Servitization in the Car Industry

A Case Study of the concept Care by Volvo

Master Degree Project in Innovation and Industrial Management

Authors: Rebecca Kjellberg & Erica Lagerkvist
Supervisor: Daniel Ljungberg
Master of Science in Innovation and Industrial Management
at the School of Business, Economics and Law at the University of Gothenburg
Graduate School

UNIVERSITY OF GOTHENBURG
SCHOOL OF BUSINESS, ECONOMICS AND LAW

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Written by Rebecca Kjellberg and Erica Lagerkvist

School of Business, Economics and Law, University of Gothenburg
Institution of Innovation and Entrepreneurship
Vasagatan 1, P.O. Box 600, SE 405 30 Gothenburg, Sweden

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Abstract

In recent years, product-based companies are adding more services to their products and in contrast to the traditional perspective, products can now be add-ons to services. Hence, servitization has entered the manufacturing industry and more specifically the car industry. The chief purpose of this thesis is to investigate how a car manufacturer can servitize its offering. This has been done by conducting a single case study at Volvo Car Sweden, about the new subscription model Care by Volvo. To answer the *Research Questions,* a *Theoretical Framework* about service, servitization and subscription have been used. To answer the *Research Questions* these theories have been combined with primary data collections in terms of qualitative and quantitative research. Based on the *Theoretical Framework* and the empirical data, the authors have identified some findings. First, suggestions for how Volvo Car Sweden can improve their communication about Care by Volvo, to increase the awareness is presented. Secondly, the differences between the competitors and Care by Volvo has been identified. Finally, the authors suggest four different services that can be added to increase the customer value of Care by Volvo. All the findings will increase the understanding of how a car manufacturer can servitize its offering.

Keywords

Servitization, Servitization in the car industry, Servitization in manufacturing industries, Servitization and Customers, Subscription, Service and Value Adding activities.

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1. Introduction

In this section, the background of the investigated subject of this thesis is first presented and is then followed by a combined problematization and case description of Care by Volvo, where a challenging point of view is taken. Three Research Questions are then presented, and this section ends with some delimitations and a disposition of the thesis.

1.1 Background

Traditionally, market conditions have moved from being stable and simple to dynamic and complex. Consumption and production has historically been driven by products, while services have often been add-ons to the core product. To add services to products is predicted to be necessary for sales of products in the future (Gebauer, Gustafsson & Witell, 2011; Kowalkowski, Kindström, 2012 & Alejandro, Brege & Biggeman, 2012). Companies who create services and thereby attracts and keeps customers will have the ability to sustain a competitive advantage (Vandermerwe & Rada, 1988; Berry, Shankar, Parish, Cadwallader; Dotzel, 2006; Liu & Huang, 2018 & Martín- Peña et al., 2018). In recent years, product-based companies are adding more services and in contrast to the traditional perspective, products can now be add-ons to services (Gebauer et al., 2011). Manufacturing firms are providing and innovating multiple services (Tehter, 2014). To offer the customers integrated and customized solutions is important (Davies, 2004 & Martín- Peña, Díaz- Garrido & Sánchez- López, 2018). Furthermore, the combination of products and services enables for manufacturing companies to penetrate new markets (Gebauer et al., 2011). Vandermerwe and Rada (1988) call the shift from focusing on products to focusing on an integrated bundle of products and services, servitization. To succeed with servitization, companies need to rethink the existing business model, to develop new opportunities (Gebauer et al., 2011; Kowalkowski et al., 2012).

1.2 Problematization and Case Description of Care by Volvo

In recent years, servitization has entered the car industry (Baines et al. 2009b). Hence, it enables for companies to create new business models by adding services to products (Gebauer et al., 2011; Kowalkowski et al., 2012). However, it can be challenging to succeed with servitization (Kowalkowski et al., 2012). A concrete example of a business model that is based on servitization is Care by Volvo, which was founded in 2016 and is a project within Volvo Car Sweden. It is a new subscription-based business model, where everything is included, and the customers can build and order the car online (Volvo Cars, 2018b).

Care by Volvo is advertised with the slogan *"By not owning things, you're not owned by things"*, meaning that a Care by Volvo car is a car that one does not own, instead one subscribes to it (Volvo Cars, 2018b). Care by Volvo is advertised as an all-inclusive offering (Volvocars.com, 2018d). Another unique characteristic with Care by Volvo is that one can build and order the car digitally and sign with BankID (Volvo Cars, 2018b). This is a completely new way of ordering a car. It also makes it more challenging for customers and potential customers to understand this new business model and the added values. Further, it is challenging to explain for the customers and potential customers what is unique with Care by Volvo, compared to private leasing, but also what extra values Care by Volvo has compared to buying a car. It is important for companies to ensure that the customers understand the added value of a new offering (Pistoni & Songini, 2017). To fully explain to the potential customers, communication is essential. There are several reasons for why an unsuccessful service delivery can occur. Among these, there can be a *"Gap between the external communications and service delivery"* (Kotler & Keller, 2016). Hence, it is a challenge for Care by Volvo to communicate what is unique with the concept and to make the potential customers understand the added values.

As mentioned above, servitization has entered the manufacturing industry, including the car industry (Baines et al. 2009b). Traditionally, this industry has been focused towards tangible products. Hence, the competition before has been focused on price and product, while services are now included in the competition as well (Baines et al., 2009a). Care by Volvo is described with the words simple, convenient, safe, *carefree* and without surprises. Everything that the customer need is included in the subscription. In terms of price, Care by Volvo is pre-negotiated and ready, and all Volvo models are available with Care by Volvo (Volvo Cars, 2018b). Because of the rapid change in the market and the more complex competition, where services are included, it can be a challenge for companies to fully understand the competition (Baines et al., 2009a & Gebauer et al. 2011). Volvo Car Sweden lacks information about what the competition against Care by Volvo looks like in terms of price, product and service. This information is essential to possess to know how to differentiate from the competitors in the market. It is also necessary to have this information to know how to further servitize the offering of Care by Volvo.

Today, customers are demanding more services than ever before and therefore, and it is of main importance for companies to understand the value of this (Iansiti & Lakhani, 2014). However, customers do not want less products, instead, they want to get access to the products and services in a quick and convenient way. This makes them more difficult to please (Vandermerwe & Rada, 1988; Martín- Peña, Díaz- Garrido & Sánchez- López, 2018). Servitization enables for manufacturers to create more customized solutions and therefore, servitization makes it possible for companies to please their customers and increase the customer value (Martín- Peña, Díaz- Garrido & Sánchez- López, 2018). However, if a company introduce a new add-on service which is not in line with what the customers demand, it will not be successful in the long term (Ravald & Grönroos, 1996). *"Care by Volvo is a new and carefree way of having a car. You choose the Volvo that best suits your demand, pay your monthly fee and use your car. We take care of everything else"* (Volvo Cars, 2018a). Based on this description of Care by Volvo, it is essential to fully understand the demand of the customers, to take *care* of what is demanded by the customers. *"By 2025, our customers should get back one week of time per year, through our products and services".* This is a strategy by Volvo Car Sweden (Volvocars, 2018c). To work in line with this strategy, servitization can be used. However, to increase the customer value of Care by Volvo, demanded services need to be identified and possibly added.

1.3 Research Questions

The objective of this thesis has been to provide Volvo Car Sweden, and more specifically Care by Volvo with information about how a car manufacturer can servitize its offering. Based on the background, and the problematization and case description of Care by Volvo, the authors have agreed upon the following *Research Questions,* which all seek to be answered in this thesis.

How can a car manufacturer servitize its offering? A case study of the concept Care by Volvo.

- *RQ1: How can Care by Volvo solve the problem regarding that the potential customers do not completely understand the new concept and the added values?*
- *RQ2: How does Care by Volvo differentiate from their competitors?*
- *RQ3: What type of services could be added to Care by Volvo in order to increase the customer value?*

1.4 Delimitations

Care by Volvo is focused towards private customers. Therefore, a logical delimitation for this study will be to only focus on servitization for Business-to-Consumer (B2C). Hence, Business-to-Business (B2B) and Consumer-to-Consumer (C2C) are not investigated in this thesis. Another delimitation is that this research is only focused towards Care by Volvo in Sweden. Hence, the global perspective of Care by Volvo is beyond this study. Finally, when the authors suggest services that could be added to Care by Volvo to increase the customer value, a strategic perspective has been used. Hence, a financial perspective, with extensive and accurate calculations, and technical perspective for how the services should be technically performed is out of the scope of this thesis.

1.5 Disposition

To provide the reader with a clear structure of this thesis, a disposition is presented below, *see Figure 1*.

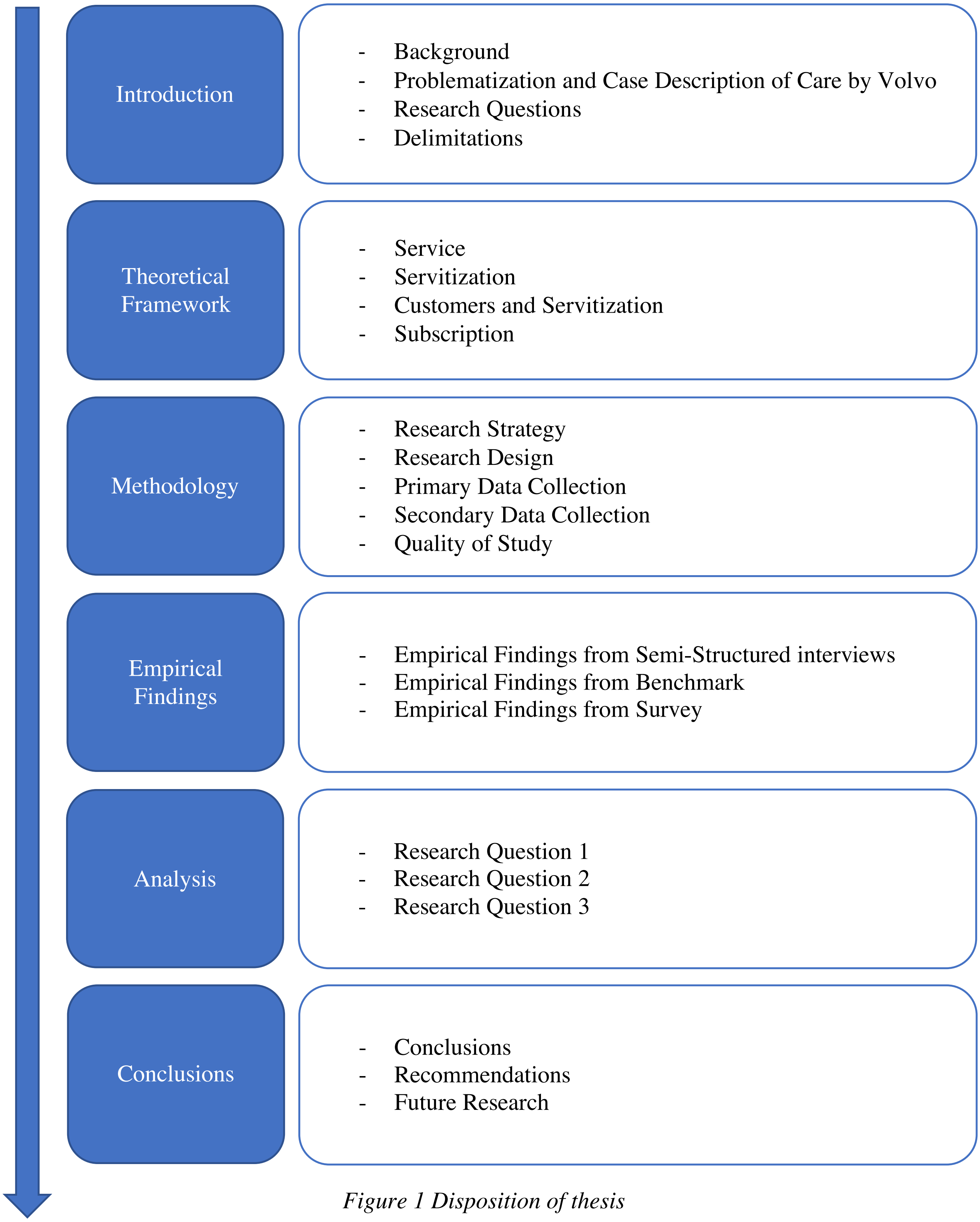

Figure 1 Disposition of thesis

2. Theoretical Framework

In this section, four main theories are presented. All of them are somehow connected to the car industry. Service is the first theory presented in the Theoretical Framework. This is related to the car industry because today, a car manufacturer does not only provide the customers with a car, but with services as well. Servitization is the second theory and this is connected to the car industry because car manufacturers can today servitize its offering, by adding services to the car. Furthermore, a part with customers and servitization is presented, where terms connected to competition is presented. This is relevant for the customers when deciding which car to buy, lease or subscribe to. Finally, subscription is presented and the chief reason for why this can be connected to the car industry is because today, it is possible to subscribe to a car, which Care by Volvo is a concrete example of.

2.1 Service

According to WTO (2015), more than 70 percent of the world GDP is today dominated by services. Services are especially attractive in mature industries where companies can no longer differentiate their products. Adding services to a product differentiates and is therefore an important source of revenue (Pistoni & Songini, 2017). However, providing service innovation is difficult and challenging (Tehter, 2014). A main reason to why there is a shift towards services is because customers are demanding more solution-based offerings, and this can be used as a marketing tool. Using services to market a product can influence the decision to purchase a product or not. Hence, adding services can help companies to sell more products (Baines et al., 2009; Oliva & Kallenberg, 2003; Pistoni & Songini, 2017). Product and service elements can be bundled together and by doing this, innovations can be recombined (Kowalkowski et al., 2012). The combination of using both services and products are advantageous for companies since they are harder to copy and can therefore result in a competitive advantage (Baines et al., 2009a). By this combination, penetrating new markets is possible (Gebauer et al., 2011). For these reasons, it is important for companies to understand the value of services. Furthermore, companies tend to give away services for free, they do not understand that services can add value to the company (Oliva & Kallenberg, 2003). A new way of increasing the value for customers is by providing the customers with services that they previously conducted themselves. Hence, extra value is created for the customers (Pistoni & Songini, 2017).

2.1.1 Difference Between Physical Products and Services

There are some fundamental differences between a physical product and a service. A product is tightly linked to manufacturing and therefore well understood in these types of organizations (Tehter, 2014). Oliva & Kallenberg (2003) suggest that services should be integrated into the core product offering off manufacturing companies. A service is identified by four main characteristics. The first one is *intangibility*, which means that the service cannot be seen, tasted, heard or touched, while a physical product is tangible. Secondly, while a physical product can be separated and exist independently from the producer, a service cannot. Hence, in a service, it is not possible to separate what is provided from who is providing the service, which means that a service is *inseparable*. The third characteristic is *perishable*, meaning that a service cannot be stored. This is the opposite against physical products. Finally, the fourth characteristic of a service is that it is often *heterogeneous*, meaning that it is variable. Therefore, standardization of services is difficult to create, while a physical product can often be standardized. Hence, a service is possible to customize (Tehter, 2014; Pistoni & Songini, 2017). Services can create value to customers without using physical products, but services and products can also be combined (Pistoni & Songini, 2017).

