td>
<td>0 =No</td>
<td>0 =No</td>
<td>0 =No</td>
<td>0 =No</td>
<td>0 =No</td>
<td>0 =No</td>
</tr>
</tbody>
</table>

Throughout all the periods, the mode on question 36 equals 1 which means that most of the customers, after the completion of their house, could recommend Trivselhus to others. Note that even from Special Group - 1 most of them could recommend the company to others. Even though that there were participants that had influenced others and answered Yes on question 37 it was only a minority.

### 4.1.9 Total Satisfaction

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>38. Satisfied, Totally?</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>4.8</td>
<td>3.69</td>
<td>5</td>
</tr>
</tbody>
</table>

The total satisfaction over the periods is high. The only outlier is the one that could be predicted from Special Group - 1. As it shows, the total satisfaction is considerable lower when the customers have made a complaint. With a mean of 3.69 it is more than one point under the average.

### 4.2 Regression Analysis

The aim of the regression analysis is to the highest degree explain the variation in the variables that explains the Total Satisfaction of Trivselhus customers. This is done by running the regression several times and excluding different independent variables in order to achieve the highest adjusted $R^2$ value. The following table presents the final regression models from all the different groups, which are the different time periods plus one special group.

In the Special Group - 2, compared to Special Group – 1, all of the interviewed customers that had made some kind of complaint were excluded. Since the authors chose to exclude those customers, the questions about complaints and handling complaints were also excluded before executing the regression. This due to the simple fact that the authors knew that the people involved in this special model had not made any complaints. The authors wanted to make one special regression with customers that never had problems with their houses that lead to complaints.
As shown below, complaints are a factor that almost always affects the outcome of customer satisfaction. Thereby, the authors argue it was important to present one regression model that was not affected by this factor. It is now possible to see which variables that is of highest importance for the customers that had a product without problems. Included in the research was 98 participants without complaints, all of them are included in Special Group – 2.

The table presents the understandized coefficients B value and the (standard error). The stars (*) represents if and on which level the variable is significant or not. If the box is empty it means that the variable was excluded from the final model. Correlation testing was made prior to the regression. The authors found no correlation that will affect the outcome of the analysis. Due to the fact that the correlation did not affect the regression, the decision was made not to include the correlation tables.

To see all the models from each group and to follow at which level each variable were excluded and how it affected the adjusted $R^2$ see Appendix 5: Regression Models. The questions in this section have been abridged. To see the full question and the abridged versions at the different parts in the thesis see Appendix 3: Question Abridgements.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5. Degree of Trustworthiness?</td>
<td>0.645 ** (0.229)</td>
<td>0.409 ** (0.152)</td>
<td>0.688 ** (0.115)</td>
<td>0.154 ** (0.077)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Degree of Competence?</td>
<td>-0.653 ** (0.184)</td>
<td>0.246 (0.197)</td>
<td>0.158 (0.107)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. How Affordable?</td>
<td></td>
<td></td>
<td></td>
<td>0.211 * (0.101)</td>
<td>0.085 (0.067)</td>
<td></td>
</tr>
<tr>
<td>8. Expectations Service?</td>
<td>0.277 ** (0.115)</td>
<td>-0.808 ** (0.237)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Expectations Flexibility?</td>
<td></td>
<td>-0.602 ** (0.123)</td>
<td>-0.495 ** (0.111)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Expectations Energy?</td>
<td></td>
<td>0.200 ** (0.088)</td>
<td>-0.288 ** (0.076)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Satisfied, Looks Design?</td>
<td>0.442 ** (0.196)</td>
<td></td>
<td>0.328 ** (0.149)</td>
<td>0.153 (0.107)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Satisfied, Material Quality?</td>
<td></td>
<td>0.717 ** (0.146)</td>
<td></td>
<td>0.155 * (0.081)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Satisfied, Build Quality?</td>
<td>0.158 (0.120)</td>
<td>0.645 ** (0.118)</td>
<td>0.111 (0.083)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Satisfied, Options &amp; Flexibility Shaping?</td>
<td>0.147 (0.091)</td>
<td>-0.348 ** (0.120)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. Satisfied, Options &amp; Flexibility Construction?</td>
<td>-0.322 ** (0.141)</td>
<td>-0.341 ** (0.108)</td>
<td>-0.396 ** (0.100)</td>
<td>-0.075 (0.066)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------</td>
<td>------------------------------------</td>
<td>----------------------------------------</td>
<td>-----------------------------------------------</td>
<td>-----------------------------------</td>
<td>-------------------------------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td></td>
<td>0.408 ** (0.191)</td>
<td>0.340 ** (0.108)</td>
<td>-0.227 ** (0.105)</td>
<td>-0.322 (0.230)</td>
<td>0.356 ** (0.104)</td>
<td>0.186 (0.111)</td>
</tr>
<tr>
<td></td>
<td>0.347 ** (0.123)</td>
<td>0.312 ** (0.085)</td>
<td>-0.534 ** (0.106)</td>
<td>-0.340 ** (0.126)</td>
<td>0.380 ** (0.120)</td>
<td>0.356 ** (0.090)</td>
</tr>
<tr>
<td></td>
<td>0.380 ** (0.126)</td>
<td></td>
<td>-0.056 (0.046)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.341 (0.090)</td>
<td>0.097 (0.066)</td>
<td>0.285 ** (0.058)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.239 (0.104)</td>
<td>0.121 ** (0.048)</td>
<td>0.565 ** (0.113)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.239 (0.104)</td>
<td>0.121 ** (0.048)</td>
<td>0.565 ** (0.113)</td>
</tr>
</tbody>
</table>

Commentary: * = Significant at a 0.1 (90 %) level, ** = Significant at a 0.05 (95 %) level
Trivselhus Special Energy Info? and Complaints? Is represented as dummy variables
The numbers in brackets are standard error.
In the sections from 4.2.1 to 4.2.6 is a summary of the table presented in words. The first and final regression models are presented from each group with their respective Adj.R² (adjusted R²) for a compression and to see the positive effect of the exclusion of some of the independent variables. The dependent variable for all the groups is Satisfied Totally. However, depending on the group, all the different independent variables are presented. If the name of the independent variable have a strike through its name it means that it is not significant on a 95 % significance level (α= 0.05). The R² interpretation combines the value of the Adj.R² with the independent variables and explains to which degree the variation in Satisfied Totally can be explained with the different variables from each group.

For an overview model to see which of the variables that were included in the different groups see 4.2.7. The meaning of that table is to give a clearer overview of which variables that were mostly used and which affected customer satisfaction from year to year. The questions in this section have been abridged. To see the full question and the abridged versions at the different parts in the thesis see Appendix 3: Question Abridgements.

4.2.1 2000 – 2001

Model 1: Including all variables: Adj.R² = -0.176


Model 16 is the model which gives the highest Adj.R² = 0.602

For all regression models see appendix Regression Models, 2000 - 2001

Dependent variable (y) = Satisfied Totally

Independent variables (x) = Looks Design, Options Flexibility Construction, Final Product/Investment, Energy Consumption, Info Catalogs, Info Before, Coordination and Communication, Complaints and Handling Complaints

R² interpretation: = 0.602. Therefore 60.2 % of the variation in Satisfied totally can be explained by the variation in = Looks Design, Options Flexibility Construction, Final Product/Investment, Energy Consumption, Info Catalogs, Info Before, Coordination and Communication, Complaints and Handling Complaints

4.2.2 2002 – 2003

Model 1: Including all variables: Adj.R² = 0.885


Model 14 is the model which gives the highest Adj.R²= 0.950

For all regression models see appendix Regression Models, 2002 - 2003

Dependent variable (y) = Satisfied Totally
Independent variables (x) = Trust, Competence, Expectations Service, Build Quality, options Flexibility Construction, Final Product/Investment, Energy Consumption, Info Construction, Responsible Salesperson, Complaints, Handling Complaints

R² interpretation: = 0.950. Therefore 95 % of the variation in Satisfied Totally can be explained by the variation in = Trust, Competence, Expectations Service, Build Quality, options Flexibility Construction, Final Product/Investment, Energy Consumption, Info Construction, Responsible Salesperson, Complaints, Handling Complaints

4.2.3 2004 – 2005

Model 1: Including all variables: Adj. R² = 0.331


Model 13 is the model which gives the highest Adj. R² = 0.755

For all regression models see appendix Regression Models, 2004 - 2005

Dependent variable (y) = Satisfied Totally


R² interpretation: = 0.755. Therefore 75.5 % of the variation in Satisfied Totally can be explained by the variation in = Trust, Competence, Expectations Service, Energy Consumption, Energy Consumption Construction, Pay Extra, Info Catalogs, Info Before, responsible Salesperson, Coordination and Communication, Complaints, Handling Complaints

4.2.4 2006 – 2007

Model 1: Including all variables: Adj. R² = 0.914

Model 9: Excluding Looks Design, Info Catalogs, Trust, Responsible Salesperson, Final Product/Investment, Expectations Service, Energy Consumption and Build Quality: Adj. R² = 0.957

Model 9 is the model which gives the highest Adj. R² = 0.957

For all regression models see appendix Regression Models, 2006 - 2007

Dependent variable (y) = Satisfied Totally

R² interpretation: = 0.957. Therefore 95.7 % of the variation in Satisfied Totally can be explained by the variation in = Competence, Affordable, Expectations Flexibility, Expectations Energy, Material Quality, Options Flexibility Shaping, Options Flexibility Construction, Energy Consumption Construction, Trivselhus Energy Info, Energy Roll Today, Pay Extra, Info Before, Info Construction, Coordination and Communication, Complaints, Handling Complaints

4.2.5  2008 – 2009

Model 1: Including all variables: Adj.R² = 0.785


Model 12 is the model which gives the highest Adj.R² = 0.922

For all regression models see appendix Regression Models, 2008 - 2009

Dependent variable (y) = Satisfied Totally


R² interpretation: = 0.922. Therefore 92.2 % of the variation in Satisfied Totally can be explained by the variation in = Trust, Expectations Flexibility, Expectations Energy, looks Design, Build Quality, Options Flexibility Shaping, Options Flexibility Construction, Energy Roll Today, Pay Extra, Info Catalogs, Info Construction, Complaints, Handling Complaints

4.2.6  Special - 2

Model 1: Including all variables: Adj.R² = 0.613


Model 14 is the model which gives the highest Adj.R² = 0.646

For all regression models see appendix Regression Models, Special

Dependent variable (y) = Satisfied Totally

Independent variables (x) = Trust, Affordable, Looks Design, Material Quality, Build Quality, Energy Consumption Construction, Energy Roll Today, Info Construction, Responsible Salesperson
\textbf{R}^2 \textbf{interpretation}: = 0.646. Therefore 64.6 \% of the variation in Satisfied Totally can be explained by the variation in = Trust, Affordable, Looks Design, Material Quality, Build Quality, Energy Consumption Construction, Energy Roll Today, Info Construction, Responsible Salesperson

\textbf{4.2.7 Regression Models Overview}

In the table below, an overview of all the regression models are presented. It is quite similar to the table presented 4.2. However, the different variables that are included in the models are represented with an X. This is made to give a full overview of which variables that are of importance for each group and are affecting customer satisfaction. There are no numbers to analyze, just the simple fact that the variable was included in the final regression model, and affects customer satisfaction. As can be seen both in the questionnaire design (section 3.4) and central tendency (section 4.1), the different questions are divided up into categories. In this case knowing which categories the different variables belong to can help to further understand which main factors that are of importance for the outcome of customer satisfaction.