2.1.2 Five Categories of Product and Service Offerings

According to Kotler & Keller (2016) the total offering to customers consist of product components and service components. The main focus of the total offering can be on either products or services, or a combination of both. Products and services can be distinguished into five different categories of offerings. These are presented below, *see Figure 2.*

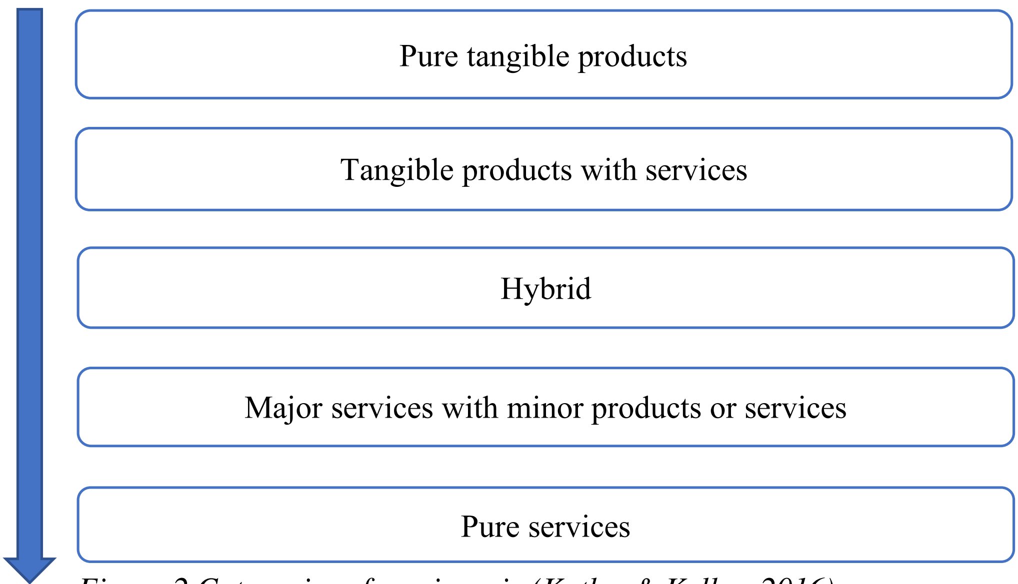

Figure 2 Categories of service mix (Kotler & Keller, 2016)

The first category is *"Pure tangible products"*, which logically only consist of tangible products. Hence, no services are included in this first offering. The second category of offering is "*Tangible products with services",* where the main focus still is on tangible products, but there are one or more services included in the offering. The *"Hybrid"* is the middle category and the characteristics of this offering is that it consists of an equal part products and services. The fourth category of offering is when the customer is offered *"Major services with minor products or services",* which means that products can be seen as add-ons to the services. Finally, the last category in this model, *"Pure services"* focuses primarily on services and no products are included into this offering (Kotler & Keller, 2016). For manufacturing companies, this model can be useful in order to change the business logic and move towards more services (Oliva and Kallenberg, 2003).

2.1.3 Word of Mouth

A challenge with providing services is that it is difficult to evaluate for the customers, even after consumption. Furthermore, services can be risky to purchase since they often are high in credence qualities and experiences, meaning that there is an embedded insecurity of what will be delivered. Therefore, customers often rely more on word of mouth than advertisement (Kotler & Keller, 2016). An extension of the traditional word of mouth is the electronic word of mouth, (e-word of mouth). This makes it possible for customers to share their experiences and opinions of products and services online. Compared to the traditional word of mouth, e-word of mouth makes it possible for a very large number of customers and potential customers to read the reviews online. The use of Internet for spreading information about products and services results in an unbiased source of information, compared to the traditional advertising (Henning-Thurau, Gwinner, Walsh & Gremler, 2004).

2.2 Servitization

"The increased offering of fuller market packages or 'bundles' of customer focused combinations of goods, services, support, self-service and knowledge in order to add value to core product offerings". This is how Vandermerwe & Rada (1988) coined the term servitization, at that time a completely new concept. There are broader and more narrow meanings of servitization (Pistoni & Songini, 2017). In 1999, a definition of servitization was stated by White, Stoughton & Feng. They defined servitization as *"The emergence of product-based services which blur the distinction between manufacturing and traditional service sector activities"* (p.2). According to Baines et al. (2009a) servitization is now recognized as *"The process of creating value by adding services to products"*. The mutual characteristic of these three definitions is that there is a focus on the delivery of product-based services. With the above definitions in mind, the following definition will be used in this thesis, *"The innovation of an organization's capabilities and processes to shift from selling products to selling integrated products and services that deliver value in use"* (Baines et al., 2009a, p.547). Since the combination of products and services is essential in servitization, three out of five categories in "*Categories of service mix, Figure 2"* (Kotler & Keller, 2016), fit within the frame of servitization. These are category two "*Tangible products with services"*, category three *"Hybrid"* and category four *"Major services with minor products or services"*. Meanwhile, category one *"Pure tangible products"* and category five *"Pure services"* does not fit within the frame of servitization since they do not combine products and services in the same offering.

2.2.1 Prerequisites to Implement Servitization

There are three prerequisites to implement servitization strategies. The first one is that the company needs sustainable and unique resources if they want to move towards servitization. The second prerequisite is that the company needs to have the right capabilities and competences. Instead of changing all the capabilities within the company, an increased collaboration with intermediaries can help solve this prerequisite. The reason for this is because the intermediaries have different competences and capabilities embedded in their company. By this collaboration, a valuable offering can be provided to the final customer which can increase the revenues. Finally, the company needs to have the right culture if they want to succeed with servitization, meaning that they need to focus more on the customers and not only on the manufacturing process (Pistoni & Songini, 2017). Furthermore, related to the second prerequisite, is that for manufacturing companies, servitization can be difficult because the resources and capabilities embedded in the company, are more focused towards physical products (Kowalkowski et al., 2012). According to Baines et al. (2009b) a challenge with servitization is the relationship between the company and the supplier. It can be hard to make sure that the both parties have the same expectations of the service as well as the level of commitment.

2.2.2 The Evolution of Servitization

According to Vandermerwe & Rada (1988), factors that are driving industries and therefore companies towards servitization are technology, globalization, strong competition and deregulations. Today, customers demand integrated and customized solutions (Davies, 2004 & Martín- Peña, Díaz- Garrido & Sánchez- López, 2018). Hence, servitization can be used. Furthermore, for manufacturing companies, it has been successful to use servitization in order to differentiate (Pistono & Songini, 2017). The shift towards servitization has blurred the boundaries between products and services. There are three stages, in which servitization has evolved (Vandermerwe & Rada, 1988). These are further presented below, *see Figure 3.*

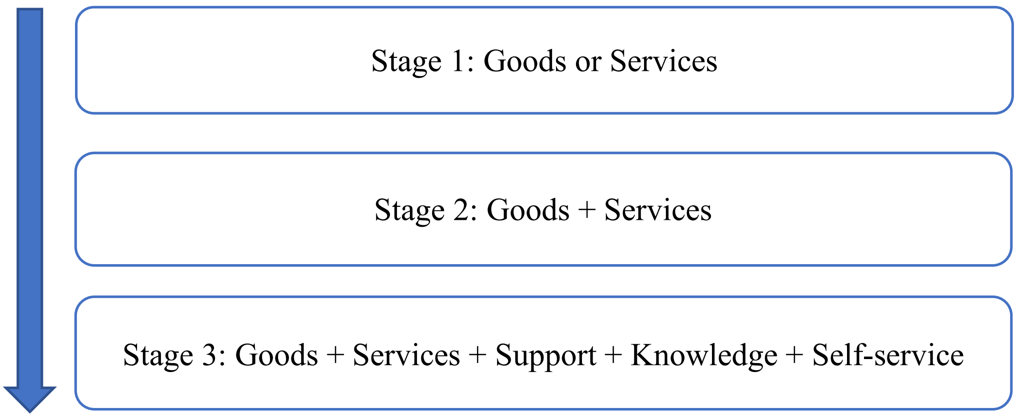

Figure 3 The Evolution of Servitization (Vandermerwe & Rada, 1988)

In the first stage, companies either focus on manufacturing goods, or providing services, *"Goods or Services"*. The difference between the first stage and the second stage is that in stage two, companies offer products and services together in a bundle, *"Goods + Services"*. In the third stage, companies are combining many parts in the offering, namely *"Goods + Services + Support + Knowledge + Self-service"*. In stage three, the modules that are offered can be either free-standing or bundled. The purpose is that the customer has the possibility to choose whether or not they want the whole package (Vandermerwe & Rada, 1988). In more recent literature, the concept of bundle has been further described as "*The practice of marketing two or more products and / or services in a single package*". Furthermore, a company can extend the bundle into a full-service concept where they go one step further and offer *"A comprehensive bundle of products and / or services that fully satisfies the needs and wants of a customer related to a specific event or problem"* (Pistoni & Songini, 2017).

From the company perspective, it can be beneficial to incorporate a servitization strategy if the customers perceive an increased value of a bundled offering instead of buying them separately. Therefore, it is important for companies to make sure that the customers understand this added value. Moreover, it is important to keep in mind that the shift towards services does not mean that the products cease to exist, products are still an important part of the whole offering (Pistoni & Songini, 2017).

2.3 Customers and Servitization

2.3.1 Customer Loyalty

Today, the focus is no longer on solely attracting customers to buy a product, but rather to create relationships and take *care* of the customers. Hence, creating customer loyalty is now a primary focus for companies (Ravald & Grönroos, 1996). Customer loyalty can according to Blomqvist, Dahl and Haeger (2004, p.121) be defined as *"A customer whom over time hires a company to satisfy the entire or a major part of his or her need of the products and services which is covered in the company's offerings"*. This is connected to a bundled offering of products and services, i.e. servitization. Customer loyalty is a suitable measure for how well a company creates customer value (Blomqvist, Dahl & Haeger 2004). In a service setting, loyal customers are more profitable than new customers. The reasons for this is that loyal customers are easier to serve, they are less sensitive to price and they can via word of mouth spread positive experiences and opinions to potential customers. Moreover, it is easier to sell more extensive and profitable services to loyal customers then it is to potential customers (Gebauer et.al 2011). It is more costly for a company to attract new customers than it is to retain customers (Blomqvist, Dahl & Haeger 2004). Customer satisfaction is one of the most important criteria for increasing customer loyalty. Hence, customer satisfaction is a suitable predictor if a customer will rebuy the offering (Ravald & Grönroos, 1996).

2.3.2 Expected and Perceived Service

There are several reasons to why customers switch services. These are core service failures, response to service failures, inconvenience, pricing, competition, involuntary switching, service encounter failures and ethical problems. For companies, it is important to manage customer expectations (Kotler & Keller, 2016). Perceived value is defined as *"The ratio of perceived benefits relative to perceived sacrifice"* (Ravald & Grönroos, 1996, p.20). Before a customer will perceive a service, the customer will have an expected service, which is built upon three main dimensions. These are first word of mouth, meaning that what other tells you affects the expected service. Secondly, the personal needs affect the expected service and finally, the past experience of a similar service also affects the expectation. It is important that the perceived service is in line with or higher than the expectation of the service, otherwise the customer will be disappointed, *see Figure 4.* However, it is not enough just to satisfy the customers, a company also needs to surprise and delight them (Kotler & Keller, 2016).

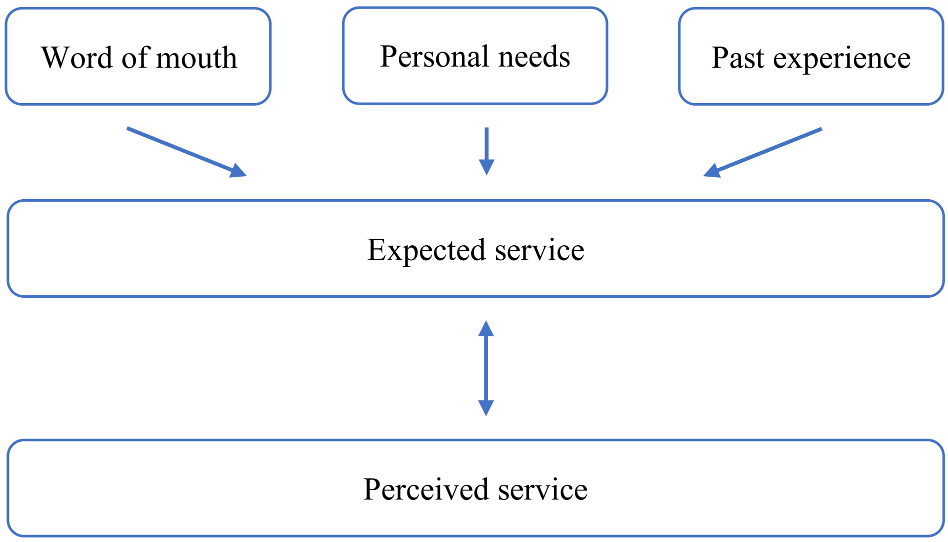

Figure 4 Expected and Perceived Service (Kotler & Keller, 2016)

According to Pistoni & Songini (2017) and Ravald & Grönroos (1996) companies can create a competitive advantage by giving customers more than they expect. To create value for the customers, it is important to remember that customers evaluate the whole package of products and services more than when they are offered separately (Pistoni & Songini, 2017). Furthermore, if a company introduce a new add-on which is not in line with what the customers want and need, it will not be successful in the long term. By only introducing new services that customers do not demand, the company might attract new customers in the short term. However, in the long term, these extra services will create increased costs for the customer which means that the customers perceived value will remain the same because they have access to more services but also an increased cost (Ravald & Grönroos, 1996).

As defined above, perceived value is *“The ratio of perceived benefits relative to perceived sacrifice”*. These two elements are mutually dependent which means that an increase in the perceived benefits should automatically lead to a reduction in the perceived sacrifice of the customer. However, the relationship is not that easy. Instead, customers are usually more sensitive to increased sacrifice than a gained benefit. It is important to keep in mind that a person's perception of an offering might differ over time as well as that the perception can differ between people. The perceived benefit is concerned with what the customers gain from the offering while perceived sacrifice is what the customers have to give up in order to gain the offering. The perceived benefits can be increased by adding more to the offering, which is perceived as beneficial, unique and important for the customer. The perceived sacrifice can be reduced by increasing the convenience of the offering and by lowering the price. From the perspective of the customer, a financial limit is usually the prime restraint. It is important for the company to understand the customers in terms of preferences and needs to reduce the perceived sacrifice of the customer. By reducing the perceived sacrifice, the company can add value to the offering. Hence it is important for the company to take on a customer perspective. The most beneficial approach for companies is to try to reduce the perceived sacrifice of the offering without actually adding any benefits (Ravald & Grönroos, 1996).

2.3.2.1 Reasons for an Unsuccessful Service Delivery

There are several reasons for why an unsuccessful delivery of a service can occur. It is important for managers and marketers to keep these in mind. The first reason is that there might be a *“Gap between consumer expectation and management perception”*. This misalignment can be caused due to the misunderstanding of the customers and that the managers does not really understand what the customers really want, i.e. the expectations of the customers. A second reason can be that there is a *“Gap between management perception and service-quality specification”*. In this case, the managers understand the expectations of the customers, but a performance standard is not correctly set. The third reason is that there can be a *“Gap between service-quality specifications and service delivery”*. An example can be poorly trained employees or an unwillingness to meet the delivery specifications. “*Gap between external communications and service delivery”* is the fourth reason to why an unsuccessful delivery of service can occur.