Questions 5-6 belongs to the Image category, Q 8-10 to Expectations, Q 11-16 to Product Quality, Q 17 20-23 to Energy, Q 28-32 to Service Quality and Q34 and 35 to Complaints. If there it is a strike trough the $\times$, it means that it was not significant on a 95 \% level.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5. Degree of Trustworthiness?</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>6. Degree of Competence?</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. How Affordable?</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Expectations Service?</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Expectations Flexibility?</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>10. Expectations Energy?</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Satisfied, Build Quality?</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Satisfied, Options &amp; Flexibility Shaping?</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. Satisfied, Options &amp; Flexibility Construction?</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. Satisfied, Energy Consumption House?</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20. Degree of Environmental Conscious, Construction?</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22. Degree, Energy Roll Today?</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>23. Willingness to Pay Extra?</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28. Satisfied, Info Catalogs?</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>29. Satisfied, Info Before?</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30. Satisfied, Info Construction?</td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>31. Satisfied Responsible Salesperson?</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32. Satisfied, Coordination and Communication?</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>34. Complaints?</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>35. Handling of Complaints?</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>
5 Analysis

This section analyzes all the findings. The analyses are done for all the different groups that were included in the regression. Note that it is the Special Group -2 that it is analyzed in this case. The Special Group – 1 is not included in the analysis. Special Group – 1 does, compared to Special Group – 2, only include the participants that made complaints. The decision was made to only present the central tendency values from Special Group – 1 to state the factual results. However, as shown in the regression models, and as analyzed in this section, complaints are a factor that affects customer satisfaction. That is why the authors chose to exclude this group from the regression since it already is known what the main problem is from this group. The author felt that it was of greater importance for the research and the company to focus on Special Group – 2 in the analysis. This in order to see which variables that affects customer satisfaction when the products deliver on its full capacity.

The analysis looks foremost on the regression models, with complementary information from the central tendency values and comments given by the participants to further strengthen the findings. The analysis is also connected to the theoretical part of the research for a deeper explanation and understanding of the results.

The analyses are done separately for each group without taking any concern to each other. Even if there is a risk of repeating some aspects, the authors want to give the reader the ability to see the analysis from every group in order to understand the different variables that affect customer satisfaction. However, a summary analysis from all the groups is presented in the end of the chapter (5.7).

5.8 is a separate analysis on the different climate zones. However, this analysis is only based on the central tendency numbers generated through the descriptive statistics. The findings from the central tendency’s that are used can be found under section 4.2. The regression models are found under section 4.3 and the significance level used is 95 % (α=0.05).

5.1 Analysis 2000 – 2001

As the regression model for 2000 – 2001 shows, the looks and design of the house constitutes an important part of how satisfied the customer are. This is in line with what Torbica and Stroh (2000) show in their Home-buyer satisfaction model (Figure 2, section 2.4.1.) that house-buyer satisfaction depends at a large extent on the design of the house. Trivselhus has, already from the start in 1993, offered their customers the possibility of being involved in developing the house and its design. This might be a reason for that the look and design is a significant variable in determining Trivselhus’ customer satisfaction. As shown in 4.2.2., Trivselhus receive a central tendency of 5.33 in 2000 and 2001 regarding looks and design, which is a high value although it is under the average score.

Furthermore, one can find that the possibility of options and flexibility during the construction represent a significant variable of customer satisfaction. This implies that customers value the chance to influence the construction. Ozaki, (2003) argues that in order to obtain a higher customer satisfaction it is good to provide a customized house with a certain standard of quality that meets the customer’s expectations. In order to meet the customer’s wants and needs it is important for the company to understand these requirements (Ozaki, 2003). Trivselhus is working with flexibility as a core value within their organization and this is shown to be important since the result from the regression analysis shows that options and flexibility given to the customers during the construction is a significant variable.
This is strengthened by comments made by customers (Appendix 2000-2001), where customers express that Trivselhus has high flexibility and no restrictions. As shown in section 4.2.4., Trivselhus receives a central tendency of 4.57 regarding this variable, which is slightly above the average score for all ten years.

The financial investment versus the final product is another variable in the regression that is significant. Customers are always seeking the highest return of investment. Looking at the central tendency for this variable (section 4.2.4.), one can see that the customer in this period gave a central tendency score of 5.10, which is above average score and indicate that the customers perceive the house being worth their money spent.

Energy consumption was also proven a significant variable when determining customer satisfaction among Trivselhus’ customers. This shows that the energy consumption is an important factor when determining customer satisfaction, which can be explained by the worldwide increase in environmental concerns. As shown in section 4.2.5., the central tendency is 4, which implies that customers are fairly satisfied but that there is room for improvements.

The information that the customers received before the construction was also a significant variable that will affect how totally satisfied the customers are. To have well-structured information before the construction starts, are, to many customers, often necessary in order to plan and monitor the process. Ozaki, (2003) states that in order to have an effective flexibility, it is required to have efficient information flow within the company so that the information from the customer reaches the right recipient. As the central tendency (section 4.2.6.) shows, the customers in this period gave a score of 5, which implies that customers are satisfied with information before the construction. Moreover, it is proven that the success of the coordination and communication between Trivselhus, the entrepreneurs, and the customers is another significant variable. As shown in the section 4.2.6., Trivselhus receives a score of 4.27 which implies that there is room for improvements. The information availability before the agreement was also included in the regression but is not significant with $\alpha=0.05$, and should therefore not be taken in to consideration when analyzing the results.

The final significant variable for 2000 – 2001 is complaints. Complaints have a negative impact on customer satisfaction. However, an effective handling of complaints can have positive impact on customer satisfaction. This is strengthened by Spreng et al. (1995) who states that customer satisfaction can increase with a successful complaints handling, even beyond the level that they had before. Furthermore, Fornell and Wernerfelt (1976) and Davidow (2003) argue that effective complaints handling will have a positive effect on word-of-mouth communications among customers and enhance loyalty that will have a positive impact on customer satisfaction.

### 5.2 Analysis 2002 – 2003

As one can see from the regression model for 2002 – 2003, customers’ expectations regarding service is an important variable when determining customer satisfaction. This is strengthened by several researchers who state that customer satisfaction depend on the fulfillment of customers’ expectations (Fornell, 1992; Herrmann, Huber and Braunstein, 2000; Torbica and Stroh, 2000; Matzler et al., 1996; Johnson and Fornell, 2001).
Looking at the central tendency for customers' expectations regarding service (section 4.2.3.), one can see that the central tendency is 5.50, which means that Trivselhus' customers have high expectations regarding service. Furthermore, Image in terms of trust and competence is also proven important variables that affect customer satisfaction. This is aligned with Oliver (1980) who argues that customers' expectations is a response of the customers' past experience of the brand and product as well as other symbolic elements of the company. As shown in the section of central tendencies for Image (4.2.2.), Trivselhus receive high values for both trust and competence, which implies that the customer perceive Trivselhus as a trustworthy and competent company.

Whether or not the customers' get adequate options and room for flexibility during the construction is shown to affect how satisfied they will become. This can be explained by Osaki (2003), who says that companies must understand their customers' requirement in order to be able to satisfy them. Osaki (2003) argues that it is important to provide customized houses which fulfill their customers' requirements. As shown in section 4.2.4., Trivselhus receive a central tendency value of 4.53 in 2002 – 2003 regarding this variable, which is slightly above the average score for all the periods. However, as the comments made by the customers indicate, there is room for improvement regarding this issue. The customers commented that the company had difficulties adjusting to customers requirements (Appendix 2002-2003).

How the customers value the finished product in relation to the financial means they have invested does also affect their overall satisfaction. Intuitively, it means that a customer will be more satisfied with their house the more they get out of their investment. Customers in this time period gave a central tendency score of 5 (section 4.2.4.), which is a high score that implies that they perceive the house to be worth their money spent. Build quality was also included in the regression model. However, this variable should not be considered since is not significant on a significance level of 95%.

The level of energy consumption of the customers houses determine how satisfied they will become, which implies that customers are increasingly aware of energy consumption, and perhaps more concerned about the environment. The central tendency for how satisfied the customers are with the level of energy consumption is 4.37 (section 4.2.5.). This score indicate that the customers are satisfied with the energy consumption of their house but that there is room for improvements. The comments made by the customers indicated that they thought it was too little attention spent on energy efficiency attributes (Appendix 2002-2003).

Torbica and Stroh (2000) argue that construction companies must consider themselves more as a service organization and put more effort to improve the service surrounding the product. During 2002 - 2003, Trivselhus customers felt that the information given during the construction, and the contact with the responsible salesperson, were two important variables which have an effect on customer satisfaction. This is supported by Oliver (1980) and Kapoor and Kulshrestha (2009), who state that front-line personnel and their action influence customer expectations since the personnel represent the company as a whole, including its products. As seen in the comments made by the respondents of the survey (Appendix 2002-2003), there is a number of opinions expressed regarding the salespersons. These opinions will, therefore, ultimately have an effect on customer's satisfaction.
Looking at the central tendency for information received during the construction (section 4.2.6.), one can see that a score of 4.03, while still above average, it is room for improvements. The central tendency for how satisfied the customers are with the responsible salesperson is 3.67, which is the lowest score of all periods. This implies that the customers in 2002 – 2003 are not satisfied with the salesperson. Since expectations regarding services in this period were high, a central tendency of 5.50, it indicates that Trivselhus was not able to fulfill their customers’ expectations regarding services.

The last two variables that affect customer satisfaction in 2002 – 2003 are complaints and how the company handles their complaints. This is strengthened by Spreng et al. (1995), who state that if companies handle their customers’ complaint in an effective way, it might increase the level of customer satisfaction beyond the level the customer had before the complaint. Furthermore, Fornell and Wernerfelt (1976) say that companies should see complaints as a tool to enhance loyalty and increase customer satisfaction. When conducting the survey, the participant commented on Trivselhus poor handling of complaints (Appendix 2002-2003), implying that it will have a negative effect on customer satisfaction.