Consumers create expectations based on statements and advertisements from the company and when the service is delivered, these expectations are not always matched. Finally, the fifth reason to why a service delivery can be unsuccessful is because of a *"Gap between perceived service and expected service".* This occurs when the service quality is misperceived of the customer (Kotler & Keller, 2016).

2.3.3 Order Qualifiers, Order Winners and Delights

In Kano´s (1984) model about customer satisfaction, three terms are described. The first one is the basic factors, called *dissatisfiers,* which is a minimum requirement for competing in the market. Customers will be dissatisfied if these are not fulfilled, but they will not be satisfied if these are fulfilled or exceeded. Furthermore, excitement factors, called *satisfiers* increases the customer satisfaction when they are delivered, but customers will not be dissatisfied if these are not delivered. Hence, *dissatisfiers* and *satisfiers* are working in the opposite way. Furthermore, when *satisfiers* surprise the customers, a *delight* is created (Kano, 1984; Matzlera, Bailomb, Hinterhubera, & Pichlerb, 2004).

In order for companies to make the customers satisfied, and hence to achieve competitive success, it is important to keep the above mentioned terms in mind. Furthermore, these terms have in more recent days been described with newer names, even though the meaning is the same. *Dissatisfier* can be replaced with *order qualifier* and can be described as the minimum criterion that a product or service need to have to be considered as an alternative for the customer. A *satisfier* can be replaced with *order winner.* This term describes what differentiates a product and a service from the competitors. Hence, *order winners* are the reason for why customer decides to buy a specific product and/or service (Jacobs & Chase, 2014). Furthermore, *delight* is the third term, and in this case, the name has remained the same. It is described as an extra feature that the customer has not thought about when buying the product or service. Instead, the *delight* first appears when the customer uses the product or service and it is highly valued. A company cannot have *delights* without *order winners* (R. Middel, 2017). These three terms are all interlinked to each other and over time, an *order winner* can become an *order qualifier.* An example of this can be seen in Volvo Cars, from the beginning the safety of Volvo´s cars was seen as an *order winner,* however in recent years, safety is seen as an *order qualifier* since safety is required and necessary when competing in the market. Correspondingly, *delights* can become *order winners* over time (R. Middel, 2017). *Order winners* and *order qualifiers* may differ among customers (Hill & Brown, 2007).

2.4 Subscription

"An arrangement that facilitates regular delivery or long-term use of a service or product. The arrangement settles what the product/service is, frequency of usage/delivery, at what cost, and within what timeframe". This is how subscription is defined by ING Economics Department (2018). Subscription which is offered by B2C, is divided into two main categories, namely durables and consumables. In this case, durables correspond to products as a service and a relevant example of this is a private leasing car model. A durable product is often available for a long-term use. Example of consumables can be food subscription, which is often delivered frequently (ING Economics Department, 2018).

When subscribing to durable tangible products, there are three factors that consumers value most. These are no risk of maintenance or repair cost, to have an up to date and modern product and to have a high-quality product without paying a high purchase price. When subscribing to consumables, the most valued reasons are the possibility of home delivery, that it is never out of stock and that it can be cheaper than buying (ING Economics Department, 2018).

The frequency of the subscription corresponds to the maximum kilometers allowed in a private leasing contract and the cost structure can for example be to pay per period, have a basic fee + pay-per-use or have a hybrid model. The timeframe of a subscription can differ, but consist of a start and a stop day, which can also be flexible (ING Economics Department, 2018).

The potential for subscription of tangible products in the market is neither low, nor high. However, the potential for intangible goods is considered high. People younger than 25 seems to be more positive to subscription of tangible products. The main reasons for this is the possibility to get access to an expensive product, without buying it. The younger, the more interested are people in subscribing. However, it is important to keep in mind that very young people often have less money than middle aged people. The growth potential for subscriptions of durables seems to be highest among people with high income. Nonetheless, subscription can enable high quality and expensive products to people with lower incomes, because of the paying arrangement (ING Economics Department, 2018).

2.4.1 Assessing Subscription Attractiveness for Consumers

When assessing subscription attractiveness for consumers, there are two main perspectives to take into consideration. The first perspective is about the total price of the subscription. This should be put in relation to the one-off transaction, i.e. buying the same product instead of subscribing to it. The second perspective is about what extra value the subscription adds, compared to the one-off transaction of the same offering. These two perspectives, and hence the assessed subscription attractiveness is presented in a framework, *see Figure 5.* The added value differs from offering to offering, but can for example consist of extra services, extra convenience, a reduction in transaction costs, the ability to get the latest model and the flexibility to up-/downgrade. Added value can also be a combination of all mentioned examples. The framework clearly shows that there are four different outcomes, which consist of the combination of price and added value (ING Economics Department, 2018).

- Added value of subscription compared to one-off transactions is higher, in combination with total price of subscription compared to one-off transactions is lower, leads to an *attractive offering.*
- Total price of subscription compared to one-off transactions is lower, in combination with added value of subscription compared to one-off transaction is lower, leads to an *offering which can be attractive,* if extra price advantage is worth the lower added value.
- Added value of subscription compared to one-off transactions is lower, in combination with total price of subscription compared to one-off transactions is higher, leads to an *offering which is not attractive.*

Total price of subscription compared to one-off transactions is higher, in combination with added value of subscription compared to one-off transactions is higher, leads to an *offering which can be attractive,* if extra added value is worth the higher price (ING Economics Department, 2018).

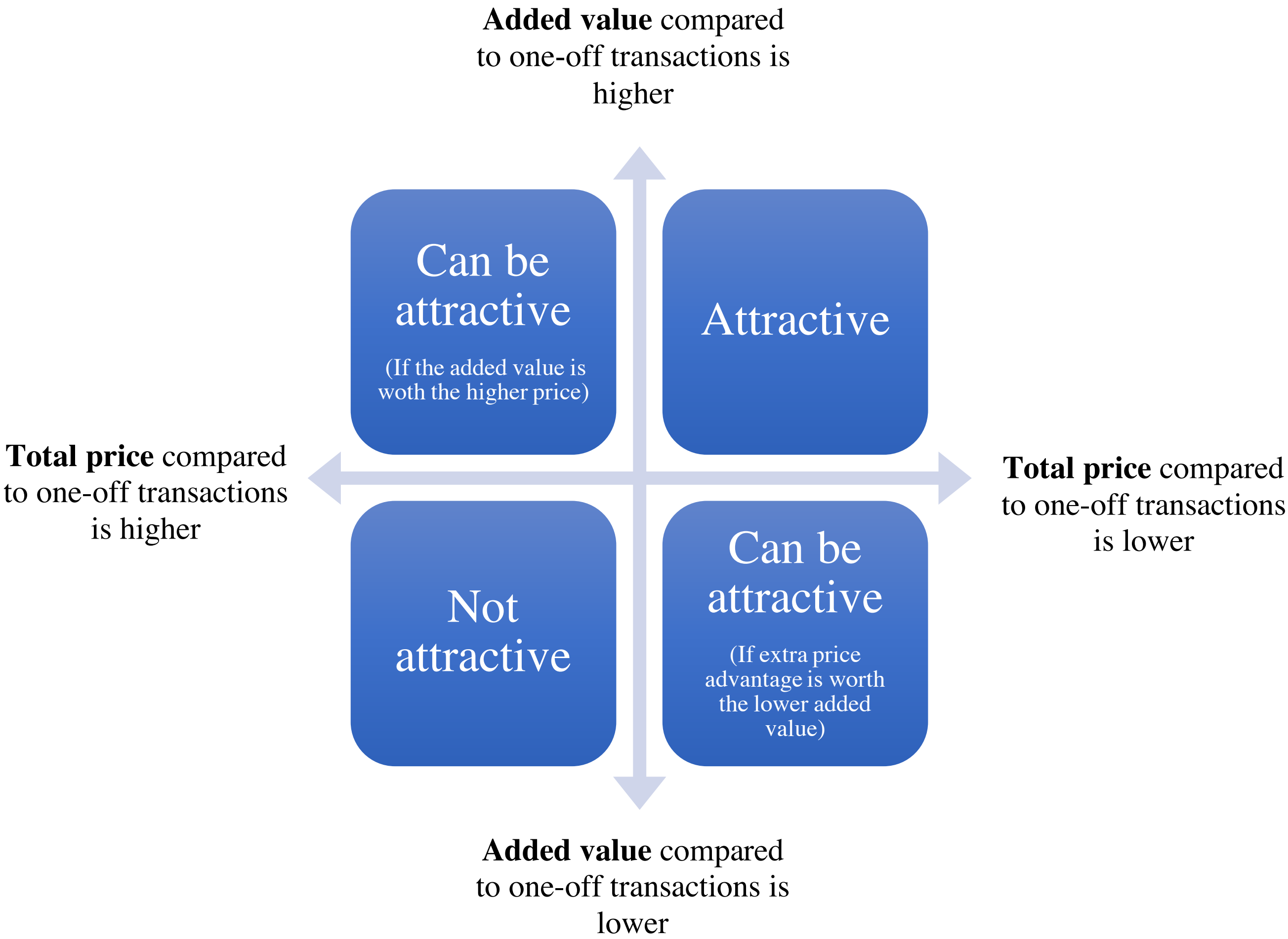

Figure 5 Assessing subscription attractiveness for consumers: added value versus price (ING Economics Department, 2018)

2.4.1.1 Durable Goods Subscription and Price

During all phases of the customer journey, from acquire, to use and end of usage, a subscription model can affect the price and the cost of subscription. The price of subscription can be negatively, as well as positively affected, compared to a one-off transaction model. Examples of factors that drives the costs and the price down and the factors that drives costs and price up will be presented in *Table 1*.

Phase of customer journey	**Factor**	**Drives costs and price down**	**Drives costs and price up**
Acquire	No upfront investment	Potentially larger customer base, economics of scale	Adverse selection: might attract customers that are not creditworthy thus higher risk costs
Use	Maintenance	Supplier can ensure proper preventative maintenance thereby reducing breakdown risk: lower risk costs	-
Use	Repair	Supplier can negotiate better rates with maintenance companies than individual consumers (scale advantages), lower maintenance costs	Moral hazard: Consumers might not be as cautious with products they do not own, thereby increasing breakdown risk: higher risk costs
End of usage	Sell	Supplier can extract more value of the residual product than consumer: lower depreciation costs, through better access to/negotiation skills in the second-hand market	Moral hazard: Consumers might not be as cautious with products they do not own, thereby increasing breakdown risk: higher risk costs
End of usage	Reuse	More users per product → lower cost per user	Higher costs for refurbishment and logistics

Table 1 Factors that drive costs and price down and factors that drive costs and price up in subscription models (ING Economics Department, 2018)

2.4.1.2 Durable Goods Subscription and Added Value

Durable goods subscriptions add value through solving issues for consumers. The issues and the added value can occur during all phases of the customer journey, from acquire to use and end of usage (ING Economics Department, 2018). By only introducing new services that the customers do not demand, the company might attract new customers in the short term. However, in the long term, these extra services will create increased costs for the customer which means that the customers perceived value will remain the same because they have access to more services but also an increased cost (Ravald & Grönroos, 1996). Examples of issues and the added value of subscription will be presented in *Table 2* (ING Economics Department, 2018).

Phase of customer journey	Issue	Added value of subscription model
Acquire	Too high upfront investment	Small periodic payments allowed
Acquire	I do not like buying new products and then throwing them away	The product lifetime can be optimized, when there is a focus on take-back and reuse
Use	I want to use my product immediately without hassle	Ready to use product
Use	I want my product to work properly, without having to plan and conduct maintenance	Proactive maintenance is offered
Use	If my product breaks down, I face high costs	Repair/replacement is offered without extra cost
End of usage	I am afraid to get a bad price in the second-hand market	Supplier accept burden of risk and incorporates residual value in subscription price
End of usage	I want to get rid of the product easily	The company collected the product after use
End of usage	I only need the product temporarily	Consumer pays only for agreed subscription period

Table 2 Durable goods subscriptions add value through solving issues for consumers (ING Economics Department, 2018)

Finally, to provide the reader with a clear overview of the main points from the *Theoretical Framework,* each main theory is presented below. The main theories that have been presented in this chapter are service, servitization, customers and servitization and subscription. These are summarized together with the with the main points from each theory below, *see Table 3*.

Theory	Summary of Theory
Service	Shift towards services Difference between physical products and services: intangibility, inseparable, perishable, heterogenous Five categories of product and service offerings: Pure tangible products, Tangible products with services, Hybrid, Major services with minor products or services, Pure services Word of Mouth
Servitization	Definitions of servitization The evolution of servitization Goods or services Goods + services Goods + services + support + knowledge + self-service
Customers and servitization	Customer loyalty Expected and perceived service Order qualifiers, order winners, delights
Subscription	Definition of subscription Assessing subscription attractiveness for consumers Durable goods subscription and price Durable goods subscription and added value

Table 3 Summary of the main points from each theory

3. Methodology

In this section, the research strategy used in this thesis is first presented. This is followed by the research design. Further, primary data collection including semi-structured interviews, benchmark and survey is presented. This is followed by secondary data collection and lastly the quality of the study for qualitative and quantitative research.

3.1 Research Strategy

3.1.1 Mixed Method

The purpose of this thesis is to investigate how a car manufacturer can servitize its offering. This has been done by conducting a case study of the concept Care by Volvo, which is a project within Volvo Cars. To answer the *Research Questions*, the authors need to have both an understanding of Care by Volvo but also more information about what is demanded by the customers and potential customers. A benchmark study has also been conducted to map the competition, mainly focused towards private leasing car models, in the premium segment. The *Research Questions* can preferably be answered by using a mixed method of qualitative and quantitative research. When using a mixed method, it is important to combine the two strategies and not just use them in tandem. Therefore, all primary data collection methods are all interrelated to one another, *see Figure 6* for the structure of primary data collection. First, the authors needed a deeper understanding of the concept Care by Volvo. Hence, qualitative, semi-structured interviews with the Swedish Care by Volvo Team was a necessary start to gain this understanding. Due to the unique characteristics of this new and innovative concept, semi-structured interviews are suitable to capture the details. This knowledge was also needed for the authors to prepare and conduct the quantitative study, which was decided to be a survey. With the results from the semi-structured interviews, the authors could easier create questions for the quantitative research, meaning that the survey was conducted based on the semi-structured interviews. A survey was chosen because of the possibility to reach many respondents. The semi-structured interviews also preceded the benchmark study. Hence, some findings from the semi-structured interviews sought to provide the authors with necessary information, related to the benchmark.

3.1.2 Qualitative Research and Quantitative Research

The difference between a qualitative research strategy and a research quantitative strategy is that the focus of a qualitative research strategy is on words while the focus of a quantitative research strategy is on numbers. In a qualitative research strategy, the gathered data is not locked in predetermined goals, which is the case in a quantitative research strategy. The qualitative research provides a certain degree of flexibility, meaning that not everything is fixed from the beginning. Hence, questions can be changed, deleted or added during an interview. A downsize with qualitative research is that the results only can be interpreted and analyzed by the authors, which makes it hard to generalize the results back to the population. Furthermore, there is also a risk that the results are biased and that it can be hard to replicate the study (Bryman & Bell, 2011). Hence, since Care by Volvo is a unique case, the purpose of the semi-structured interviews was not to seek an answer of a broad issue. Instead, the authors were interested in capturing the details of Care by Volvo. Therefore, a qualitative study was first suitable. A benefit with the quantitative research is that the result is more objective and provides a broader picture of the studied subject. In quantitative research it is also easier to generalize the results than in the qualitative research. A downsize with quantitative research is that the results can be static and that the results is reliant on instruments. Since the authors sought more general answers from the customers and potential customers, a quantitative study was to be preferred over a qualitative study in this case. Both the benefits and downsides with these methods will be considered when the data is being analyzed (Bryman & Bell, 2011).

3.1.3 Inductive Approach and Deductive Approach

Using a combination of qualitative and quantitative research methods means that to some extent, the authors have been open to new information and data but also that they have been locked in predetermined goals. The qualitative approach is connected to the inductive approach. The purpose of an inductive approach is to get a deeper understanding, and that there is a possibility that new theories can be developed. Hence, one start in the specific and end up with a more general answer (Bryman & Bell, 2011). An example of this is that Care by Volvo has been investigated to understand how a car manufacturer can servitize its offering. Hence, the authors started in the specific, and ended up with a more general answer, which is based on the case. However, it is important to keep in mind that all findings cannot be generalized based on a single case. The quantitative approach is connected with the deductive approach where the theory is the starting point and in the end the theory can be revised. Hence, one start with a general subject and end up with a more specific answer (Bryman & Bell, 2011). An example of this is that the findings from the survey, which can be seen as general information, could be applied to a specific case, i.e. Care by Volvo.

3.2 Research Design

3.2.1 Single Case Study

The earlier described research strategy is supposed to be brought together with the research design when conducting a thesis. The research design works as the core of the thesis and all parts should correspond to the chosen research design. A case study is one among several research designs to choose from (Bryman & Bell, 2011). In this master thesis, a single case study is chosen as the research design. The chief reasons for this decision is because of the main characteristics of a single case study, namely that a single case study can be conducted in one specific organization and that a great level of details and the unique characteristics of the situation in the organization can be taken into consideration. Another reason for why a single case study is chosen in this thesis is because the great majority of the papers written on the subject servitization, are based on case studies (Baines et al., 2009a). A case study can be used in both qualitative and quantitative research strategy. Because of this the authors have chosen to conduct a single case study. This is chosen because the authors were interested in capturing the unique characteristics of Care by Volvo. A drawback with a single case study is the limited possibility to generalize the findings (Bryman & Bell, 2011). However, since this is not the purpose of this study the authors still find a single case study suitable in this thesis.

3.3 Primary Data Collection

3.3.1 Preparation for Primary Data Collection

Before starting to collect any primary data for this thesis, the authors were invited to an introduction day at Volvo Car Sweden, held February 8th. During this day, information about Care by Volvo was presented and the authors were also introduced to some members of the Swedish Care by Volvo Team, who would be interviewed in the upcoming semi-structured interviews. The purpose of this day was to get a first insight about Care by Volvo. Hence, the information from this day has not been used as primary data collection, but rather as a foundation for what to ask more in depth about during the semi-structured interviews.

3.3.1.1 Structure of Primary Data Collection

After the introduction day at Volvo Car Sweden, three different primary data collection methods have been used. The first one has been semi-structured interviews, the second one has been a benchmark study and the final one has been a self-completion survey. These methods are interrelated to each other. The insights from the introduction day were taken into consideration when conducting the semi-structured interviews. The insights from the semi-structured interviews were in turn the ground for both the benchmark and the survey. The benchmark was also the ground for the survey. The chief purpose of the benchmark study was to answer the second *Research Question* and the chief purpose of the survey was to answer the first and third *Research Question. See Figure 6* for an illustration of how the primary data collection is structured and connected.

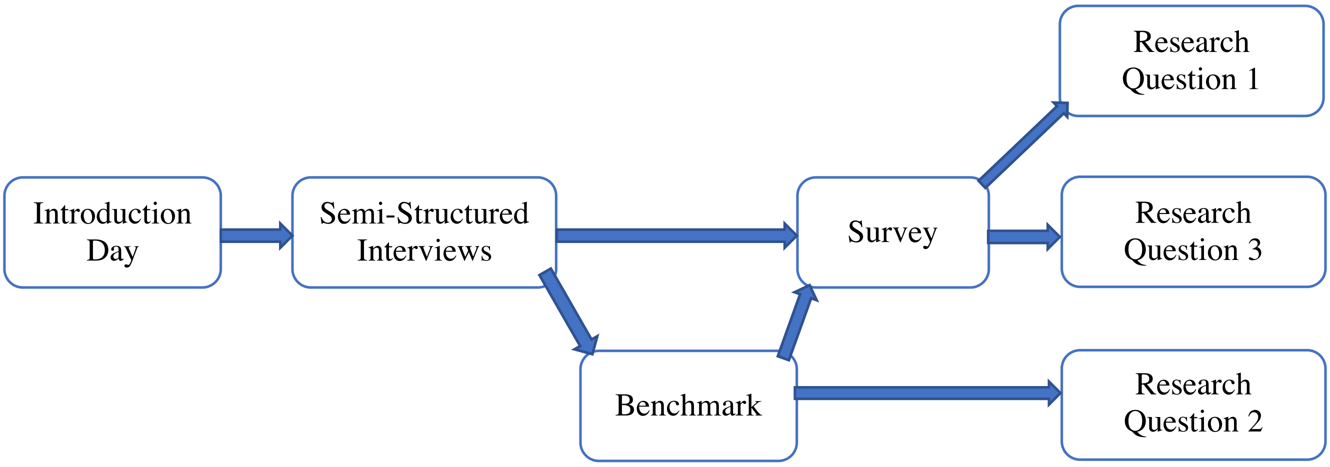

Figure 6 Structure of primary data collection

3.3.2 Semi-Structured Interviews

3.3.2.1 Purpose of Semi-Structured Interviews

Main characteristics of a semi-structured interview is the flexibility in terms of the possibility for the authors to depart from the interview guide, for making follow up questions. A semi-structured interview is also advantageous if the topic of interest is quite specific (Bryman & Bell, 2011). The authors had a relatively clear picture of the topic, after attending the introduction day at Volvo Car Sweden. Hence, semi-structured interviews were a suitable method (Bryman & Bell, 2011). The purpose of the semi-structured interviews was to gain a deeper understanding about the concept Care by Volvo, to capture the core idea and to get some valuable insights and understandings that could be useful in the two other primary data collection methods, namely the benchmark study and the survey. Hence, the chief purpose of the semi-structured interviews was not to respond to any of the *Research Questions* per se. However, the answers provided during the semi-structured interviews were rather necessary in order for the authors to get a deeper understanding about Care by Volvo. By using semi-structured interviews, the authors could ensure cross-case comparability between the interviews and this method is to be preferred over conducting multiple case studies. By using semi-structured interviews, the goal is to identify similarities and differences between the responses of the interviewees (Bryman & Bell, 2011).

It has been important for the authors to keep in mind that the information gathered from the semi-structured interviews at Volvo Car Sweden is very specific for the concept Care by Volvo. Hence, it is hard to generalize the findings from the semi-structured interviews.

3.3.2.2 Preparing Interview Guide

Before creating the interview guide, the authors studied some basic elements of how to prepare the interview guide. Suggestions such as having the questions in a certain order, to use a comprehensive language and to not ask leading questions were taken into consideration (Bryan & Bell, 2011). *See Appendix 1* for interview guide. When conducting the interview guide, the authors used some insights from the introduction day at Volvo Car Sweden and created questions with this information in mind. Since the purpose of the interviews was to increase the understanding about Care by Volvo, most questions were related to this. To get a more academic perspective on the interview, some questions related to relevant literature has been asked as well.

The interview guide was divided into five categories. The first category consist of some introduction questions and the chief purpose of those questions was to get a smooth start of the interview and make the interviewee convenient. One of the questions in this section was about the goal with Care by Volvo. This question was important for the authors to understand, because the responses of this will be a frame of what Care by Volvo is, and therefore the actions of the authors need to correspond to this overall goal. The next section of the interview guide was related to Care by Volvo specific questions. The purpose of those questions was to increase the author´s understanding of Care by Volvo and those sought to work as a foundation for the survey. An example of this is the question about what *care* in Care by Volvo means. Furthermore, the third section of the interview guide was about benchmark and to get a deeper understanding about competitors, customers and segment. The chief purpose of this section was to work as a basis for the upcoming benchmark study. Therefore, one example of a question included in this section was about what competitors Care by Volvo have. The mentioned car brands have all later been investigated in the benchmark. The fourth part of the interview guide consisted of questions corresponding to a customer perspective. These questions have been asked because it is interesting to know how Volvo Car Sweden perceive Care by Volvo and compare this with how the customers and potential customers perceive Care by Volvo. An example of a question included in this section is what flexibility and mobility means. Finally, the last section of the interview guide consisted of some closing questions. These were included because the authors wanted to give the interviewees the opportunity to make additional comments.

Questions in semi-structured interviews can be of an open character, meaning that the respondents can answer however they like. There are no fixed alternatives limiting the respondents. Advantages with open questions is that the respondents can use their own terms and that the level of knowledge of the respondents can be captured by the authors (Bryman & Bell, 2011). The authors believe that open questions are therefore suitable in this case, because the unique characteristics and a genuine understanding for the concept Care by Volvo is sought to be understood by the authors. Furthermore, other reasons for why open questions is to be preferred is when the authors have limited knowledge of the field (Bryman & Bell, 2011). Since the author's knowledge about Care by Volvo before the semi-structured interviews was relativity limited, this approach was chosen. However, one disadvantage of open questions is that it requires more time from the interviewees as well as from the interviewers (Bryman & Bell, 2011). To somehow limit this disadvantage, the authors have carefully decided upon relevant questions to ask and have also asked the supervisor to review and provide the authors with critical feedback of the interview guide. The result was thereafter open interview questions with high relevance for the topic and the interest of the authors.

3.3.2.3 Setup of Semi-Structured Interviews

All semi-structured interviews were conducted with the presence of both authors. According to Bryman & Bell (2011), there are some advantages with multiple interviewers, such as the possibility for the "passive" interviewer to take extensive notes and to intervene at any point where a further explanation would be needed, hence ask follow-up questions. Furthermore, the use of multiple interviewers can also contribute to a more informal atmosphere and the interview can be similar to a discussion, rather than an exchange between only two persons. This kind of atmosphere was sought to be reached because the authors were interested in getting as precise and informative answers as possible. Disadvantages with being multiple interviewers is the extra time it requires and that the interviewers need to be sensitive to one another and try to understand the conversational cues (Bryman & Bell, 2011). Despite this, the authors decided to both be present at the interviews, due to the all advantageous it brings. Since only four semi-structured interviews were conducted in this thesis, the lost time would probably be compensated by a better understanding from the beginning, instead of spending time on updating one another. To avoid misunderstandings between the interviewers during the semi-structured interviews, the roles of each interviewer was clearly discussed and predetermined where one was chosen to be more active, while the other was chosen to be passive.

All four interviews were scheduled to take place at the office of the Care by Volvo Team because of convenience for the interviewees. Based on a recommendation from the tutor at Volvo Car Sweden, all members of the Swedish Care by Volvo Team were interviewed. To enable for well completed interviews, the authors asked the respondents to book a quiet conference room. This was requested because a quiet place, with a minimum risk of interruptions is a suitable place for an interview (Bryman & Bell, 2011). The first three interviews took place at the office of the Care by Volvo Team, and the fourth one was rescheduled to a place in the city of Gothenburg, because of initiative from the last interviewee. All interviews were conducted in quiet and comfortable places where recording was possible. Before the interviews started, the authors asked the respondents if recording was allowed, and all four approved it. To ensure a high quality of the recordings, the authors did a speech recording test with the recording app, Röstmemon, in the interview room, before starting to record the interviews. Two smartphones were used when recording and all present were asked to put flight mode on, in order not to disturb the recordings. The semi-structured interviews were conducted in Swedish since this is the native language of all interviewees. Hence, the authors believe that the answers of the respondents could be more detailed and precise. Another reason is that the authors believed that the atmosphere could be more relaxed and that the native language would make the interviews more convenient for the interviewees.

3.3.2.4 Thematic Analysis

A thematic analysis consists of five steps, which will all be presented and described below.

3.3.2.4.1 Step 1: Data Familiarization

In the data familiarization step, the authors should get to know the data, which includes to transcribe and to take initial notes (D. Ljungberg, personal communication, 5 December 2017). Hence, the initial notes were taken by the passive interviewer during the semi-structured interviews. After each semi-structured interview, the authors transcribed chosen parts of the interviews. The authors focused on transcribing those parts of the interviews that they found most relevant and interesting for the case study. Transcribing full interviews is a very time-consuming activity (Bryman & Bell, 2011). Therefore, only certain parts have been transcribed. However, a major part of the responses was transcribed because the authors evaluated most of the information as relevant. The reason for why most of the replays were considered interesting was because most of the questions could provide the authors with new information about Care by Volvo. Since the semi-structured interviews were conducted in Swedish, the language of the transcriptions was in Swedish as well. To secure the content of the transcriptions, the authors have sent it to the interviewees for revision. The first reason for why this was done was to make sure that the content of the interviews was correctly understood. This increases the credibility of the study. The second reason was that some parts of the interviews might be of secret content and therefore, some text could not be published. After receiving feedback on the transcriptions, the secret parts, and the parts that were misunderstood were deleted from the transcription.

3.3.2.4.2 Step 2: Initial Coding

When the transcription of all four semi-structured interviews was done, the initial coding of the data was conducted. The initial codes were first based on the different questions in the interview guide. The authors did not find all questions relevant to code and an example of this could be for how long time a respondent had worked in the Care by Volvo Team, this question was asked because it is a relatively new project. The responses of different questions were in some cases of similar character and were therefore put together. After the initial coding, 15 codes were created. *See Appendix 2* for the whole coding. It is important to stay close to the data, which can be done by using the same formulations as the respondents (D. Ljungberg, personal communication, 5 December 2017). To correspond to the language in this thesis, the parts of the transcription that was used in the coding, was translated into English in the coding section. The authors tried to translate as precise as possible, in order not to lose the content of the responses. To do so, both authors did the translation together and agreed upon a correct translation.

3.3.2.4.3 Step 3 & Step 4: Identification of Themes & Review and Refine Themes

In step three, there is a focus on finding themes. A theme is built upon several codes. When the themes are conducted, the next step is to review and refine the themes. It is important to keep the *Research Questions* in mind in this step. The themes should correspond to a coherent story of the interviews. Several themes can be combined into one "aggregated theme" (D. Ljungberg, personal communication, 5 December 2017). The 15 initial codes were compiled into four different themes. The initial plan of the authors was to separate step three and four and first make themes, and then aggregate them. However, since so few themes were invented directly in step three, no themes needed to be aggregated. Hence, step three and step four could be compiled into one step. The purpose of the different themes was to provide the authors with data and information that could be further used in the thesis. When compiling the codes into themes, the authors focused on finding the same underlying phenomena and thus make themes based on this. The responses from the different interviewees were presented, both when the answers were aligned and when they were not aligned. Four themes were created, which all build upon several codes. *Theme 1* was focused on more general information about Care by Volvo, which has been used because the authors needed to increase the understanding of Care by Volvo. Therefore, *Theme 1* does not answer any of the *Research Questions* per se. However, the three other themes are more related to the *Research Questions. Theme 3* and *Theme 4* are connected to the first *Research Question.* Hence, these themes are related to how to increase the understanding about Care by Volvo and therefore sought to provide the authors with a foundation of what to ask about in the survey. Furthermore, *Theme 2* was connected to the benchmark and hence sought to provide the authors with a foundation of what to benchmark in *Research Question* two. Finally, *Theme 3* and *Theme 4* are connected to *Research Question* three and hence to the survey. This sought to help the authors find suitable services to add to Care by Volvo, to increase the customer value.