5.3 Analysis 2004 – 2005

In 2004 – 2005, trust is the only variable in the category Image that is proven to have an impact on customer satisfaction. Competence was also included in the regression model, however, it is not included in the analysis since it was proven not significant. There is, therefore, only one variable in the Image category that affects customer satisfaction in 2004 – 2005. Nonetheless, Image and symbolic elements of the company is important in the creation of customer expectations (Oliver, 1980). Observing the central tendency for trust in section 4.2.2., one can see that a value of 4.97 is slightly below average for all periods but still indicates that Trivselhus’ customers perceive the company as trustworthy. Customers’ expectation regarding service is also an important variable when determining customer satisfaction, which is aligned with the theories that claim that customer satisfaction is dependent on the fulfillment of customers’ expectations (Fornell, 1992; Herrmann, Huber and Braunstein, 2000; Torbica and Stroh, 2000; Matzler et al., 1996; Johnson and Fornell, 2001). The central tendency value for customers’ expectations regarding service is 5.40, which is a high value and indicated that the customers expect good service throughout the purchasing process.

In the Energy category, there are several variables that affect customer satisfaction. However, the question regarding the customers’ willingness to pay extra for energy efficient attributes was not significant and should therefore not be taken into consideration. The level of energy consumption, as well as to what degree energy efficiency and environmental friendliness was incorporated in the construction of their house, are two variables in the Energy category which affect customer satisfaction. This implies that customers are increasingly aware of their energy consumption, which affects how satisfied they will become. Therefore, it is crucial for Trivselhus to supply energy efficient options in order to meet the demand from their customers. Looking at the central tendency values for the two significant variables included in the regression (section 4.2.5.), one can see that there are low scores for both the level of energy consumption, as well as to what degree energy efficiency and environmental friendliness was incorporated when building their house. This implies that they did not spend enough effort to incorporate energy efficiency in to their house. Since they are not completely satisfied with the energy consumption of their house, it is something that could be interpreted as brought upon themselves.
Construction companies should focus more upon the whole ‘offering’ surrounding the product since service is an important factor in customer satisfaction (Torbica and Stroh, 2000). Moreover, it is believed that front-line personnel and their action will influence customer expectations (Oliver, 1980; Kapoor and Kulshrestha, 2009). This is supported by the results from the regression model as the treatment and contact with the responsible salesperson is proven an important variable in 2004 - 2005, which will affect customer satisfaction. The central tendency for how satisfied the customer were with the salesperson is 5 (section 4.2.6.), which is the same as the average for all periods. A central tendency of 5 is a high score, however a few customer expressed their displeasure regarding the salesperson (Appendix 2004-2005), which implies that there is still room for improvements. Furthermore, the success of the coordination and communication between Trivselhus, the entrepreneurs, and the customer is proven to be important in the determination of customer satisfaction. This variable has a central tendency of 4.07, implying that the customers are not entirely satisfied. Information received via catalogs and webpage, as well as information received prior to the construction is also included in the regression, but should not be taken in to consideration since these two variables are not significant.

Whether the customers had Complaints and how the companies handle complaints are two other variables included in the regression model but they are not significant, and should therefore not been taken into consideration.

5.4 Analysis 2006 – 2007

In the period of 2006-2007, the regression model shows that expectation concerning flexibility and energy is variables that are important in the determination of customer satisfaction. Customer satisfaction will occur when customer’s expectations are met or exceeded (Fornell, 1992; Herrmann, Huber and Braunstein, 2000; Torbica and Stroh, 2000; Matzler et al., 1996; Johnson and Fornell, 2001). Looking at the central tendency for customer expectations regarding flexibility and energy (section 4.2.3.), one can see that the central tendency is 5.3 for flexibility and 4.67 for energy, which means that Trivselhus’ customers have high expectation regarding these variables. The customer has high expectations regarding Trivselhus’ flexibility due to the fact that the company uses flexibility as a core value.

How the customers perceive Trivselhus competence and how affordable they are, were also variables that were included in the regression model. However, these two variables are not significant and are therefore not considered.

Furthermore, Product Quality in terms of material quality is showed to be an important variable. According to Fornell (1992), consumers judge the quality in different ways and the best measurement of quality is how it affects customer satisfaction. As shown in section 4.2.4., Trivselhus receive a central tendency of 5 regarding material quality. How satisfied a customer will be is also determined by the options and flexibility that they are given during the construction. This is in line with Ozaki (2003) who states that in order to achieve customer satisfaction, it is necessary to understand what customers require. In section 4.2.4., it is shown that Trivselhus receives a central tendency of 5 regarding options and flexibility during the construction. This score is over the average score for all periods. The high score implies that customers are satisfied, however, there were some comments made by customers about improvements regarding flexibility (Appendix 2006-2007). Options and flexibility during the shaping process was also included in the regression model, however, it was not significant and is therefore not considered.
Furthermore, in the Energy category, variables that affect the overall satisfaction are to which degree the environmental friendliness and energy efficiency were taken into consideration during the customer’s construction, together with to what degree the customers had considered environmental friendliness and energy efficiency if the house would have been built today. As shown in the central tendency section 4.2.5., the customer in this time period got a central tendency value of 4 and 4.6 respectively. Another significant variable within the Energy category is the willingness from customers to pay extra for energy efficiency attributes. In section 4.2.5 the central tendency value of this variable is 4.23, which is above the total average score, implying that customers in this period are willing to pay extra for energy efficiency attributes. Because these variables are included in the regression, it is proven that it is necessary for Trivselhus to supply their customers with different energy solutions in order to keep their customers satisfied. A variable that is included in the regression model, which should not be taken into consideration because it was not significant were the variable regarding if Trivselhus supplied any special information or offers concerning environmental friendliness and energy consumption.

Moreover, in the Service category, the regression models show that, during 2006 – 2007 significant variables that will affect customer satisfaction were information during the construction, as well as the communication and coordination between Trivselhus, entrepreneurs and the customers. This is strengthened by Torbica and Stroh (2000), who argue that construction companies must add more effort within the service area to meet the customer’s wants and needs. Furthermore, Torbica and Stroh (2000) say that a small increase in the service quality can increase customer satisfaction. Looking at the central tendency (section 4.2.6.), one can see that the central tendency for information during construction is 4.13, and 3.93 for communication and coordination. This indicates that, during the period 2006 – 2007, Trivselhus customers were fairly satisfied with these variables. There are a few comments made by customers that indicate displeasure of the communication and coordination between Trivselhus, the entrepreneur, and the customer (Appendix 2006-2007). This implies that this is an area that needs improvements. The variable regarding information prior to the construction were also included in the regression, but should to be taken in to consideration since it is not significant.

In 2006 – 2007, complaints and how Trivselhus handle complaints are variables that affect customer satisfaction. In the event of complaints, companies have, according to many researchers, a chance to turn the situation around to their advantage. Spreng et al. (1995) argues that customer satisfaction will be affected in a positive manner through successful handling complaints by the company. This is further strengthened by Fornell and Wernerfelt (1976) who say that companies can increase customer satisfaction and loyalty if they see complaints as a tool to communicate with the customer. However, there are a few customers that commented that Trivselhus handle their complaints badly, which imply that this is an area that needs improvement (Appendix 2006-2007).
5.5 Analysis 2008 – 2009

Looking at the regression model from this period, one can see that customers’ expectation is an important variable when determining customer satisfaction. The regression model includes customers’ expectations regarding both flexibility and energy, and is proven to have an effect on customer satisfaction. This is supported by several researchers who say that customer satisfaction occur when customers’ expectations are fulfilled (Fornell, 1992; Herrmann, Huber and Braunstein, 2000; Torbica and Stroh, 2000; Matzler et al., 1996; Johnson and Fornell, 2001). Looking at the central tendency regarding customers’ expectation of flexibility and energy (section 4.2.3), one can see that the expectations regarding flexibility is 6, which is the highest score possible. This means that Trivselhus’ customers demand a high level of flexibility, which is in line with Osaki (2003) who says that companies must meet their customers’ requirements and supply customized houses in order to get satisfied customers. The central tendency regarding customers’ expectations about energy is 5, which is a high value, implying that customers have high expectations regarding energy. Furthermore, Oliver (1980) argues that customers’ expectations are influenced by past experience with the brand as well as symbolic elements of the company. This is supported by the findings of the regression model where Image in terms of trust is proven to be a variable that has an effect on customer satisfaction among Trivselhus’ customers. For 2008 – 2009, the central tendency of trust is 5.2 (section 4.2.2.), which indicates that customers perceive Trivselhus as a trustworthy company.

According to the findings from the regression model, the looks and design of the house, as well as the build quality, are both important variables when determining customer satisfaction. This is strengthened by Torbica and Stroh (2000), who explain through their Home-Buyer Satisfaction Model (Figure 2, section 2.4.1) that the design of the house, as well as the house itself, play’s a major role in how satisfied house-buyers will become. The central tendency for the looks and design of the houses built in 2008 – 2009 is 6 (section 4.2.4.), which is the highest score possible, implying that the customers are very satisfied. This could be explained by the fact that the customers are to a large extent involved in sketching their houses, and thus, they have options to alter the design after their needs. The build quality of the house, on the other hand, received a central tendency value of 5 (section 4.2.4.), which is also a high value implying that customers are satisfied with the build quality of their house. This is strengthened by comments made by customers that the house is of high standard and good quality (Appendix 2008-2009). Furthermore, as the regression model shows, the amount of option and flexibility given to the customer during the shaping of their house will also affect customer satisfaction. This is aligned with Osaki (2003) who state that companies must understand their customers’ requirements and that it is important to provide customized houses that fulfill these requirements. This variable received a central tendency of 5, implying that the customers are satisfied. The amount of options and flexibility given to the customer during the construction is also included in the regression model. However, this variable is not significant and should therefore not be taken into consideration.
In the Energy category, several variables affect customer satisfaction. To what extent the customers would consider energy efficiency and environmental friendliness if they were to build a house today is proven to be a significant variable. As mentioned earlier, customers’ expectation regarding energy consumption is a variable that has an effect on customer satisfaction in 2008 - 2009. This implies that Trivselhus’ customers are concerned about energy consumption, which is in line with the fact that the customers will consider energy consumption if they were to build a house today. Furthermore, the customers’ willingness to pay extra does also affect customer satisfaction. Looking at the central tendency value for each of the included variables (section 4.2.5.), one can see that the value for the extent to which the customers consider energy efficiency and environmental friendliness if they were to build a house today is 5. This implies that customers are well aware of energy consumption and it is, therefore, crucial for Trivselhus to fulfill these demands in order to get high level of customer satisfaction. The willingness to pay extra has a central tendency of 3.93. This means that, even if the customers are aware of energy consumption, they are not particularly willing to pay extra for such attributes.