3.3.2.4.4 Step 5: Define and Name Themes

The last step in this process is to define and name the themes (D. Ljungberg, personal communication, 5 December 2017) The names of the themes are *Theme 1: General Characteristics of Care by Volvo, Theme 2: Benchmark of Care by Volvo, Theme 3: Servitization of Care by Volvo* and *Theme 4: Value Adding Activities of Care by Volvo.*

To create an all through structure, the names of these themes will be presented more in detail in the *Empirical Findings,* where the names of the themes will correspond to the names of the headlines. Since each theme build upon several codes, these will be presented in *Figure 7* in the *Empirical Findings.*

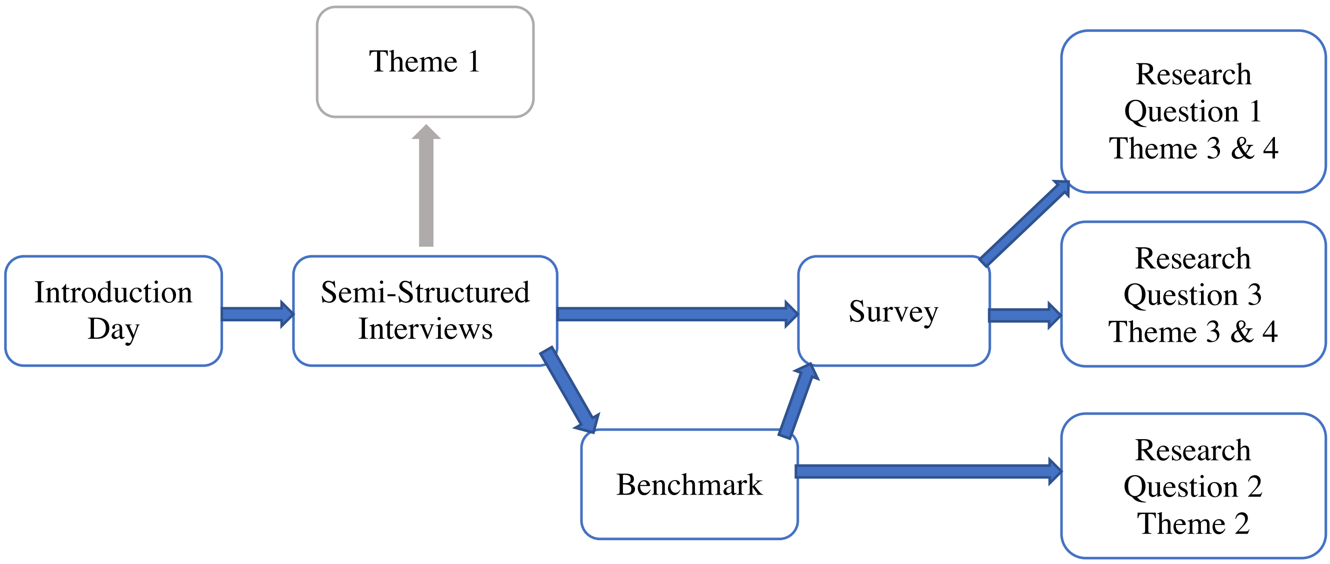

Figure 7 Structure of primary data collection extended with themes

3.3.3 Benchmark

3.3.3.1 Purpose of Benchmark

To benchmark means to gather information about competitors. The information collected can for example be what techniques the competitors offer and why they can be an attractive alternative in the market (Gebauer et.al 2011). The authors decided to conduct a benchmark study, for seeking an answer to the second *Research Question* in this thesis, namely "*How does Care by Volvo differentiate from their competitors?"*. Primary data collection was needed to fully understand the market and the competition, in terms of price, product and service. Since one of the main theories in this thesis is servitization and since Care by Volvo is trying to differentiate in the market by adding services to the core product, i.e. the car, it was necessary to focus on the services as well. Since Care by Volvo is a new concept, Volvo Car Sweden lacked comprehensive information about the competition in the market. Furthermore, the benchmark also sought to add value to this thesis by creating an understanding of what is unique with Care by Volvo. This understanding was essential to possess before answering the third *Research Question* "*What type of services could be added to Care by Volvo in order to increase the customer value?"*.

3.3.3.2 Limitations of Benchmark and Car-Requirements

Because of time restrictions, the authors needed to make a limitation of the benchmark and therefore, the authors together with the tutor from Care by Volvo decided that three different Care by Volvo car models should be the basis for the benchmark, namely Volvo XC40, Volvo V60 and Volvo V90. The main reason for why XC40 was chosen was because it is the car most related to Care by Volvo. V60 has recently been updated and therefore, Volvo was especially interested in the competition against this car. V90 was also decided because then, three different car sizes were covered in the benchmark. In addition to the three different car models, some other specifications were pre-requested from Volvo, such as the Momentum package, D4 engine, four-wheel drive, white color, 36 months leasing period and 15 000 km/year.

The benchmark was done with the most similar car models from Audi, BMW, Mercedes-Benz and Volkswagen. The reason for why these four companies were chosen was because Volvo is in the premium segment, which corresponds to the three first mentioned companies. These companies were also mentioned during the semi-structured interviews. Volkswagen was chosen because it is a volume brand and can therefore be seen as a competitor. This was mentioned during one of the semi-structured interviews. Volvo´s private leasing concept was also benchmarked because it differs from the Care by Volvo concept in terms of offering, even though the cars are the same. Volkswagen Passat was compared with both Volvo V60 and Volvo V90. Hence, 18 cars were benchmarked, but only 14 different car models, because Volkswagen Passat was compared two times and the three Volvo models were benchmarked two times each, but in different offerings. *See Table 4* for an overview of all benchmarked car-models.

	Care by Volvo	**Volvo**	**BMW**	**Audi**	**Mercedes-Benz**	**Volkswagen**
Car models	XC40 D4 AWD Momentum	XC40 D4 AWD Momentum	X1 xDrive 20d	Q3 2.0 TDI Quattro Proline Sport S-tronic	A180d	Tiguan GT Executive Edition 2.0 TDI SCR 4MOTION DSG
	V60 D4 AWD Momentum	V60 D4 AWD Momentum	320d xDrive Touring	A4 Avant 2.0 TDI Quattro Proline S-tronic	C220d Estate	Passat Sport combi GT Executive R Edition 2.0 TDI SCR 4MOTION
	V90 D4 AWD Momentum	V90 D4 AWD Momentum	520d xDrive Touring	A6 Avant 2.0 TDI Quattro Proline S-tronic	E220d 4MATIC Estate	Passat Sport combi GT Executive R Edition 2.0 TDI SCR 4MOTION

Table 4 Overview of benchmarked car-models

3.3.3.3 Setup of Benchmark

3.3.3.3.1 Step 1: Online Benchmark

The first step in the benchmark was to build the cars online, at the Care by Volvo website (Byggdinvolvo, 2018). The cars were built based on the pre-requested specifications. Hence, no other extras were added to the cars. When the cars were built, according to the pre-requested specifications, all information about the cars were written in an Excel file. Everything from the pre-requested specifications, to technical packages, safety systems, support systems, services and all available prices was presented. To be as prepared as possible for the benchmark and to make sure that all components of the Care by Volvo cars were asked about, the authors made lists of all components of each car model and printed out. These lists were then the basis for the benchmark and the authors made sure that all those components were asked about during the benchmark with the car dealers.

3.3.3.3.2 Step 2: Visit with Car Dealers

On Monday March 19th, the authors started the benchmark towards competitors and started off with Volvo Private leasing. In this case, the cars are identical, but the services and the prices differ. The authors got quotations for Volvo XC40, Volvo V60 and Volvo V90. After this visit, the authors compiled the new information from the quotations in the Excel file. The next company was Audi, where three car models was benchmarked. The most equivalent car to Volvo XC40 is Audi Q3, the most equivalent car to Volvo V60 is Audi A4 and the most equivalent car to Volvo V90 is Audi A6. After this visit, the authors compiled the new collected data in the Excel file. The third visit the same day was Mercedes-Benz where Volvo XC40 was compared with A180d, Volvo V60 was compared with a C220d Estate and Volvo V90 was compared with E220d Estate. Unfortunately, the authors did not get any quotations this time. On Thursday March 22th, the authors visited BMW. The car models that were benchmarked this time were Volvo XC40 against BMW X1, Volvo V60 against BMW 320d and Volvo V90 against BMW 520d. The authors received a quotation for each car. Later, the same day, the authors also visited Volkswagen and compared Volvo XC40 with Tiguan, Volvo V60 with Passat and Volvo V90 with Passat. The authors received a quotation for each car in this case as well. The newly collected data was then compiled in the Excel file the next day. Finally, when the authors visited the car dealers, no negotiation was performed. Instead, the actual prices that day were included in the quotes. If there were any price reductions on some packages which were demanded by the authors, the lower price was used in the benchmark.

3.3.3.3.3 Step 3: Compilation of Benchmark

When the authors had visited all car dealers, it was time to start to really compare the different car models. First, the basic data which could be read in all the quotations was compiled and afterwards, some specifications, such as different packages were also written in the benchmark. To make the benchmark as accurate as possible, the authors also read many descriptions about different safety systems and watched short movies, to fully understand what different kind of safety systems and support systems could do. This was necessary to know where in the benchmark each specific system or component should be presented. It was identified that the companies used different names for similar safety systems and therefore, the authors needed to increase their understanding about these different systems to place the system in the right box in the Excel file.

Since no quotations were provided by the seller at Mercedes-Benz, a recommendation of a website, Carplus was suggested instead. There, it is possible to build cars for private leasing online (Carplus, 2018). This website, in combination with the website of Mercedes-Benz (Mercedes-Benz, 2018) and email-correspondence has been used to collect the necessary data. The authors were provided with information about how to calculate the monthly fee when private leasing a Mercedes-Benz. Hence, it was possible to make a relevant comparison. The calculation is made by taking 50 percent of the price of the car, and then divide with 36 months. This information has not been given from the other benchmarked companies.

The Excel-files were categorized in a logical way, where Volvo XC40 was compared with similar cars from the other brands. Furthermore, another Excel file consisted of information about Volvo V60, which was compared with similar cars from other brands. Finally, one Excel file consisted of information about Volvo V90, which was compared with similar cars from other brands. This division was made to make the benchmark as easy to overview as possible. Furthermore, this division was logical because the authors wanted to compare each of the three Care by Volvo models with similar models, and not all models together.

The authors found out that there were some different alternatives regarding what was included in the cars in terms of products and services. Some products and services could be standards, some could be available to a price, some was not available at all and some could be of similar character as the ones in the Care by Volvo cars. An example of what could be of similar character, but have different names were all different safety systems and support systems. This was a very time-consuming activity to compile. To correspond to the language of the thesis, the whole benchmark was later translated into English.

3.3.3.4 Analysis of Benchmark

When analyzing the benchmark, the different tables in the primary data collection of the benchmark has been used. First, price and product have been compared, and then services have been added to the *Analysis* as well, to provide the reader with a complete picture of what the competition looks like. Further, the *Analysis* of the benchmark has been divided into three analyses, based on the benchmarked Volvo models, Volvo XC40, Volvo V60 and Volvo V90.

3.3.4 Survey

3.3.4.1 Purpose of Survey

A survey can be used when collecting quantitative primary data (Bryman & Bell, 2011). For manufactures, it is important to understand how customers value the products and services to be effective and efficient (Baines et al., 2009a). The main purpose of the survey was to answer the first and the third *Research Questions* in this thesis, where the first is stated as followed, "*How can Care by Volvo solve the problem regarding that the potential customers do not completely understand the new concept and the added values?".* To seek an answer of this *Research Question*, the questions in the survey have for example been focused towards the awareness of Care by Volvo, what the respondents know about Care by Volvo and what kind of communication they prefer. Furthermore, the purpose of the survey was also to increase Volvo´s understanding of the potential customers, to create a better customer value. The authors answered on this in *Research Question* three, "*What type of services could be added to Care by Volvo in order to increase the customer value?".* To focus more on the customers and understand them is a main prerequisite to succeed with servitization (Pistoni & Songini, 2017). Since the main *Research Question* in this thesis is about how car manufacturer can servitize its offering, the knowledge gained from the survey can possibly help Volvo in their shift towards servitization. The motivation behind these questions are that the authors seek to find new services to add to Care by Volvo and therefore, this understanding is necessary to have. The right differentiators are sought. Furthermore, there are some specific questions related to Care by Volvo and the motivation behind this is that many customers and potential customers do not fully understand the whole concept and therefore, these insights can be important for Volvo because they need to know how to communicate for making people fully understand. In the beginning of the survey, some control variables have been added in to investigate if there are any correlations in terms of gender, age, family situation and similar.

Unlike the semi-structured interviews, the information gathered from the survey with the customers and potential customers seeks to provide the authors with a more general picture of how well Care by Volvo is understood today, but also what customers are demanding in terms of private leasing. The authors are aware of that the questions about Care by Volvo will be hard to generalize, while other questions will be of more general character. However, questions that are specifically related to Care by Volvo, can possibly result in interesting and important insights for Volvo and will therefore add value in this thesis.

3.3.4.2 Setup of Survey

The survey was created in Webropol, which is an easy tool to use (Webropol, 2018). Since the authors have previous experience from using this tool, the survey could be created in a quick and convenient way. To make the survey as convenient as possible to respond to, a respondent will automatically proceed to the next relevant question and hence skip the irrelevant ones. This setup was chosen because some questions would not be relevant to answer for all respondents. An example of this can be that a respondent who do not have a car, do not need to answer the question about how much money one spends on the car each month, while this could be an interesting question to answer if the respondent does have a car. To indicate for the respondents how much of the survey that is completed, a progress bar was added. This can also increase the response rate because the respondents get encouraged to continue with the survey and complete it (E. Bourelos, personal communication, 5 April 2018). Other setups that have been used to make the survey as convenient as possible to respond to is a clear division of the survey, where different headlines have been used in to guide. A brief introduction text about Care by Volvo as well as a text in the end of the survey was added, to thank the respondents for taking their time to respond. This has been added because the authors wanted to show some gratefulness to the respondents.

The setup of a survey can be conducted in different ways. The chosen approach in this thesis has been to create a Web survey based on a self-completion questionnaire. A Web survey means that the respondents are directed to a website to respond to the questionnaire (Bryman & Bell, 2011). Questionnaires is an effective and cost-efficient way of collecting a large amount of data at the same time. Another advantage with questionnaires is the easiness in comparing the responses, because predetermined questions are used (Bryman & Bell, 2011). However, as mentioned above, the respondents will get questions based on previous answers. Hence, all respondents do not answer all questions, but only the relevant ones.