Torbica and Stroh (2000) state that construction companies must focus more upon the whole ‘offering’ including the service surrounding the product. In other words, service constitutes an important part in customer satisfaction. This is supported by the findings from the regression model where it is proven that the information given through the catalogs and webpage determine how satisfied the customer will become. The central tendency of this variable is 5 (section 4.2.6.), which is a high value indicating that the customers are satisfied with the information given. The amount of information received by the customer during the construction is also included in the regression model, but is not significant and is therefore not considered.

The final two variables included in the regression model for 2008 – 2009 are complaints and how Trivselhus handle complaints. Both of these variables are proven to affect customer satisfaction. This is aligned with the theory presented by Spreng et al. (1995), who argued that if companies handle complaints in an efficient manner that is pleasing to the customer there is a possibility that customer satisfaction will increase, even beyond the level they had before. In the unfortunate event of complaints, companies could view complaints as a tool to increase loyalty and customer satisfaction (Fornell and Wernerfelt, 1976).

5.6 Analysis Special Group – 2

As mentioned, this group only consists of participants without complaints. The focus is to be able to explain which variables that affects customer satisfaction when the issue of complaints is excluded.

In this Special Group -2 model it is proven that Image in terms of trust is a significant variable that affects customer satisfaction. This is supported by Oliver (1980), who argues that customers’ expectations is influenced by their past experience regarding the products, brand and other symbolic elements connected to the company. As shown in the section of central tendencies for trust (section 4.2.2.), Trivselhus received a score of 5. This indicates that customers perceive Trivselhus as a trustworthy company. Another variable in the Image category that was included in the regression model was how affordable the customers perceived Trivselhus to be. However, this variable was not significant and therefore not be considered.
Furthermore, within the Product Quality category, the variables looks and design, material quality, and build quality was included in the regression model but none of them is significant and should therefore not be taken into consideration.

Moreover, in the Energy category, a variable that is proven to affect customer satisfaction is to what extent the customer would consider energy efficiency and environmental friendliness if they were to build a house today. This implies that customers are concerned about energy consumption, and that it is an important factor when determining how satisfied they will become. When looking at the central tendency (section 4.2.5.) regarding this variable, it is equal to 4.79, which implies that it is important for Trivselhus to offer energy solutions in order to fulfill the customers’ demands. To what extent energy efficiency and environmental friendliness was incorporated in the construction of the customer’s house were a variable that was not significant and therefore not be considered.

In this final regression model, the variable how satisfied the customers were with the responsible salesperson, as well as with the information given during the construction. These two variables are both significant variables, and thus, have an effect on customer satisfaction. This is supported Oliver (1980) and Kapoor and Kulshrestha (2009) who argue that actions made by front-line personnel will influence how customers will perceived the company. Furthermore, Torbica and Stroh (2000) argue that it is important for construction companies to put more effort to improve the service surrounding the product. In other words, companies have to consider themselves more as a service organization. Looking at the central tendency for how satisfied the customers are with the responsible salesperson (section 4.2.6) a score of 5 tells us that the customers are satisfied with their salesperson. Regarding the central tendency for information given during the construction (section 4.2.6) a score of 3.5 implies that the customers are not satisfied with the given information.

5.7 Summary Analysis

Taking all the previous analyses into consideration, one can see that Image in terms of competence and foremost trust is important variables that affect customer satisfaction. To what degree the customers perceive Trivselhus to be trustworthy is a variable that is included in more than half of the regression models previously presented. As argued before, this is in line with Oliver (1980) who argue that the symbolic elements of a company as well as customers past experiences of a brand form customers’ expectations of the company.

During the 10-year period that this research covers, one can see that Expectations affect how satisfied Trivselhus’ customers will become. This is supported by theories presented by numerous researchers who argue that customer satisfaction depend upon the fulfillment of customers expectations (Fornell, 1992; Herrmann, Huber and Braunstein, 2000; Torbica and Stroh, 2000; Matzler et al. 1996, Johnson and Fornell, 2001).

In the Product Quality, there have been various variables affecting customer satisfaction during the ten years that this research covers. Whether the customers get enough options and flexibility to change their house during the construction is a variable that has been proven to affect customer satisfaction several times. This is supported by Osaki (2003) who says that companies must understand their customers’ wants and needs, and that it is important to provide customized houses to fulfill these specific wants and needs.
Another variable that is proven to affect customer satisfaction more than once during this 10-year period is how the customers value the finished product in relation to the financial means invested. Arguably, it indicates that Trivselhus’ customers will be more satisfied with their house the more they get out of their investment. The final variable included in the Product Quality category that affected customer satisfaction more than once, is how satisfied customers are with the looks and design of their house. This indicates that Trivselhus customer’s value the flexibility and possibility to influence the design of their house. This is aligned with what Torbica and Stroh (2000) present in their Home-Buyer Satisfaction Model (Figure 2, section 2.4.1.), where it is clear that the design plays an important role when determining customer satisfaction among home-buyers. Material quality and build quality are to other variables that are proven to affect customer satisfaction. These to variable can be seen as incorporated in the product, making it the second part of Torbica and Stroh’s (2000) Home-Buyer Satisfaction Model.

In the Energy category, the variable regarding the level of energy consumption is proven to affect customer satisfaction several times during this 10-year period. This implies that customers are increasingly concerned about their energy consumption. Furthermore, it is proven that the level of concern regarding energy efficiency and environmental friendliness incorporated when they build their house is an important variable. This indicates that Trivselhus’ customers are concerned about energy consumption, which is in line with the fact that the customers will consider energy consumption if they were to build a house today. Looking at the central tendency values regarding how environmental conscious the customers were when they build their house versus how conscious they are today, one can see that the customers are more conscious about the environment today (section 4.2.5.). The central tendency value for how environmental conscious the customer are today is 4 and how conscious they were when they build their house is 3.54. Both values are not particularly high values, which imply that Trivselhus’ customers are moderate conscious about the environment. Moreover, customers’ willingness to pay extra for energy efficiency attributes does also affect customer satisfaction. Due to the fact that these variables regarding energy efficiency are proven to affect customer satisfaction, it indicates that Trivselhus has to supply their customers with adequate solution regarding energy efficiency and environmental friendliness in order to meet the existing demand and obtain high levels of customer satisfaction.

There are several variables in the Service category that affect how satisfied Trivselhus’ customers will become. Torbica and Stroh (2000) argue that construction companies must consider themselves more as a service organization and put more effort to improve the service surrounding the actual product. Service can therefore be seen as important in order to satisfy customers. The most frequent variable that affects customer satisfaction within the Service category is how satisfied the customer is with the coordination and communication between Trivselhus, the entrepreneur, and themselves. Furthermore, throughout the last ten years, Trivselhus’ customers felt that the information they were given during the construction, as well as the contact with their responsible salesperson are two other important variables that affect how satisfied they will become. This is in line with Oliver (1980) and Kapoor and Kulshrestha (2009) who say that front-line personnel’s actions affect customers’ perception and expectations about the company since salespersons represent the company and its products. Information received via catalogs and the webpage, as well as information given to the customers prior to the construction are the last two variables, included in the Service category, that has been proven to affect customer satisfaction during the last ten years.
The final category that is included in this research, and which is proven to have a strong effect on customer satisfaction is Complaints. This category contains two variables; whether or not the customer had any complaints, and how satisfied they are with Trivselhus’ handling of complaints. Spreng et al. (1995) say that complaints and companies way of handling complaints will affect customer satisfaction. Furthermore, Spreng et al. (1995) say that if complaints are handled efficiently, customers might end up being more satisfied than they were before they had a complaint. Moreover, Fornell and Wernerfelt (1976) argue that complaints are a tool to increase loyalty and customer satisfaction.

5.8 Geographical Analysis

| Table 1 |
|-------------------------------|-----------------|-----------------|-----------------|
| Question                      | Climate Zone - 1 | Climate Zone - 2 | Climate Zone - 3 |
| 10. Expectations Energy?      | 5               | 4.64            | 5               |
| 17. Satisfied, Energy Consumption House? | 4               | 4.07            | 4               |
| 18. Environmentally Conscious, Today? | 5               | 4               | 4               |
| 20. Degree of Environmental Conscious, Construction? | 3.4             | 3.14            | 3.41            |
| 21. Trivselhus Special Energy Info? | 0 =No           | 0 =No           | 0 =No           |
| 22. Degree, Energy Roll Today? | 5.2             | 4.71            | 5               |
| 23. Willingness to Pay Extra?  | 4.8             | 4.07            | 4               |
| 24. Aware of Energy Components in House? | 1 =Yes          | 1 =Yes          | 1 =Yes          |
| 26. (If No) Change to Energy Components today? | 0 =No/No Answer | 0 =No/No Answer | 0 =No/No Answer |
| 27. (If Yes) Were Would You Go? | 0 =No/No Answer | 0 =No/No Answer | 0 =No/No Answer |
| 38. Satisfied, Totally?       | 4.2             | 4.36            | 5               |

Qualitative questions and optional meanings of the numbers
Q21: 0=No, 1=Yes
Q24: 0=No, 1=Yes
Q25: 1=Yes Conscious Choice, 2=No Given By Trivselhus
Q26: 0=No/No Answer, 1=Yes
Q27: 0=No/No Answer, 1=Contact Product Supplier, 2=Collect Offers, 3=Visiting Building Suppliers, 4=Contact Trivselhus
The authors chose to geographically divide Sweden up into three different climate zones (see section 3.2.3) according to the information provided by Boverket (Johnasson, 2009). The reason for this is that these different climate zones differ in temperature and climate conditions, and therefore demand special concerns regarding energy consumption (Johnasson, 2009). As mentioned in section 3.2.3, there is unevenness in the distribution of customers across these climate zones, where Climate Zone 3 is over-represented. Therefore, the authors decided to include at least one customer from Zone 1 and two from Zone 2 in each time period, in order for every climate zone to be represented. Below, it is presented how many customers that were interviewed from each climate zone and the percentage it represents in relation to all participants interviewed. As one can see in the sampling section 3.2.2, the final distribution in the research is fairly similar to the population.

Climate Zone 1: 5 \(\approx\) 3.33 %

Climate Zone 2: 14 \(\approx\) 9.33 %

Climate Zone 3: 131 \(\approx\) 87.33 %

Table 1 presents the central tendency for each answer on the questions regarding energy-efficiency and environmental friendliness, together with total satisfaction in the same manner as in section 4.2.