In some of the questions, the respondents were asked to rank the below alternatives based on how much one agrees. *See Table 5* for an explanation of which number that corresponds to in what extent a respondent agrees with the statement.

1.	Strongly disagree
2.	Disagree
3.	Neither disagree, nor agree
4.	Agree
5.	Strongly agree

Table 5 Explanation of the relation between the numbers and to what extent a respondent agrees

3.3.4.3 Pilot Survey and Adjustments

The survey has been one of the main methods for collecting primary data in this thesis and therefore, it is of great importance that the survey was clear and well understood, with relevant questions. To make sure that the quality of the survey was as good as possible, the authors themselves filled in the survey multiple times for making the initial necessary adjustments. Since a certain answer on some of the questions automatically proceeded to other questions, the authors tried all different alternatives for making sure that one proceeded to the right question and that no irrelevant questions were asked for every single respondent. Examples of initial adjustments was to change the order of the questions, to re-formulate some questions and to remove some questions that would not help to answer the first or the third *Research Questions.* March 29th, at 11:23, a first pilot survey was sent out to five study colleagues of the authors, whom all were familiar with the Webropol tool. This was done to make sure that the survey was clear and that there were no misleading questions or other unclarities. The same day as the first pilot survey was sent out, the authors gained some feedback. The main changes that were made was to remove some “other options” where this was not considered relevant, and to make all questions mandatory. This was done to ensure that no questions were skipped by mistake by the respondents. Hence, the responses would be more complete. The second pilot survey was sent out April 3, to three supervisors, two from School of Business, Economics and Law, at Gothenburg University and one from the Swedish Care by Volvo Team. This was done in order to make a last check of the quality of the survey, and also to make sure that the questions used in the survey would be of interest from an academic point of view and from Volvo´s point of view.

The same day as the second pilot survey was sent out, feedback was given from one tutor at the School of Business, Economics and Law, at Gothenburg University. The authors immediately revised the survey. The feedback that was taken into consideration was mainly to remove some unnecessary options in a few questions and to add some relevant options to some questions. The order of the questions was also adjusted, because a more logical structure was sought. A few days later, more feedback was given, from another tutor at the School of Business, Economics and Law, at Gothenburg University. This was also taken into consideration and the main change that was made was to change the "yes or no" options in some questions, to instead reformulating the questions and ask the respondent to value between 1-5. The reason for this change was that the authors would gain more insights with these options. Hence, this adjustment was made to hopefully increase the quality of the *Analysis.* Feedback regarding one mutually exclusive question was given. Hence, the authors adjusted and reformulated this question, based on the feedback. The last feedback that was taken into consideration was provided April 10. Hence, the last revision was made April 11. Since all necessary adjustments had been made, the survey was ready to be published.

3.3.4.4 Publication of Survey

The adjusted survey was published April 11, at 9:43 on Facebook and 9:46 on LinkedIn. Both authors published the survey, to reach as many respondents as possible. The number of potential respondents reached up to approximately 1.200 respondents. Exactly one day after the survey was first published, the authors noted that the number of respondents reached up to 106 respondents. After checking the number of respondents, the authors sent out a 24-hour reminder. The purpose of this was to remind people who had not yet responded to the survey and to reach people who might not have seen the posts. The main reason for why the survey was published at the social media of the authors was that the authors during the semi-structured interviews found out that one important goal of Care by Volvo is to reach customers who are not attracted by the traditional way of having a car. Since the social media network of the authors mainly consist of younger persons, it was considered a suitable place to publish the survey. April 12, at 15:41, the survey was also sent to 500 Volvo customers, by email. This was done to reach a larger number of respondents, and also to reach more respondents who have a car today. Hence, the combination of publishing the survey online where younger people were reached, and to send the link to current Volvo customers seems to complement each other well. The link was closed April 17th, at 10:19. By then, the survey had reached about 1.700 (1.200+500) possible respondents and out of these 305 had conducted the survey. This gives a response rate of approximately 18 percent (305/1.700).

3.3.4.5 Analysis of Survey

When the survey was closed, all responses were downloaded and transferred to Excel. In order to know how to analyze the different questions with each other, it was first necessary to allocate what kind of variable each question was connected to. There are three kinds of variables, namely dependent, independent and control variables. These are defined as the following.

- *"A variable that is causally influenced by another variable is a dependent variable".*
- *"A variable that has a casual impact on another variable, is an independent variable".*
- *"A control variable is a variable that possible can have an impact on the relationship between the dependent and the independent variable"* (Bryman & Bell, 2011, p714, p715, & p.306).

In the survey, two dependent variables have been used. These are question 15 *"How much do you spend on your car each month?"* and question 32 *"Rank the following alternatives based on what you would like to add when subscribing or leasing a car"* in the survey. Hence, the rest of the questions are either control variables, independent variables or nominal, meaning that it only contains words and not numbers. When the authors were aware of which questions that were connected to what kind of variables, the analysis could begin. First, some descriptive statistics were made. This was then followed by correlations and statistical significance. The *Analysis* of the survey finally ends with Cronbach's Alpha.

3.3.4.5.1 Descriptive Analysis

The descriptive statistics that is measured in the *Analysis* of the survey is mean, median and mode. The diagrams are either pie charts or bar charts, depending of what to illustrate. The descriptive statistics aimed to give the reader some background data of the respondents of the survey. The authors have made descriptive statistics of all questions in the survey, to present each one of them. However, some of them were placed in *Appendix 3* and some of them were placed in the primary data collection chapter. The ones which were placed in *Appendix 3* were placed there because they were not connected to the first or the third *Research Question* per se, while the ones placed in the *Empirical Findings* chapter were of greater importance to answer these questions or could be of more interest for the readers for other reasons.

3.3.4.5.2 Correlation and Statistical Significance

Correlation measures the strength between the variables. In this study, the authors have used Pearson r to investigate if there are any relationships between the variables. The correlation can vary between 0 and 1 where 0 means that there is no correlation between the variables and 1 means that there is a perfect correlation between the variables. Furthermore, the correlation can be either positive or negative. The numbers indicate the strength of the correlations, while the signs (+, -) indicates if the correlation is positive or negative (Bryman & Bell, 2011). In this thesis, all the alternatives including in the two dependent variables have been combined with multiple independent variables or control variables to seek for any correlations. Each alternative was combined with one or several variables that logically could have a strong correlation. The authors presented the correlations with strongest correlations in the chapter about *Empirical Findings* from the survey because they provided the authors with relevant findings that where then further analyzed in the *Analysis*. Variables with lower correlations were instead presented in *Appendix 3,* because they did not add any extra value to the thesis and to the *Analysis.* The authors have also investigated if the correlations were statistically significant. A statistically significant finding means that the authors can be confident in the findings. However, a statistically significant finding does not have to be important. The statistical significance has been set to 95 percent, this is investigated to evaluate if the findings are generalizable or not (Bryman & Bell, 2011). In this thesis, the authors have decided to only include the correlations that are statistically significant in the *Empirical Findings* from the survey. The motivation behind this is that these findings have been possible to draw conclusions from. The opposite is true for the correlations which are not statistically significant. Since the authors cannot draw any conclusions from them, it did not bring any extra value to the thesis and hence, the correlations that are not statistically significant have been placed in *Appendix 3.* Finally, due to space limitations, some of the correlations that have been conducted are neither presented in the *Empirical Findings* from the survey, nor in the *Analysis.* The motivation to why these are not present in this thesis is that they did not add any extra value. Hence, these have not been used at all.

3.3.4.5.3 Internal Reliability: Cronbach's Alpha

Cronbach's Alpha was conducted as well, with the purpose to check the internal reliability of the study. It is a measure used for investigating if the respondents have been coherent in the answers or not. Cronbach's Alpha varies between 0 and 1, where 0 means no internal reliability and 1 means perfect internal reliability. A rule of thumb states that a Cronbach's Alpha of 0.8 is an acceptable level of internal reliability. However, lower numbers can be accepted as well (Bryman & Bell, 2011). A Cronbach's Alpha of 0.6 can be acceptable (Evangelos Bourelos, personal communication, 23 November 2018). This measure is especially important in questions where the respondents are asked to rank certain statements between 1 and 5. Therefore, Cronbach's Alpha has been used in survey questions 14, 16, 31, 32 and 34 where the respondents were asked to rank the statements based on to what extent they agreed to each of the statements. Internal reliability is important to investigate in this kind of questions since it is easy for the respondents to just answer randomly and not being consistent in the ranking. All Cronbach's Alpha are presented in *Appendix 3* and hence not in the *Empirical Findings* from the survey. The reason for this is that it does not help to answer any of the *Research Questions* per se, but rather seek to ensure a high quality of the survey, in terms of internal reliability.

3.3.4.5.4 Limitations of Analysis of Survey

When analyzing the survey, it is important to be aware of its limitations. When comparing two variables, there is a chance that the relationship that is shown not is real, because one of the variables might be related to a third variable. This research is also limited by time and therefore not all of the variables have been analyzed. There is a chance that some of the data that has not been analyzed could have an effect on the result of the study. An example of this is that some of the descriptive statistics has been placed in *Appendix 3,* because it has not yet been analyzed. Some of these might include interesting findings that have not been found, due to time limitations.

3.4 Secondary Data Collection

The authors started the study by collecting and interpreting secondary material. This material was then used as a foundation for the *Theoretical Framework,* which in its turn was used when preparing and formulating the semi-structured interviews. All secondary material was critically reviewed to secure the trustworthiness and validity of the material. Hence, when searching for some specific keywords, the articles with relatively most citations were then used. Hence, the authors did not require a minimum absolute number of citations when evaluating the sources. By this approach, the authors determined what sources to use, for the *Theoretical Framework.* To further increase the trustworthiness of the secondary data collection for this thesis, the authors have sought to find the ground source for each theory. A concrete example of this is that an article written by Vandermerve & Rada (1988) has been used as the ground source for the servitization chapter. However, this is completed with newer sources that all build upon this first article. Regarding newer literature, the authors have not required that the articles must have a relatively high number of citations. The motivation behind this is that the newer sources have not yet had the time to be highly reviewed. Furthermore, the combination of older and newer sources makes the literature review more extensive and hence increases the trustworthiness. An example of this is that a combination of older and newer sources is to be preferred in the chapter about servitization, because it is a subject under constant change. Furthermore, other newer sources that have been used, are for example an article about subscription. This article presents a framework which easily could be applicable to Care by Volvo. Therefore, the authors decided to use this new article, with few citations, because it added a relevant aspect to the thesis.

Furthermore, only recommended databases were used when searching for literature, namely GUNDA, GUPEA, Google Scholar, ScienceDirect, Emerald and Business Source Premier. Other secondary materials used in the study are public documents, websites and PowerPoint presentations. Examples of a public document used is the terms and conditions of Care by Volvo. The websites have mainly been used to seek for more information about Care by Volvo and in the benchmark when the authors build cars online. Finally, the PowerPoint presentations that have been used have in general been used for the *Methodology,* for example when describing a thematic analysis. Finally, to combine primary data collection with secondary data collection is important for strengthening the result of the study. This combination is especially suitable in a case study (Saunders, Lewis & Thornhill, 2016). Hence, because this thesis builds upon a single case study, to use both primary data collection and secondary data collection is suitable to answer the *Research Questions* in this thesis.

3.5 Quality of Study

3.5.1 Quality of Qualitative Study

To ensure the quality of this study, there are some criterion to take into consideration. Lincoln and Guba (1985) proposes some alternatives to the often used quality measures of reliability and validity which are often used when evaluating the quality of quantitative research. A more suitable criterion for ensuring the quality of qualitative research is the trustworthiness. Four criteria build up the trustworthiness, namely *credibility, transferability, dependability* and *confirmability* (Lincoln & Guba, 1985). These will be further described below.

3.5.1.1 Credibility

Credibility is similar to the quantitative quality measure of internal validity and includes if the findings can be trusted or not. This criterion ensures that the research has been conducted according to good practice and that the interviewees have been shown the findings, to confirm that the authors understood and made correct interpretations of the responses in interviews (Lincoln & Guba, 1985). For increasing the level of credibility in the primary data collection, recording of all the semi-structured interviews have been conducted, as well transcriptions. To further increase the credibility, the transcriptions have been sent to each interviewee for making sure that the responses are correctly understood and approved to be published. In the secondary data collection, all sources used were first evaluated, based on reviews and the literature review was extensive to ensure credibility (Lincoln & Guba, 1985). Finally, by constantly discussing, and writing the thesis together, the authors share the same understanding of the study, which also increased the internal reliability.

3.5.1.2 Transferability

Transferability corresponds to the external validity and can be interpreted as an issue in the qualitative research. This because the object of study is hard to generalize to another context, or even in the same context but in another time (Lincoln & Guba, 1985). To ensure the quality of this criteria, the authors are aware of the limitations of a single case study in terms of generalization. The chief purpose of this study is not to make wide generalizations. Contrariwise, the purpose is more focused towards understanding a certain concept, Care by Volvo, in depth. However, the authors believe that other companies can take parts of the findings into consideration (Lincon & Guba, 1985).

3.5.1.3 Dependability

Dependability can be connected to reliability and questions whether the findings of the research could be valid again. Dependability is hard to achieve when conducting qualitative research since it is hard to replicate the exact same scenery of interviews and the results from interviews is highly dependent on the person who is being interviewed (Bryman & Bell, 2011). To increase the dependability in this thesis, the authors have constantly focused on being transparent in the method, to make it possible for others to make a similar study afterwards. Furthermore, to record, and transcribe chosen parts of the semi-structured interviews was decided as an approach to take, this was done to increase the dependability of this research (Lincon & Guba, 1985). To strengthen the dependability of the research, a copy of the interview guide was given to all the respondents during the semi-structured interviews (Bryman & Bell, 2011). Furthermore, the interview guide is also presented in *Appendix 1*, for the authors to be transparent, and to show the reader what questions that were asked during the semi-structured interviews.

3.5.1.4 Conformability

Finally, the last criterion of trustworthiness in qualitative research is confirmability, which is related to objectivity, meaning to what degree the authors have allowed personal values or feelings to influence the research. The authors have ensured confirmability by keeping a clear distinction between their own values and feelings and the ones from the literature and the semi-structured interviews (Lincon & Guba, 1985). A concrete example of this is that the *Theoretical Framework* is only built up on theories. In the opposite way, the chapter about the *Empirical Findings* is only based on what the authors found from the primary data collections, such as the semi-structured interviews. An objective approach has been used here, where no personal values or feelings of the authors have been used. Finally, in the *Analysis,* a clear distinction about where the text comes from, with help from sources or references to the semi-structured interviews have been used. Hence, it should be clear for the reader when the authors have expressed something with own values. This structure seeks to increase the conformability of this thesis.

3.5.2 Quality of Quantitative Study

Alike the quality measures of the qualitative study, there are similar terms that can be used for describing the quality of a quantitative study. According to Bryman & Bell (2011), some suitable terms to use for explaining the quality of a quantitative study are *reliability* and *validity*. These will be further described below.