Prior to this research, the authors anticipated the answers to show a difference between the three climate zones, where Climate Zone 1 was thought to have higher concerns regarding energy consumption than Climate Zone 3. However, as one can see in Table 1, there is little difference between all three climate zones. This indicates that Trivselhus is successful in their work of constructing houses that is adapted to the different climate zones.

When studying Table 1 more closely, one can see that the expectations regarding energy consumption is fairly equal across the three climate zones. Since the participants were asked to answer on a scale from 1 to 6, a central tendency around 5 is considered to be high. This implies that all customers, no matter from where they live, have high expectations regarding energy efficiency. However, on the question regarding how satisfied the customers are with the energy consumption of their house, the central tendency for all climate zones is 4. Arguably, the customers’ expectations are not completely fulfilled. Since customer satisfaction is dependent on the fulfillment of customer expectations (Fornell, 1992; Herrmann, Huber and Braunstein, 2000; Torbica and Stroh, 2000; Matzler et al., 1996; Johnson and Fornell, 2001), this should mean that the overall customer satisfaction should decrease. However, looking at question 38 in Table 1, one can see that customers in Climate Zone 3 are generally very satisfied, but the customers in Climate Zone 2 and Climate Zone 1 in particular are less satisfied. One should take into consideration that there are many other variables that affect customer satisfaction, and that it is therefore almost impossible to argue that energy consumption alone will have this affect on customer satisfaction. Nonetheless, it is obvious that Climate Zone 1 differs from Climate Zone 3 regarding total satisfaction. The authors argue that energy consumption plays a more important role in Climate Zone 1 due to the fact that it has a colder climate and that the residents in this climate zone are more agreed upon the fact that they have to put more effort into screening their houses. This is aligned with the answers on question 23, where the customers rate their willingness to pay extra for energy-efficiency attributes. The answer shows that customers in Climate Zone 1 are the ones that are most willing to pay extra for such attributes, which indicates that customers living in this zone are more prepared to take precautions in order to lower their energy costs. Furthermore, if these customers were to build
a house today (question 22), the customers in Climate Zone 1 are the ones that would have the highest concern regarding energy-efficiency and environmental friendliness. However, looking at question 19, were the customers was asked how environmentally conscious they considered themselves to be when they build their house, the customers in Climate Zone 3 has the highest score. The customers in Climate Zone 1, however, claim that they are more environmental conscious today, the central tendency is 5. Climate Zone 2 and 3, on the other hand, has a central tendency of 4, which is still above average. However, it has to be noted that the sample size for Climate Zone 1 and Climate Zone 2 is not sufficient enough to assume normality. Therefore, the findings from these climate zones cannot represent the entire population.
6 Conclusion

The purpose of this thesis was to investigate the customer satisfaction among Trivselhus’ customers over a period of 10 years. This purpose is fulfilled when answering the research questions presented below.

Research Question 1: Have the customer satisfaction among Trivselhus customers changed over a 10-year period?

There is a high level of customer satisfaction among Trivselhus’ customers during all the years that is covered in this research. The results are conclusive; Customer satisfaction has not changed during this period of 10 years.

Research Question 2: What are the main factors that affect customer satisfaction?

There are several variables affecting customer satisfaction. In order to generalize the answer, these variables are included in different categories. The categories are Complaints, Expectations, Service Quality, Energy, Product Quality, and Image.

The category that includes most variables that affect customer satisfaction is Complaints. Expectations include second most variables and can also be considered to be an important factor that affects customer satisfaction. Energy and Service Quality include the same amount of variables that affect the determination of customer satisfaction. There are also several variables included in Product Quality that affect how satisfied the customers will become. Image was also included, although, with the least number of variables.

Research Question 3: Do energy efficiency and environmental friendliness affect customer satisfaction geographically?

There is no substantial difference between the three climate zones regarding attitudes towards energy efficiency and environmental friendliness. However, one can detect a slightly higher concern regarding energy efficiency in Climate Zone 1, implying that customers in Climate Zone 1 is a bit more interested in lowering their energy consumption. One can also conclude that customers in Climate Zone 3 are generally very satisfied, whereas customers in Climate Zone 2 and Climate Zone 1 are less satisfied. This implies that there is a geographical difference of customer satisfaction. However, one has to take into consideration that there are several other variables that affect customer satisfaction, which makes it hard to argue that energy efficiency and environmental friendliness alone have this impact. Furthermore, the sample size for Climate Zone 1 and Climate Zone 2 are small, and normal distribution cannot be assumed. Nonetheless, it is obvious that customer satisfaction differ between customers in Climate Zone 1 and Climate Zone 3.
7 Discussion

Throughout this research, the words customer satisfaction and Trivselhus are the two main keywords that have been used. Two different words with completely different meanings. However, in this research the two have been combined to make a research, which has put both of them in a new light. Customer satisfaction is something that includes many different theories that is usually not applied within the building industry that Trivselhus operates in. In the same meaning, the authors got the impression that customer satisfaction is a widely used word within the company without the full and complex understanding of the concept.

In the theoretical part of this research, it has been shown that the concept of customer satisfaction is much more complex than it might seem. It is dependent on various issues within an organization. Even though there are many different models and ways to approach and measure customer satisfaction, all of them can be considered as measurement of the overall performance within an organization. In order to truly satisfy customers, an organization needs to offer more than a competitive product or service. A satisfied customer knows what it can expect and have trust in that the company perform and deliver up to their expectations. In addition, they expect surplus values, more than just the product itself. Surplus values in form of the availability of contact and information together with how well complaints are handled are surplus values that stand out in this research.

Trivselhus is a company that undoubtedly knows that they have satisfied customers over the years, which is proven by their stable results and growth over a longer period of time. Moreover, with the fact that many of their sales comes from recommendations by word-of-mouth from satisfied customers. However, the authors got the impression that customer satisfaction had not yet been measured in a sufficient way in order to fully understand what features are strong and on which points the company can improve.

With satisfied customers, word-of-mouth becomes a tool for a company to increase their sales and their brand value. As shown from the research, most of the participants from all groups are willing to recommend Trivselhus to others. This fact is also supported by the CEO of the company. He claims that their sales rely heavily upon recommendations and word-of-mouth. In today’s society with the easy availability of communication around the world with cell phones, internet, and social networks, the aspects of the concept word-of-mouth has grown. Nowadays, information can be obtained and shared in a way that companies, including Trivselhus, have to be aware of. As shown in this research, the media used to first come in to contact with the company was the internet. Even though the authors have nothing to comment or criticize on the webpage used by Trivselhus, it is important for the company to acknowledge the importance of this media and continue to evolve the use of the internet in their operations. Notice boards, blogs, chats, and social networks are new ways that the company could use to make the customer more personally involved and to ease the spread of word-of-mouth. Social networks such as Facebook and Twitter are ways to, in a more personal way, communicate with the customers, and also a way for others to meet up and share their experiences and inspirations.

In this research, the authors have, by their year by year comparison, presented which factors that is of highest importance in order for the customers to be satisfied. Some of the results presented in this research could probably be further explained by looking at the company itself in order to see if different operations and management styles have been used that could explain why some of the variables are included during the different time periods.
Because in this research, the authors have only been looking at the customer without trying to explain the issues and findings from a managerial point of view.

That is why one of the most important comments from the authors to the company is that, in case of unexpected or surprising results from this research, the authors recommend to look at the operation and management to find an explanation. Moreover, the authors want to raise a greater awareness of the complexity of customer satisfaction and how it can affect the overall performance of the company. As shown, there are different variables that affect customer satisfaction year from year. However, there are similarities and conclusions that could be drawn out of this research over the whole time period which gives Trivselhus indications on where they should put extra effort or improve their work. One aspect that is clear is that customer satisfaction includes much more than the product itself. Of course, the product is the base of everything. However, the authors feel that, in the case of Trivselhus, where the company has developed and produced such a strong product, they reach a point where the company would benefit more from develop new and evolve existing surplus values rather than the product itself.

Concerning the energy part of the research, it was mainly included due to the fact that people are more aware of the issues and problems concerning the environment. Also that the producers of houses soon are set against very hard and demanding rules concerning energy consumption of houses. The research shows that the overall awareness of these issues among Trivselhus customers is high. The interesting part is that the results show that most of the customers find themselves to be more aware of environmental issues after they have constructed their house.

The overall goal of this research was partly for the authors personally to obtain a deeper understanding of the customer satisfaction concept. The plan was to be able to test and use the concept of customer satisfaction in the real world in collaboration with a company. Trivselhus offered to take part in the research, and their wish was to, from a new angle, look at their customers and understand what factors affect customer satisfaction. In today’s society where more people are increasingly conscious of the environmentally it was of interest to profile their customers from environmental point of view and to look at the geographical differences.

To summarize the information useful for the company, the main finding from this research is that the handling of complaints has to be done in a better and in a more efficient way. As shown by the central tendencies from Special Group – 1 in 4.2 the average values from most questions and categories are the same compared to the other groups up until the category Service Quality. This supports what was previously stated that Trivselhus offers a strong and competitive product but fail on some of the surplus values. This is supported by comments given by the customers throughout this research, problems with contact, promises and responsibilities. Customers claim that they have been waiting for weeks and months just to get in contact and then they get promises that are not kept. The authors cannot take sides or know who is right or wrong in the different cases. However, the fact is still that the complaints are made. Once more, the authors does not see the full picture when it comes to complaints but it is clearly shown in this research that complaints and the handling of complaints is a factor that clearly affects customer satisfaction among Trivselhus customers.
However, in the end one should remember that most of Trivselhus customers are very satisfied with the company and the products which they offer. Positive comments given throughout the research covers most of the categories that is shown to be of most importance for customer satisfaction. It is just important to continue to work with and evolve surplus values, because the spread of word-of-mouth could also be used in a negative way.

One recommendation that is given by quite a few customers in the research is to offer customers turnkey contracts. The authors agree that by offering turnkey contracts it is clear who has the responsibility and the company gets the chance to develop their surplus values and offers their customers a full package deal, which can prove to increase the overall customer satisfaction for all Trivselhus’ customers.
References


Appendices

Appendix 1: English Questionnaire

Trivselhus Survey Mars/April 2010

1. Is it correct that you live in a Trivselhus?
   - Yes
   - No

2. Was it the first time that you did build a house?
   - Yes
   - No

3. How many live in the house today?

4. Through which media did you first come in contact with Trivselhus?

<table>
<thead>
<tr>
<th>Radio</th>
<th>TV</th>
<th>Trade Magazine</th>
<th>Local press</th>
<th>National Papers</th>
<th>Friends</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. To which degree did you perceive Trivselhus trustworthiness before the purchase?

   1  2  3  4  5  6
   □  □  □  □  □  □

6. To which degree did you perceive Trivselhus competence before the purchase?

   1  2  3  4  5  6
   □  □  □  □  □  □

7. How affordable did you find Trivselhus to be before the purchase?

   1  2  3  4  5  6
   □  □  □  □  □  □

Expectations

8. What were your expectations on Trivselhus service?

   1  2  3  4  5  6
   □  □  □  □  □  □

9. What were your expectations on Trivselhus flexibility?

   1  2  3  4  5  6
   □  □  □  □  □  □
10. What were your expectations on your house regarding energy consumption and environmental friendliness?

House/Product
11. How satisfied are you with looks and design of your house?

12. How satisfied are you with the materials and its quality?

13. How satisfied are you with the building quality and the house as a whole?

14. How satisfied are you with options and flexibility during the shaping of your house?

15. How satisfied are you with options and flexibility during the construction of your house?

16. How do you value the final product in relation to the sum that you have invested?

Energy
17. How satisfied are you with the energy consumption of your house?

18. How environmentally conscious do you find yourself to be today?

19. How environmentally conscious did you find yourself to be when you built your house?
20. To which degree did environmental friendliness and energy consumption play a part during the construction of your house?

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

21. Did Trivselhus supply any special information or offers concerning environmental friendliness and energy consumption?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

22. How big of a role would environmental friendliness and energy consumption played if you had built your house today?

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

23. How willing are you to pay extra for these attributes?

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

24. Are you aware of that you have energy efficient components such as doors and windows in your house today?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

25. If Yes – was it a conscious choice or a proposal given by Trivselhus?

<table>
<thead>
<tr>
<th>Conscious</th>
<th>Trivselhus</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

26. If No – In the eventuality of changing these components would you choose a more energy efficient option?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

27. If Yes – where would you go to purchase these components?

<table>
<thead>
<tr>
<th>Contact Product Supplier</th>
<th>Collect Offers</th>
<th>Visit building Suppliers</th>
<th>Contact Trivselhus</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Service

28. How satisfied are you with availability to obtain information before agreement in form of catalogs and webpage?

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
29. How satisfied are you with availability to get into contact with the company and obtain information before the start of the construction?

[Rating Scale 1-6]

30. How satisfied are you with information and contact during the construction?

[Rating Scale 1-6]

31. How satisfied are you with the treatment and contact with your responsible salesperson?

[Rating Scale 1-6]

32. How satisfied are you with the coordination and communication between Trivselhus, entrepreneurs and you as the customer?

[Rating Scale 1-6]

33. Have you had any problems with your house?

Yes  No

34. If Yes – Did you make any complaints?

Yes  No

35. If Yes – How satisfied are you with Trivselhus handling of your complaints?

[Rating Scale 1-6]

36. Have you or could you recommend Trivselhus to others?

Yes  No

37. If Yes – Do you know if anyone after that has built a Trivselhus?

Yes  No

38. How satisfied are you totally with Trivselhus as a house provider when all the aspects are weight in?

[Rating Scale 1-6]

Other general comments, something that was especially good or bad, something they should think about or do differently?
Appendix 2: Swedish Questionnaire
Trivselhus Marknadsundersökning Mars/April 2010

1. Stämmer det att Ni bor i ett Trivselhus?

<table>
<thead>
<tr>
<th>Ja</th>
<th>Nej</th>
</tr>
</thead>
</table>

2. Var detta första gången Ni byggde ett hus?

<table>
<thead>
<tr>
<th>Ja</th>
<th>Nej</th>
</tr>
</thead>
</table>

3. Hur många bor i huset idag?


4. Via vilket medium kom Ni först i kontakt med Trivselhus?

<table>
<thead>
<tr>
<th>Radio</th>
<th>TV</th>
<th>Bransch Tidningar</th>
<th>Lokalpress</th>
<th>Rikstäckande Tidningar</th>
<th>Vänner och Bekanta</th>
<th>Övrigt</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

Image

5. Till vilken grad uppfattade Ni Trivselhus pålitlighet innan köp?

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

6. Till vilken grad uppfattade Ni Trivselhus kompetens innan köp?

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

7. Hur prisvärt ansåg Ni Trivselhus vara innan köp?

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

Förväntningar

8. Vad var dina förväntningar på Trivselhus service?

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

9. Vad var dina förväntningar på Trivselhus Flexibilitet?

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

10. Vad var dina förväntningar på ditt hus angående energiförbrukning och miljövänlighet?

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Hus/Produkt</td>
<td>11. Hur nöjd är Ni med, Utseende, design på huset?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>□ □ □ □ □ □</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>12. Hur nöjd är Ni med, Materialval och dess kvalitet?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>□ □ □ □ □ □</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>13. Hur nöjd är Ni med, Byggkvalitet och husets helhet?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>□ □ □ □ □ □</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>14. Hur nöjd är Ni med, Tillvalsmöjligheter och flexibilitet under utformningen av Ert hus?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>□ □ □ □ □ □</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>15. Hur nöjd är Ni med, Tillvalsmöjligheter och flexibilitet under byggnation?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>□ □ □ □ □ □</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>16. Hur värderar Ni den slutgiltiga produkten i förhållande till summan som Ni investerat?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>□ □ □ □ □ □</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Energi</th>
<th>17. Hur nöjd är Ni med, Energiförbrukningen på Ert Trivselhus?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td></td>
<td>□ □ □ □ □ □</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>18. Hur miljömedveten anser Ni att Ni är idag?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>□ □ □ □ □ □</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>19. Hur miljömedveten anser Ni att Ni var när Ni byggde Ert hus?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>□ □ □ □ □ □</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>20. Till vilken grad vägdes miljövänlighet och energiförbrukning in i Ert bygge?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>□ □ □ □ □ □</td>
</tr>
</tbody>
</table>
21. Erbjöd Trivselhus Er information eller speciella alternativ angående miljövänlighet och energiförbrukning?

<table>
<thead>
<tr>
<th></th>
<th>Ja</th>
<th>Nej</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

22. Hur stor roll hade miljövänlighet och energiförbrukning spelat in om Ni hade byggt Ert hus idag?

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

23. Hur villig skulle Ni vara att betala extra för dessa egenskaper?

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

24. Är Ni medveten om Ni har energisnåla komponenter såsom fönster och dörrar i Ert hus idag?

<table>
<thead>
<tr>
<th></th>
<th>Ja</th>
<th>Nej</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

25. **Om Ja** – var det ett medvetet val eller var det ett förslag angivet av Trivselhus?

<table>
<thead>
<tr>
<th>Medvetet</th>
<th>Trivselhus</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

26. **Om Nej** – Vid eventuellt byte av dessa skulle ni då välja ett energisnålare alternativ?

<table>
<thead>
<tr>
<th></th>
<th>Ja</th>
<th>Nej</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

27. **Om Ja** – hur skulle Ni gå till väga?

<table>
<thead>
<tr>
<th>Kontakta Produkttleverantör</th>
<th>Samla Offerter</th>
<th>Besöka Bygghvaruhus</th>
<th>Kontakta Trivselhus</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

**Service**

28. Hur nöjd är Ni med, Tillgängligheten till information före avtal i form av t.ex. kataloger och hemsida?

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

29. Hur nöjd är Ni med, Tillgänglighet till kontakt och information innan byggnation?

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

30. Hur nöjd är Ni med, Löpande information och kontakt under byggnation?

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
31. Hur nöjd är Ni med, Bemötande och kontakt från Er ansvariga säljare?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

32. Hur nöjd är Ni med, Samordning och kommunikation mellan Trivselhus, Entreprenör och Er själva som kund?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

33. Har Ni haft något problem med Ert hus?

<table>
<thead>
<tr>
<th>Ja</th>
<th>Nej</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

34. Om Ja – Är det något som krävt reklamation?

<table>
<thead>
<tr>
<th>Ja</th>
<th>Nej</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

35. Om Ja – Hur nöjd är Ni med Trivselhus handläggning av Er reklamation?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

36. Har Ni eller skulle Ni rekommendera Trivselhus till andra?

<table>
<thead>
<tr>
<th>Ja</th>
<th>Nej</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

37. Om Ja – Vet ni om någon av dessa därefter har byggt ett Trivselhus?

<table>
<thead>
<tr>
<th>Ja</th>
<th>Nej</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

38. Hur nöjd är Ni med, Totalt sett, med Trivselhus som leverantör, då ni väger in alla aspekter?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Övriga allmänna kommentarer, något som var särskilt bra eller dåligt, något som dom borde tänka på, göra annorlunda?
Appendix 3: Question Abridgements

Due to space limitations and the design of the thesis, abridgements of the questions have been used sometimes throughout the text. In case of confusion or misunderstandings the following table presents the original question, its number, and how the question has been abridged in the thesis and where which version is used.