3.5.2.1 Reliability

Reliability is important to consider when evaluating the quality of the study. Reliability is concerned with if the results of the study is repeatable, meaning that other researchers can replicate the study and get the same results. It is a useful method to use when conducting quantitative research (Bryman & Bell, 2011). The quantitative primary data collection in this thesis is a survey. To ensure the reliability of the survey, the authors have sent out two pilot surveys. This was done in to get feedback on the questions. It is important that the formulation of the questions is clear, so all respondents interpret the questions in the same way. To ensure this, the authors have spent much time on formulating the questions, as well as revised the ones where feedback about unclarities were provided. To test the internal reliability of the answers in the survey, Cronbach's Alpha has been used to accept or reject the level of internal reliability. Read more about Cronbach's Alpha in *"Analysis of survey"* in the *Methodology.*

3.5.2.2 Validity

Validity is concerned with if the study measures what it is supposed to measure (Bryman & Bell, 2011). To increase the validity, the authors have had the first and third *Research Question* in mind when conducting the survey and made sure that all questions could provide some interesting insights to the questions. Validity is also concerned with the generalization of the study and if it can be applicable on other cases, and it therefore considers if the study is credible or not (Bryman & Bell, 2011). The authors have been aware of the limited possibility to generalize a single case study. However, the findings from this study is mainly focused and concerned with Care by Volvo and no wide generalizations are sought to be found.

4. Empirical Findings

In this section, all the Empirical Findings of this thesis will be presented. First, some information about Care by Volvo will be presented, which will be followed by the findings from the semi-structured interviews. Further, this is followed by the Empirical Findings from the benchmark and this section ends with the Empirical Findings from the survey.

4.1 Care by Volvo

"Care by Volvo is a new and carefree way of having a car. You choose the Volvo that best suits your demand, pay your monthly fee and use your car. We take care of everything else" (Volvo Cars, 2018a). This is how the concept Care by Volvo is described online. Care by Volvo was founded in 2016 and is a project within Volvo Car Sweden. The concept is advertised with the slogan *"By not owning things, you're not owned by things"*, meaning that a Care by Volvo car is a car that one does not own, instead one subscribes to it. The concept is described with the words simple, convenient, safe, *carefree* and without surprises. Everything that the customer need is included in the subscription. In terms of price, Care by Volvo is pre-negotiated and ready. Hence, the customers cannot decide if they want to add or remove certain services. However, the customers can decide which services to actually use and one can choose between all Volvo models and design the car based on personal preferences, and thereby, customize the car. A unique characteristic with Care by Volvo is that one can build and order the car digitally and sign with BankID (Volvo Cars, 2018b). Care by Volvo is in line with the overall strategy of Volvo, namely that *"By 2025, our customers should get back one week of time per year, through our products and services"* (Volvocars, 2018c).

4.2 Empirical Findings from the Semi-Structured Interviews

Four semi-structured interviews were conducted with members from the Swedish Care by Volvo Team. *See Table 6* about details regarding with who the semi-structured interviews were conducted, when and how long time each interview took. The *Empirical Findings* from the semi-structured interviews were then presented in four different themes. *Theme 1* is focused on more general information about Care by Volvo, and do not answer any of the *Research Questions* per se. Instead it sought to add value to the thesis by providing the authors with a deeper understanding of Care by Volvo. *Theme 2* is connected to the second *Research Question* and was therefore a ground for the benchmark study. The two last themes, *Theme 3* and *Theme 4* sought to be a ground for the survey and are therefore connected to *Research Question* one and three.

Assigned number and position of the interviewee	Date	Length (Mins)	Channel
(1) Direct Sales Specialist	21 Feb	54	F2F
(2) Program Manager	23 Feb	49	F2F
(3) Direct Sales Manager	27 Feb	53	F2F
(4) Director Customer Experience and Retail	22 March	40	F2F

Table 6 Details about the semi-structured interviews

4.2.1 Theme 1: General Characteristics of Care by Volvo

The aim of Care by Volvo seems to be somehow aligned between the interviewees. Hence, three of the interviewees mentioned the subscription model as a chief aim of Care by Volvo. "*The first goal is to drive sales with subscription to create long-term relations with customers and to be profitable in this model"* (Direct Sales Manager, 2018). Three of four interviewees also mentioned the importance of coming closer to the customers, to understand them more and to listen to the customers. To listen to the behavior of the customers and to create long-term relations with them. "*It is strategically important to come closer to the customers"* (Program Manager, 2018). Two of the interviewees mean that one of the main aims with Care by Volvo is to save time for the customers and to make it easier. "*The second goal is to be a part of Volvo's strategy and to create new ways of car usage which should save time for our consumers"* (Direct sales Manager, 2018).

The main challenge of Care by Volvo, which all four interviewees mentioned during the semi-structured interviews, are the challenge of how to make the customers and potential customers understand Care by Volvo. "*The external mindset, to understand what the difference between private leasing and Care by Volvo is and to explain this in an understandable way, which the customers really get"* (Director Customer Experience and Retail, 2018). Two of the interviewees mentioned that it is a challenge to get in direct contact with the customers, which Volvo has never been before. "*A challenge is to change the mindset. We are a large car company and internally, we need to focus more towards customers, customer insights, to think outside the box, to take care of the customers and to work with our sales channels in another way"* (Director Customer Experience and Retail, 2018). The new subscription-based business model is also mentioned as a challenge, by two of the interviewees. "*Other challenges for us is* *to think "subscription". It is a new area for us to have end-consumer contact and to think subscription"* (Program Manager, 2018).

Regarding the unique characteristics of Care by Volvo, there are three main points mentioned by three of the interviewees. First, it is pre-negotiated, secondly, it is all inclusive and thirdly, it is possible to order the car online. *"Care by Volvo is the only all-inclusive product where everything is pre-negotiated and that you can buy online"* (Direct Sales Manager, 2018). One interviewee also mentioned that Care by Volvo wants to go from selling a car, to offer a car with complete *care*. *"We want to go from buying a car, to offer a complete service with care"* (Director Customer Experience and Retail, 2018).

The responses of which are the customers of Care by Volvo today are not aligned at all among the interviewees. One citation explains why it is hard to say who the customers of Care by Volvo are. "*You can see it from three different angles. It can be that the consumer has chosen an XC90, which can be a trigger. The consumer might like the subscription alternative were everything is pre-negotiated an ready, which also can be a trigger. Lastly to buy online can be a trigger. These are three completely different customers, they can differ in age and living situation"* (Direct Sales Manager, 2018). However, two of the interviewees mentioned that customers who are willing to pay for simplicity are within the frame of the Care by Volvo concept. *"Care by Volvo is for customers who are willing to pay for simplicity"* (Program Manager, 2018). Finally, one interviewee mentioned that the average age of buying a car today is too high. "*It is a challenge because the average age of buying a car is according to me, too high, on all brands. We want to have a balance between the genders in terms of ownership of our products"* (Director Customer Experience and retail, 2018).

When the interviewees were asked about why customers should subscribe to Care by Volvo, instead of leasing a car, three of the interviewees were very aligned in their answers. Factors such as the simplicity of ordering the car online, to have a fixed cost and a pre-negotiated price were mentioned by all these three interviewees. *"The whole negotiation process is avoided, this process can be frustrating and hard for the customer"* (Program Manager, 2018). Two interviewees also mentioned that there is more value when subscribing to a Care by Volvo, compared to private leasing "*Compared to leasing, this is more complete and caring"* (Director Customer Experience and Retail, 2018).

Regarding customer loyalty, three of the interviewees mean that rebuying and to stay within the brand for a longer period creates loyalty. *"If the customers are re-buying, it indicates loyalty"* (Direct Sales Specialist, 2018). Three of the interviewees also mentioned that there should be high barriers to leave Care by Volvo, in terms of emotional and structural obstacles. *"For me customer loyalty is when there are high barriers to leave. These barriers can be emotional or structural, but the first aspect is the most important"* (Direct Sales Manager, 2018). Two of the interviewees also mentioned that customers can show loyalty by using the products and services included in Care by Volvo. *"By using the services that are included in the subscription the customers can show that they are loyal and that they have are "all in"* (Direct Sales Manager, 2018). To use word of mouth and to spread the word about Care by Volvo can also be an indication of customer loyalty, according to two of the interviewees. *"We want the customers to be so satisfied, so they stay within the company and to spread the word about Care by Volvo. We want to have the spontaneous diffusion"* (Director Customer Experience and Retail, 2018). Finally, one of the interviewees mentioned the importance of creating a wow-feeling for the customers, to make them more loyal. *"It is important to create a "wow-feeling" for the customer, to create customer loyalty. It is important to work with the customers to create customer satisfaction during the whole journey"* (Direct Sales Specialist, 2018).

4.2.2 Theme 2: Benchmark of Care by Volvo

Regarding in which segment Care by Volvo operates, all four interviewees stated that Care by Volvo is in the premium segment. *"Today I would say that Care by Volvo is in the premium segment based on the products and additional services"* (Program Manager, 2018). One of the interviewees stated that one can subscribe to all Volvo models in Sweden. "*Volvo have a broad range of car models, with Care by Volvo in Sweden you can subscribe to all models, from V40 to XC90"* (Direct Sales Specialist, 2018). Three of four interviewees mentioned BMW, Audi and Mercedes-Benz as the main competitors of Care by Volvo. *"Premium brands, that offer some kind of private leasing are seen as our main competitors"* (Direct Sales Specialist, 2018). The interviewee who did not mentioned any specific car brands as competitors, mentioned that that Care by Volvo is in the premium segment. Finally, one interviewee also mentioned Volkswagen, but rather as a volume brand, than a premium brand.

4.2.3 Theme 3: Servitization of Care by Volvo

Regarding subscription, three of the interviewees mentioned time-period as an important aspect. However, the time-period was seen from different angles. First, it was seen as something one signs up for during an unlimited time. *"In my opinion subscription is something that I sign up for during an unlimited time period but also something that I can terminate within three months"* (Direct Sales Specialist, 2018). Secondly, the time-period of a subscription can differ. *"The period of the subscription can differ"* (Program Manager, 2018). Thirdly, subscription can be time based or not. "*A fixed price, with regularity and time based, but it does not have to be based on time"* (Direct Sales Manager, 2018). Hence, time-period seems to be an important aspect in subscription, but the time period was described in three different ways. Another aspect related to subscription is monthly payments, which two of the interviewees mentioned. *"To know the monthly fee and to have a complete care"* (Director Customer Experience and Retail, 2018). One interviewee mentioned that the payments should be regular. *"A fixed price, with regularity"* (Direct Sales Manager, 2018). Monthly payments and regularity can probably explain the same concept. Hence, three of the interviewees mentioned monthly payments or regularity as an important aspect of subscription. Two of the interviewees mentioned that subscription should be flexible. *"There are no surprises, no rises in price and it should be predictable, easy, convenient and preferably flexible"* (Director Customer Experience and Retail, 2018). Finally, two interviewees mentioned the importance of having a fixed price. *"A fee and that the customer knows its price"* (Director Customer Experience and Retail, 2018).

Regarding where Care by Volvo is today, in terms of how many percent of the offering that is a product and how many percent of the offering that is a service, the interviewees are in general not aligned. Interviewee 1 meant that Care by Volvo is 65 percent product and 35 percent service today. Interviewee 4 is of almost opposite opinion and stated that Care by Volvo is 30 percent product and 70 percent service today. However, interviewee 2 and 3 are aligned, where both meant that Care by Volvo is 90 percent product and 10 percent service today. When calculating an average of these interviewees, Care by Volvo is 68.75 percent product and 31.25 percent service.

Regarding where Care by Volvo will be "tomorrow", the interviewees had more similar opinions, compared to where they meant that Care by Volvo is today in terms of product and service. Interviewee 1 meant that Care by Volvo will be 25 percent product and 75 percent service "tomorrow". This means that interviewee 1 thinks that the relation between product and service will almost shift, to the opposite of today. Interviewee 2 and 3 are of the same opinion in this question as well. Both responded that Care by Volvo will be 10 percent product and 90 percent service “tomorrow”. This is the exactly opposite from where these interviewees believed that Care by Volvo is today. Finally, interviewee 4 meant that Care by Volvo will be approximately 15 percent product and approximately 85 percent service “tomorrow”. “*The product is in the center, so we cannot take the product away. I believe that there will be a limit of approximately 10-20 percent that must be focused towards the product, but the feeling for the customers should be that there is much services included”* (Director Customer Experience and Retail, 2018). When the authors calculated an average of these interviewees, Care by Volvo will be 18.75 percent product and 81.25 percent service in the future.

4.2.4 Theme 4: Value Adding Activities of Care by Volvo

Regarding the services of Care by Volvo today, all four interviewees mentioned flexibility as something that is very important for the customers. Hence, flexibility can be seen as more important than mobility, in terms of what kind of services that should be added to Care by Volvo. *“Today, I think that the customers value flexibility more”* (Program Manager, 2018). Three of the interviewees mentioned the pick and leave service as a very important service. *“I think that one interesting feature is the pick and leave service when the car is going into service”* (Program Manager, 2018). Two of the interviewees mentioned that having access to an extra car is a relevant service. *“One should be able to be flexible. For example, if one wants to go to practice and another one needs to use the car for work, Sunfleet can be used”* (Direct Sales Specialist, 2018). Two interviewees mentioned services related to flexibility, in terms of the possibility to add products and services on demand. *“Some extra services could be included in the subscription while the customer could be charged on demand for some other extras”* (Program Manager, 2018).

Except from the mentioned examples above, the interviewees were not of the same opinion in terms of what services that could be relevant to add to Care by Volvo. One of the interviewees talked about the possibility to get rid of the car whenever, and to not be geographically locked. “*I would say that flexibility is to be able to get rid of the car when you do not need it anymore. Or be able to upgrade or change the car based on the needs”* (Program Manager, 2018). One interviewee stated that *“I think more flexibility is important”* (Direct Sales Manager, 2018). The same interviewee also stated that flexibility lies outside of Care by Volvo and that having everything on demand could possibly be a good solution, even if the pre-negotiated and ready disappear. *"Flexibility lies outside Care by Volvo"* (Direct Sales Manager, 2018). *"An idea is to have everything on demand which would enable an enormous flexibility. However, the basic features of the concept, pre-negotiated and ready would disappear"* (Direct Sales Manager, 2018). Finally, one interviewee focused more on adding services that would make the everyday life easier, such as more In-car Deliveries or car wash. *"I would like to add something practical, which can help in the everyday life"* (Director Customer Experience and Retail, 2018).

In terms of mobility, all four interviewees agreed upon what mobility is. All stated that mobility is about the possibility to move freely, that mobility does not have to be connected to a specific vehicle but can be connected to another transport solution as well. *"Mobility in Care by Volvo means that you should be able to move freely, for example with Sunfleet"* (Direct Sales Specialist, 2018). One of the interviewees also stated that the Care by Volvo customers have a mobility solution. *"Our customer have a mobility solution, however not all of them fully understands what it means. But if the customers start to use the mobility solutions they will understand the strong value of it"* (Direct Sales Manager, 2018).