<table>
<thead>
<tr>
<th>Number</th>
<th>Original Question</th>
<th>In Central Tendency/Regression Tables</th>
<th>In Regression Models</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Is it correct that you live in a Trivselhus?</td>
<td>Live in Trivselhus?</td>
<td>N/A</td>
</tr>
<tr>
<td>2</td>
<td>Was it the first time that you did build a house?</td>
<td>First time build?</td>
<td>N/A</td>
</tr>
<tr>
<td>3</td>
<td>How many live in the house today?</td>
<td>How many live in?</td>
<td>N/A</td>
</tr>
<tr>
<td>4</td>
<td>Through which media did you first come in contact with Trivselhus?</td>
<td>Which medium, first time contact?</td>
<td>N/A</td>
</tr>
<tr>
<td>5</td>
<td>To which degree did you perceive Trivselhus trustworthiness before the purchase?</td>
<td>Degree of Trustworthiness?</td>
<td>Trustworthiness</td>
</tr>
<tr>
<td>6</td>
<td>To which degree did you perceive Trivselhus competence before the purchase?</td>
<td>Degree of Competence?</td>
<td>Competence</td>
</tr>
<tr>
<td>7</td>
<td>How affordable did you find Trivselhus to be before the purchase?</td>
<td>How Affordable?</td>
<td>Affordable</td>
</tr>
<tr>
<td>8</td>
<td>What were your expectations on Trivselhus service?</td>
<td>Expectations Service?</td>
<td>Expectations, Service</td>
</tr>
<tr>
<td>9</td>
<td>What were your expectations on Trivselhus flexibility?</td>
<td>Expectations Flexibility?</td>
<td>Expectations, Flexibility</td>
</tr>
<tr>
<td>10</td>
<td>What were your expectations on your house regarding energy consumption and environmental friendliness?</td>
<td>Expectations Energy?</td>
<td>Expectations, Energy</td>
</tr>
<tr>
<td>11</td>
<td>How satisfied are you with looks and design of your house?</td>
<td>Satisfied, Looks Design?</td>
<td>Looks, Design</td>
</tr>
<tr>
<td>12</td>
<td>How satisfied are you with the materials and its quality?</td>
<td>Satisfied, Material Quality?</td>
<td>Materials, Quality</td>
</tr>
<tr>
<td>13</td>
<td>How satisfied are you with the building quality and the house as a whole?</td>
<td>Satisfied, Build Quality?</td>
<td>Build Quality</td>
</tr>
<tr>
<td>14</td>
<td>How satisfied are you with options and flexibility during the shaping of your house?</td>
<td>Satisfied, Options &amp; Flexibility Shaping?</td>
<td>Options &amp; Flexibility, Shaping</td>
</tr>
<tr>
<td>Q</td>
<td>Question</td>
<td>Satisfied, Options &amp; Flexibility Construction?</td>
<td>Options &amp; Flexibility, Construction</td>
</tr>
<tr>
<td>-----</td>
<td>--------------------------------------------------------------------------</td>
<td>-----------------------------------------------</td>
<td>-------------------------------------</td>
</tr>
<tr>
<td>15</td>
<td>How satisfied are you with options and flexibility during the construction of your house?</td>
<td>Satisfied, Options &amp; Flexibility Construction?</td>
<td>Options &amp; Flexibility, Construction</td>
</tr>
<tr>
<td>16</td>
<td>How do you value the final product in relation to the sum that you have invested?</td>
<td>Value Final Product/Investment?</td>
<td>Final Product/Investment</td>
</tr>
<tr>
<td>17</td>
<td>How satisfied are you with the energy consumption of your house?</td>
<td>Satisfied, Energy Consumption House?</td>
<td>Energy Consumption</td>
</tr>
<tr>
<td>18</td>
<td>How environmentally conscious do you find yourself to be today?</td>
<td>Environmentally Conscious, Today?</td>
<td>N/A</td>
</tr>
<tr>
<td>19</td>
<td>How environmentally conscious did you find yourself to be when you built your house?</td>
<td>Environmentally Conscious, Build?</td>
<td>N/A</td>
</tr>
<tr>
<td>20</td>
<td>To which degree did environmental friendliness and energy consumption play a part during the construction of your house?</td>
<td>Degree of Environmental Conscious, Construction?</td>
<td>Energy Consumption, Construction</td>
</tr>
<tr>
<td>21</td>
<td>Did Trivselhus supply any special information or offers concerning environmental friendliness and energy consumption?</td>
<td>Trivselhus Special Energy Info?</td>
<td>Trivselhus Energy Info</td>
</tr>
<tr>
<td>22</td>
<td>How big of a role would environmental friendliness and energy consumption played if you had built your house today?</td>
<td>Degree, Energy Roll Today?</td>
<td>Energy Roll Today</td>
</tr>
<tr>
<td>23</td>
<td>How willing are you to pay extra for these attributes?</td>
<td>Willingness to Pay Extra?</td>
<td>Pay Extra</td>
</tr>
<tr>
<td>24</td>
<td>Are you aware of that you have energy efficient components such as doors and windows in your house today?</td>
<td>Aware of Energy Components in House?</td>
<td>N/A</td>
</tr>
<tr>
<td>25</td>
<td>If Yes – Was it a conscious choice or a proposal given by Trivselhus?</td>
<td>(If Yes) Conscious Choice?</td>
<td>N/A</td>
</tr>
<tr>
<td>26</td>
<td>If No – In the eventuality of changing these components would you choose a more energy efficient option?</td>
<td>(If No) Change to Energy Components today?</td>
<td>N/A</td>
</tr>
<tr>
<td>27</td>
<td>If Yes – Where would you go to purchase these components?</td>
<td>(If Yes) Were Would You Go?</td>
<td>N/A</td>
</tr>
<tr>
<td>28</td>
<td>How satisfied are you with availability to obtain information before agreement in form of catalogs and homepage?</td>
<td>Satisfied, Info Catalogs &amp; Webpage?</td>
<td>Info Catalogs</td>
</tr>
<tr>
<td>29</td>
<td>How satisfied are you with availability to get into contact with the company and obtain information before the start of the construction?</td>
<td>Satisfied, Info Before?</td>
<td>Info, Before</td>
</tr>
<tr>
<td></td>
<td>How satisfied are you with information and contact during the construction?</td>
<td>Satisfied, Info Construction?</td>
<td>Info, Construction</td>
</tr>
<tr>
<td>---</td>
<td>--------------------------------------------------------------------------</td>
<td>-------------------------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>30</td>
<td>How satisfied are you with the treatment and contact with your responsible salesperson?</td>
<td>Satisfied, Responsible Salesperson?</td>
<td>Responsible Salesperson</td>
</tr>
<tr>
<td>31</td>
<td>How satisfied are you with the coordination and communication between Trivselhus, entrepreneurs and you as the customer?</td>
<td>Satisfied, Coordination and Communication?</td>
<td>Coordination and Communication</td>
</tr>
<tr>
<td>32</td>
<td>Have you had any problems with your house?</td>
<td>Any Problems?</td>
<td>N/A</td>
</tr>
<tr>
<td>33</td>
<td>If Yes – Did you make any complains?</td>
<td>Complaints?</td>
<td>Reclamation</td>
</tr>
<tr>
<td>34</td>
<td>If Yes – How satisfied are you with Trivselhus handling of your complaints?</td>
<td>Handling of Complaints?</td>
<td>Handling Reclamation</td>
</tr>
<tr>
<td>35</td>
<td>Have you or could you recommend Trivselhus to others?</td>
<td>Recommend Trivselhus?</td>
<td>N/A</td>
</tr>
<tr>
<td>36</td>
<td>If Yes – Do you know if anyone after that has built a Trivselhus?</td>
<td>(If Yes) Any Build After Recommendation?</td>
<td>N/A</td>
</tr>
<tr>
<td>37</td>
<td>How satisfied are you totally with Trivselhus as a house provider when all the aspects are weight in?</td>
<td>Satisfied, Totally?</td>
<td>Satisfied Totally</td>
</tr>
</tbody>
</table>
Appendix 4: Questioner Comments

2000 – 2001

General Company (Good)
- Good recommendation of entrepreneur
- The company was courteous
- Quality construction
- True quality
- Good material selection
- High standard
- Thoughtful
- Low energy
- High flexibility and no restrictions
- Has built two houses
- Took part in the production
- Surprisingly easy to make changes
- Listened to our needs

General Company (Bad)
- Would get a refund on the undelivered products but there was never any money
- Want to have better monitoring
- Poor final accession
- Further follow-up
- Poor contact during construction
- More active involvement in the construction
- Poor calculus
- Poor estimates, it is always more expensive than you think
- Disaster in taking responsibility
- Tibro kitchen does not work
- Disappears after the construction but still probably the best of the worst
- Check carefully all subcontractors and provide references
- Poor information about the external walls were not included in the price
- Poor carpenters
- Lack of support from Trivselhus
- There should be support all the way through construction
- The company can probably qualify for fuskbyggarna (cheating builders, Swedish television program)
- More turn-key operation (Totalentreprenad)

Salesperson (Good)
- Trusted seller
- The seller had many ideas
- Good seller

Salesperson (Bad)
- The seller had poor knowledge and too little information
- The seller disappeared soon after the agreement
2002 – 2003

**General Company (Good)**

Good, well-built house  
Skilled carpenters  
We are very pleased

**General Company (Bad)**

Problems with the contractor from the beginning  
Takes no responsibility  
Should have shown more interest  
Should think more about energy  
They had difficulty to adapt to customer’s requirements  
Heavy process when we wanted to change something  
Did not get enough information and advice  
The company should carefully check their entrepreneurs  
Problem between Trivselhus and the carpenters  
Difficult to reach  
It was very good before the contract was signed, then they disappeared  
Absolutely no follow-up  
The architect had no expertise on environmental awareness  
If you did not choose the default execution you had to pay an overcharge  
Tried for three years to get parts that were included in the contract  
It was only when we signed the contract that we realized that there was no turn-key contract, the company should have been clearer on this  
We wanted to be able to choose our own independent inspector  
Poor recommendation of contractors  
Poor handling of the complaints
<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Salesperson (Good)</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Salesperson (Bad)</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>The seller was not so accommodating from the start</td>
</tr>
<tr>
<td></td>
<td>The seller has promised to arrange the errors, but still nothing has happened after three years</td>
</tr>
<tr>
<td></td>
<td>The seller had too much to do and was difficult to reach</td>
</tr>
<tr>
<td></td>
<td>The seller ignored us after we signed the contract</td>
</tr>
<tr>
<td><strong>2004 – 2005</strong></td>
<td></td>
</tr>
<tr>
<td><strong>General Company (Good)</strong></td>
<td>Really good house company</td>
</tr>
<tr>
<td></td>
<td>Not so cheap but good</td>
</tr>
<tr>
<td></td>
<td>Good contractors</td>
</tr>
<tr>
<td></td>
<td>Fantastic house</td>
</tr>
<tr>
<td></td>
<td>Flexible, good seller, fast and good answer</td>
</tr>
<tr>
<td></td>
<td>Generally good</td>
</tr>
<tr>
<td><strong>General Company (Bad)</strong></td>
<td>Bad construction</td>
</tr>
<tr>
<td></td>
<td>More support during the construction</td>
</tr>
<tr>
<td></td>
<td>Not good carpenter</td>
</tr>
<tr>
<td></td>
<td>After two inspections, it took over 1 year to fix all the errors</td>
</tr>
<tr>
<td><strong>Salesperson (good)</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Salesperson (Bad)</strong></td>
<td>Not qualified salespersons</td>
</tr>
<tr>
<td></td>
<td>The seller in Jönköping defaulted with his mission</td>
</tr>
</tbody>
</table>
2006 – 2007

General Company (Good)
- Good at being punctual
- Very nice house but also very expensive
- Has previously issued Trivselhus comments that they listened and made follow-ups on

General Company (Bad)
- Get total turn-key operation
- They take no liability for their contractors
- Be more customer-oriented than sales-oriented and become more advisory.
- They promised too much as they did not live up to
- Complaints department work badly
- The salesperson and builders were not good but the house was fine
- The energy consumption was higher than expected
- Better spreadsheet work must be done, be honest and include the worst case scenario
- Following up of subcontractors should be better. Improve customer relationships
- Project management can be improved
- Better dialogue with the architect and better feedback
- More flexibility and suggest other solutions, particularly in the energy sector
- Be more in media
- Poor focus on helping entrepreneurs

Salesperson (Good)

Salesperson (Bad)
2008 – 2009

General Company (Good)
A great product and incredible good communication
High standards and good contractors
We had high requirements and is almost completely satisfied
Good standard quality.

General Company (Bad)
We had to find out much ourselves
The salesperson wanted to come to closure quickly
The contractor had too much to do and we had to take hold of things ourselves
The choice of contractor was bad, got the impression that it was compelled to use these
Lost contact with customers when you signed the contract
It was messy in the drawing stage
More balancing meetings between customer and the entrepreneur. A schedule where you can see when things will happen. This to make it easier for customers to make decisions at the right time.
Clearer price list for the basic design.

Salesperson (Good)

Salesperson (Bad)
The salesperson disappeared when we signed the contract
Appendix 5: Regression Models

2000 – 2001

Model 1: Including all variables: $\text{Adj.} R^2 = -0.176$

Model 2: Excluding Expectations Service: $\text{Adj.} R^2 = 0.020$

Model 3: Excluding Expectations Service and Build Quality: $\text{Adj.} R^2 = 0.160$

Model 4: Excluding Expectations Service, Build Quality and Trust: $\text{Adj.} R^2 = .0265$

Model 5: Excluding Expectations Service, Build Quality, Trust and Expectations Flexibility: $\text{Adj.} R^2 = 0.346$

Model 6: Excluding Expectations Service, Build Quality, Trust, Expectations Flexibility and Info Construction: $\text{Adj.} R^2 = 0.410$

Model 7: Excluding Expectations Service, Build Quality, Trust, Expectations Flexibility, Info Construction and Competence: $\text{Adj.} R^2 = 0.460$

Model 8: Excluding Expectations Service, Build Quality, Trust, Expectations Flexibility, Info Construction, Competence and Expectations Energy: $\text{Adj.} R^2 = 0.500$

Model 9: Excluding Expectations Service, Build Quality, Trust, Expectations Flexibility, Info Construction, Competence, Expectations Energy and Energy Roll Today: $\text{Adj.} R^2 = 0.531$

Model 10: Excluding Expectations Service, Build Quality, Trust, Expectations Flexibility, Info Construction, Competence, Expectations Energy, Energy Roll Today and Energy Consumption Construction: $\text{Adj.} R^2 = 0.554$


Model 12: Excluding Expectations Service, Build Quality, Trust, Expectations Flexibility, Info Construction, Competence and Expectations Energy, Energy Roll Today, Energy Consumption Construction, Trivselhus Energy Info and Affordable: $\text{Adj.} R^2 = 0.582$


2002 – 2003

Model 1: Including all variables: Adj. $R^2 = 0.885$

Model 2: Excluding Info Before: Adj. $R^2 = 0.094$

Model 3: Excluding Info Before and Coordination and Communication: Adj. $R^2 = 0.918$

Model 4: Excluding Info Before, Coordination and Communication and Expectations Flexibility: Adj. $R^2 = 0.928$

Model 5: Excluding Info Before, Coordination and Communication, Expectations Flexibility and Energy Roll Today: Adj. $R^2 = 0.936$

Model 6: Excluding Info Before, Coordination and Communication, Expectations Flexibility, Energy Roll Today and Options Flexibility Shaping: Adj. $R^2 = 0.941$

Model 7: Excluding Info Before, Coordination and Communication, Expectations Flexibility, Energy Roll Today, Options Flexibility Shaping and Pay Extra: Adj. $R^2 = 0.946$

Model 8: Excluding Info Before, Coordination and Communication, Expectations Flexibility, Energy Roll Today, Options Flexibility Shaping, Pay Extra and Expectations Energy: Adj. $R^2 = 0.948$


2004 – 2005

Model 1: Including all variables: Adj.$R^2$ = 0.331

Model 2: Excluding Final Product/Investment: Adj.$R^2$ = 0.443

Model 3: Excluding Final Product/Investment and Options Flexibility Construction: Adj.$R^2$ = 0.522

Model 4: Excluding Final Product/Investment, Options Flexibility Construction and Materials Quality: Adj.$R^2$ = 0.578

Model 5: Excluding Final Product/Investment, Options Flexibility Construction, Materials Quality and Looks Design: Adj.$R^2$ = 0.623

Model 6: Excluding Final Product/Investment, Options Flexibility Construction, Materials Quality, Looks Design and Affordable: Adj.$R^2$ = 0.659

Model 7: Excluding Final Product/Investment, Options Flexibility Construction, Materials Quality, Looks Design, Affordable and Info Construction: Adj.$R^2$ = 0.686

Model 8: Excluding Final Product/Investment, Options Flexibility Construction, Materials Quality, Looks Design, Affordable, Info Construction and Expectations Energy: Adj.$R^2$ = 0.708


2006 – 2007

Model 1: Including all variables: Adj. $R^2 = 0.914$

Model 2: Excluding Looks Design: Adj. $R^2 = 0.929$

Model 3: Excluding Looks Design and Info Catalogs: Adj. $R^2 = 0.939$

Model 4: Excluding Looks Design, Info Catalogs and Trust: Adj. $R^2 = 0.943$

Model 5: Excluding Looks Design, Info Catalogs, Trust and Responsible Sales Person: Adj. $R^2 = 0.947$

Model 6: Excluding Looks Design, Info Catalogs, Trust, Responsible Sales Person and Final Product/Investment: Adj. $R^2 = 0.950$

Model 7: Excluding Looks Design, Info Catalogs, Trust, Responsible Sales Person, Final Product/Investment and Expectations Service: Adj. $R^2 = 0.954$

Model 8: Excluding Looks Design, Info Catalogs, Trust, Responsible Sales Person, Final Product/Investment, Expectations Service and Energy Consumption: Adj. $R^2 = 0.956$
**Model 9:** Excluding Looks Design, Info Catalogs, Trust, Responsible Sales Person, Final Product/Investment, Expectations Service, Energy Consumption and Build Quality: Adj. $R^2 = 0.957$

**Model 10:** Excluding Looks Design, Info Catalogs, Trust, Responsible Sales Person, Final Product/Investment, Expectations Service, Energy Consumption, Build Quality and Trivselhus Energy Info: Adj. $R^2 = 0.954$

**Model 11:** Excluding Looks Design, Info Catalogs, Trust, Responsible Sales Person, Final Product/Investment, Expectations Service, Energy Consumption, Build Quality, Trivselhus Energy Info and Competence: Adj. $R^2 = 0.953$

**2008 – 2009**

**Model 1:** Including all variables: Adj. $R^2 = 0.785$

**Model 2:** Excluding Final Product/Investment: Adj. $R^2 = 0.821$

**Model 3:** Excluding Final Product/Investment and Info Before: Adj. $R^2 = 0.846$

**Model 4:** Excluding Final Product/Investment, Info Before and Trivselhus Energy Info: Adj. $R^2 = 0.865$

**Model 5:** Excluding Final Product/Investment, Info Before, Trivselhus Energy Info and Materials Quality: Adj. $R^2 = 0.880$

**Model 6:** Excluding Final Product/Investment, Info Before, Trivselhus Energy Info, Materials Quality and Energy Consumption Construction: Adj. $R^2 = 0.892$

**Model 7:** Excluding Final Product/Investment, Info Before, Trivselhus Energy Info, Materials Quality, Energy Consumption Construction and Affordable: Adj. $R^2 = 0.900$

**Model 8:** Excluding Final Product/Investment, Info Before, Trivselhus Energy Info, Materials Quality, Energy Consumption Construction, Affordable and Expectations Service: Adj. $R^2 = 0.907$

**Model 9:** Excluding Final Product/Investment, Info Before, Trivselhus Energy Info, Materials Quality, Energy Consumption Construction, Affordable, Expectations Service and Responsible Sales Person: Adj. $R^2 = 0.914$

**Model 10:** Excluding Final Product/Investment, Info Before, Trivselhus Energy Info, Materials Quality, Energy Consumption Construction, Affordable, Expectations Service, Responsible Sales Person and Competence: Adj. $R^2 = 0.918$

**Model 11:** Excluding Final Product/Investment, Info Before, Trivselhus Energy Info, Materials Quality, Energy Consumption Construction, Affordable, Expectations Service, Responsible Sales Person, Competence and Coordination and Communication: Adj. $R^2 = 0.922$

**Model 12:** Excluding Final Product/Investment, Info Before, Trivselhus Energy Info, Materials Quality, Energy Consumption Construction, Affordable, Expectations Service, Responsible Sales Person, Competence, Coordination and Communication and Energy Consumption: Adj. $R^2 = 0.922$


Special – 2

In this regression all of the interviewed people that had made some kind of complaint were excluded. Since the author choose to exclude those persons the questions about complaints and handling complaints were also excluded before the start of the regression. This due to the simple fact that the author already at that point knew that the people involved in this special model had not made any complaints.

Model 1: Including all variables: Adj.$R^2 = 0.613$

Model 2: Excluding Info Catalogs: Adj.$R^2 = 0.618$

Model 3: Excluding Info Catalogs and Info Before: Adj.$R^2 = 0.623$

Model 4: Excluding Info Catalogs, Info Before and Expectations Service: Adj.$R^2 = 0.628$

Model 5: Excluding Info Catalogs, Info Before, Expectations Service and Expectations Flexibility: Adj.$R^2 = 0.632$

Model 6: Excluding Info Catalogs, Info Before, Expectations Service, Expectations Flexibility and Competence: Adj.$R^2 = 0.636$

Model 7: Excluding Info Catalogs, Info Before, Expectations Service, Expectations Flexibility, Competence and Coordination and Communication: Adj.$R^2 = 0.639$

Model 8: Excluding Info Catalogs, Info Before, Expectations Service, Expectations Flexibility, Competence, Coordination and Communication and Options Flexibility Shaping: Adj.$R^2 = 0.642$

Model 9: Excluding Info Catalogs, Info Before, Expectations Service, Expectations Flexibility, Competence, Coordination and Communication, Options Flexibility Shaping and Energy Consumption: Adj.$R^2 = 0.644$

Model 10: Excluding Info Catalogs, Info Before, Expectations Service, Expectations Flexibility, Competence, Coordination and Communication, Options Flexibility Shaping, Energy Consumption and Final Product/Investment: Adj.$R^2 = 0.646$

Model 11: Excluding Info Catalogs, Info Before, Expectations Service, Expectations Flexibility, Competence, Coordination and Communication, Options Flexibility Shaping, Energy Consumption, Final Product/Investment and Pay Extra: Adj.$R^2 = 0.646$