Regarding *care* in Care by Volvo, three of the interviewees mentioned that the customers should feel safe with the costs of having a Care by Volvo car. *"Care by Volvo differs from the traditional car-ownership. You should always be aware of the monthly cost, there should be no surprises and you should always feel safe with the costs"* (Direct Sales Specialist, 2018). Two of the interviewees stated that it should be simple and safe to order a Care by Volvo car online. *" You should be able to order the car in simple and safe ways online, which not many car manufacturers in the world offers today"* (Direct Sales Specialist, 2018). Two of the interviewees meant that it could be possible to add even more services, to increase the *care*, in Care by Volvo, but it requires many steps. *"We take step by step to get there, continuously. However, there are multiple steps that could be taken to make it easier, convenient, safe and care"* (Director Customer Experience and Retail, 2018). Two of the interviewees mentioned that Care by Volvo should provide the customer with a *carefree* car, and the importance of doing something extra for the customers. *"We should be careful so that the customer can be carefree"* (Program Manager, 2018). Furthermore, *care* for the four different interviewees also differed. One respondent mentioned that a safe ownership, a safe brand, that Care by Volvo takes *care* of everything that is related to the car, that it is safe do drive and that warranty and road assistance is included, are important aspects of *care* in Care by Volvo. *"As I see it, care means that we care, it should be a product that takes care of you and everything connected to* *the car. You should get a car that you can trust, it should be safe to drive, and you should have a warranty on the car, you have road assistance if something should happen, you have services and insurance. I think that is the foundation of care"* (Direct Sales Specialist, 2018). Another interviewee stated that having things on demand is connected to *care*. *"Like the subscription idea, where thing is on demand"* (Program Manager, 2018). One interviewee meant that it is important that Care by Volvo is simple to understand. *"It means that it should be pre-negotiated, simple to understand and simple to buy"* (Direct Sales Manager, 2018). Finally, one interviewee mentioned the importance of understanding the customers and also that Care by Volvo is in line with a strategy of Volvo. *"Volvo has a strategy that by 2025, one week of quality time per customer per year should be saved and therefore simplicity, convenience and care is connected to this. It is about the buying process but also during the subscription time, for example that it should be easy to get in touch with Customer Care Center and that the service works well"* (Director Customer Experience and Retail, 2018).

All the themes, the codes and the main findings of each code are summarized *in Table 7* below.

Name of Theme	Name of Code	Main findings of each code
Theme 1: General Characteristics of Care by Volvo		
	Aim of Care by Volvo	Subscription model Coming closer to the customers
	Challenges with Care by Volvo	How to make customers and potential customers to understand what is included in Care by Volvo and to understand the value adding
	Unique Characteristics of Care by Volvo	Pre-negotiated All-inclusive Order online
	Customers of Care by Volvo	Different kind of customers Willing to pay for simplicity
	Why Care by Volvo?	Simplicity of order online Fixed cost Pre-negotiated
	Customer Loyalty of Care by Volvo	Re-buying High barriers to leave Using the products and services

Theme 2: Benchmark of Care by Volvo		
	Segment of Care by Volvo	Premium segment
	Competitors of Care by Volvo	Audi, BMW, Mercedes Benz, Volkswagen
Theme 3: Servitization of Care by Volvo		
	Definition of Subscription	Misaligned responses about time period Monthly fee
	Servitization of Care by Volvo Today	Misaligned answers. Average: 68,75% product and 31,25% service today
	Servitization of Care by Volvo Tomorrow	More aligned answers. Average: 18,75% product and 81,25% service tomorrow
Theme 4: Value Adding Activities of Care by Volvo		
	Services of Care by Volvo	Flexibility Pick and leave service Many other suggestions
	Flexibility of Care by Volvo	Flexibility Pick and leave service Many other suggestions
	Mobility of Care by Volvo	Move freely Not connected to a specific vehicle
	Care	Feel safe with the costs Simple and safe to order online Add more services A carefree car

Table 7 Explanation of how the different codes are compiled into themes and the main result from each code

4.3 Empirical Findings from Benchmark

The *Empirical Findings* from the benchmark will below be divided into three sub-headlines where XC40 is presented in the first one, V60 in the second one and V90 in the third one. The reason for this structure is because each Volvo model is only relevant to be presented together with the compared models from the benchmarked companies, and not to other models. For this reason, the text can be perceived repetitive. Read more about the benchmark in the analyses of *Research Question 2.*

4.3.1 Benchmark of XC40

4.3.1.1 Comparison of Prices

Benchmark of the XC40	**Price**
Volvo XC40 D4 AWD Momentum Care by Volvo 190hp	**7 336 SEK/Month**
Volvo XC40 D4 AWD Momentum 190hp	**6 271 SEK/Month**
BMW X1 xDrive 20d 190hp	**7 389 SEK/Month**
Audi Q3 2.0 TDI Quattro Proline Sport S-tronic 184hp	**5 336 SEK/Month**
Mercedes-Benz A-class A180d 116hp	**5 258 SEK/Month**
VW Tiguan GT Executive Edition 2.0 TDI SCR 4MOTION 190hp DSG	**6 322 SEK/Month**

Table 8 Comparison of monthly prices when leasing or subscribing to a car XC40

In *Table 8,* in the benchmark for Volvo XC40, the price range of these cars varies between 5 258 SEK/month, for a Mercedes-Benz A-class and 7 389 SEK/month for a BMW X1. Hence, the difference between the cheapest car and the most expensive car corresponds in terms of monthly cost, to 2 131 SEK/month. Volvo XC40 with Care by Volvo is the second most expensive car, with a monthly cost at 7 336 SEK/month.

Car model	**Volvo XC40 Care By Volvo**	**Volvo XC40**	**BMW X1**	**Audi Q3**	**MB A180d**	**VW Tiguan**
Sub mileage	0 SEK/km	0 SEK/km	0 SEK/km	0,375 SEK/km	0 SEK/km	0,375 SEK/km
Over mileage	0 SEK/km	1 SEK/km	1,25 SEK/km	0,75 SEK/km	1,25 SEK/km	0,75 SEK/km

Table 9 Comparison of price at sub and over mileage XC40

In *Table 9,* in the benchmark for Volvo XC40 in terms of sub mileage and over mileage, it can be seen that the price for sub mileage is always lower, or the same as for over mileage. Audi Q3 and VW Tiguan have the same fees, corresponding to 0,375 SEK/km for sub mileage and

0,75 SEK/km for over mileage. BMW X1 and Mercedes-Benz A180d have the same fees, corresponding to 0 SEK/km for sub mileage and 1,25 SEK/km for over mileage. For XC40 with Care by Volvo, sub mileage and over mileage corresponds to 0 SEK/km if the distance is up to 3 000 kilometers shorter or longer than the agreed distance. However, if the distance falls below 3 000 kilometers less than the agreed distance, the price for sub mileage is 0,60 SEK/km. Alike, if the distance exceeds 3 000 kilometers more than the agreed distance, the price for over mileage is 0,60 SEK/km.

Car model	**Volvo XC40**	**BMW X1**	**Audi Q3**	**MB A180d**	**VW Tiguan**
Total Price	419 815SEK	462 900SEK	443 774SEK	378 600SEK	388 496SEK
Discount	-22 744SEK	–59 100SEK	–27 900SEK	0 SEK	0 SEK
Net Price	397 071SEK	403 800SEK	415 844SEK	378 600SEK	388 496SEK

Table 10 Comparison of net prices, when buying a car XC40

In the benchmark for Volvo XC40, in terms of net price, it varies between 378 600 SEK for a Mercedes-Benz and 415 844 SEK for an Audi Q3, *see Table 10.* Hence, the difference between the cheapest car and the most expensive car, in terms of net price, corresponds to
37 244 SEK. Volvo XC40 is the third most expensive car in terms of net price, which corresponds to 397 071 SEK.

4.3.1.2 Comparison of Safety Systems

Volvo XC40 Care by Volvo	Volvo XC40	BMW X1	Audi Q3	MB A180d	VW Tiguan
City Safety	City Safety	Traffic Jam Assist	Pedestrain Protection	Pre-Safe	Front assist with City Emergancy Brake & Traffic jam assist
Pedestrian detection	Pedestrian detection	Pedestrain Protection	Pedestrain Protection	Pedestrain Protection	Pedestrain protection
Cyclist detection	Cyclist detection	-	-	Cyclist detection	-
Large animal detection	Large animal detection	-	-	-	-
Connected Safety	Connected Safety	-	-	-	-
Lane Keeping Aid & Lane departure warning	Lane Keeping Aid & Lane departure warning	Lane Keeping Aid & Lane departure warning	Audi Side Assist & Audi active lane assist	Active Lane Change Assist & Lane Keeping Assist	Lane assist
Blind Spot Information System	Blind Spot Information System		Audi side assist	Blind spot assist	Side assist & Rear traffic alert
Autobrake at intersection	Autobrake at intersection	Approach control warning	-	Pre-Safe & Braking Assist	Front assist with City Emergency Brake
Driver Alert Control.	Driver Alert Control.	-	-	Attention assist	Driver alert control
Oncoming lane mitigation	Oncoming lane mitigation	-	-	-	-
Run of road mitigation	Run of road mitigation	Lane Keeping Aid & Lane departure warning	Audi active lane assist	Lane Keeping Assist	Lane assist
Forward Collision Warning.	Forward Collision Warning.	Approach control warning	Audi side assist	Collision prevention assist	Front assist with City Emergency Brake
Adaptive cruise control & Distance alert	Adaptive cruise control & Distance alert	Active cruise control with Stop & Go	Cruise Control	Adaptive cruise control & Distance alert	Adaptive cruise control
		-	-	Pre-Safe	Pre-Crash, proactive passenger protection system

Table 11 Comparison of safety systems XC40

In *Table 11,* in the benchmark for Volvo XC40 about safety systems, it can be seen that Volvo XC40 has 13 safety systems, which is more than all the competitors. None of the other cars have large animal detection, connected safety or oncoming lane mitigation. Mercedes-Benz A180d has a system which Volvo XC40 lacks, Pre-safe. Also, VW Tiguan has a system which Volvo XC40 lacks, Pre-crash, proactive passenger protection system. The car with the second most safety systems is Mercedes-Benz A180d with three less safety systems than Volvo XC40 and VW Tiguan has four less safety systems than Volvo XC40. The cars with the least safety systems are BMW X1 and Audi Q3, which both lack seven safety systems compared to Volvo XC40. However, a new Audi Q3 will be released later this year, this can explain the lack of safety systems in this car.

4.3.1.3 Comparison of Support Systems

	Volvo XC40 Care by Volvo	**Volvo XC40**	**BMW X1**	**Audi Q3**	**MB A180d**	**VW Tiguan**
Rain sensor	Rain sensor	Rain sensor	Rain sensor	Rain sensor	Rain sensor	Rain sensor
Traffic Information	Traffic Sign Recognition.	Traffic Sign Recognition.	Real Time Traffic Information	MMI-navigation	Live Traffic Information	Online Traffic Information
Hill Start Assist	Hill descent control & Hill start assist	Hill descent control & Hill start assist	Hill descent control & Hill start assist	Hill start assist	Hill start assist	Hill descent control & medlutsassistent
Headlight LED	Headlight LED, auto flash On and Off	Headlight LED, auto flash On and Off	Headlight LED, auto flash On and Off	Headlight LED	Headlight LED, auto flash On and Off	Headlight LED, auto flash On and Off
Rear view mirror, automatic reflection	Rear view mirror, automatic reflection	Rear view mirror, automatic reflection	Rear view mirror, automatic reflection	Rear view mirror, automatic reflection	Rear view mirror, automatic reflection	Rear view mirror, automatic reflection
Emercandy Assist	Volvo Assistans	Volvo Assistans	Intelligent Emergency Call	myService	Mercedes-Benz E-call	Emergency Call Service
Parking assist	-	-	Park Assistant	Parking sensor, rear	Parking Assistant	Park assist & Parking sensor, rear

Table 12 Comparison of support systems XC40

In the benchmark for Volvo XC40 in terms of support systems, all cars have similar type of support systems, *Table 12*. However, parking assistance is not a standard equipment in Volvo XC40 Momentum, but it is available as an option.

4.3.1.4 Comparison of Services and Added Values

Specifications	Volvo XC40 Care by Volvo		Volvo XC40		BMW X1		Audi Q3		MB A180d		VW Tiguan	
Service		*Included*		*149 SEK/Month*		*Included*		*100 SEK/Month*		*259 SEK/Month*		*99 SEK/Month*
New car warranty	Whole leasingperiod	*Included*	2 years	*Included*	2 years	*Included*	2 years	*Included*	2 years	*Included*	2 years	*Included*
Insurance	Volvia försäkring	*Included*	Volvia Försäkring	*Included*	Half Insurance	*395 SEK/Month*	Half Insurance	*597 SEK/Month*	Half Insurance	*735 SEK/Month*	Half Insurance	*654 SEK/Month*
Wagon warranty	3 years	*Included*	3 years	*Included*	3 years	*Included*	3 years	*Included*	3 years	*Included*	3 years	*Included*
App	Volvo on Call	*Included*	Volvo on Call	*Included*	ConnectedDrive	*Included*	Audi MMI connect	*Included*	Mercedes me connect	*Included*	App-Connect	*Included*
Payment Card	Volvokort	*Included*	Volvokort	*Included*	Biliakort	*Included*	Audikort Visa	*Included*	Hedinkort	*Included*	Volkswagenkortet Visa	*Included*
Tire Hotel		*Included*	995 SEK/Season	*166 SEK/Month*	1500 SEK/Season	*250 SEK/Month*	985 SEK/Season	*164 SEK/Month*	800 SEK/Season	*133 SEK/Month*	995 SEK/Season	*166 SEK/Month*
In-car Delivery	In-car Delivery	*Included*	In-car Delivery	*Included*	-	-	-	-	-	-	-	-
Extra features	Extra car on 10 occasions	*Included*	-	-	-	-	-	-	-	-	-	-
	20 % at Hertz	*Included*	-	-	-	-	-	-	-	-	-	-

Table 13 Comparison of services and added values XC40

In *Table 13,* in the benchmark for Volvo XC40 about services and added values, the service of the cars is free when having a Volvo XC40 with Care by Volvo and BMW X1. The price for service for the other cars varies between 99 SEK/month for VW Tiguan and 259 SEK/month for Mercedes-Benz A180d. Care by Volvo has a customized pick and leave service, if the customer is in Stockholm's County at the time for service. This is unique for Care by Volvo, and hence not available for the other benchmarked cars. A main difference between Volvo XC40 with Care by Volvo and all other benchmarked car models, is that the new car warranty is valid for the whole leasing period, meaning that it can be valid for two years or three years, while the new car warranty is only valid for two years on the other cars. Regarding the insurance, it is included in Volvo XC40, both with Care by Volvo, and private leasing. The price for insurance for the other cars varies from 395 SEK/month for BMW X1 and 735 SEK/month for Mercedes-Benz A180d. All cars have a wagon warranty for three years, an app and a payment card. Tire hotel is included in Volvo XC40 with Care by Volvo. For the other car models, tire hotel is available to a cost. The price varies from 133 SEK/month for Mercedes-Benz A180d, to 250 SEK/month for BMW X1. In-car Delivery is only available for Volvo XC40, both with

Care by Volvo and private leasing. Extra features which are unique for Care by Volvo is that the customers get ten free trips with Sunfleet and 20 percent discount at Hertz. The main result from *Table 13* is that all mentioned services are included in the monthly price with Care by Volvo, when these services are available to a price, in the other models.

4.3.2 Benchmark of V60

4.3.2.1 Comparison of Prices

Benchmark of the V60	Price
Volvo V60 D4 AWD Momentum Care by Volvo 190hp	**7 299 SEK/Month**
Volvo V60 D4 AWD Momentum 190hp	**5 975 SEK/Month**
BMW 320d xDrive Touring 190hp	**6 346 SEK/Month**
Audi A4 Avant 2.0 TDI Quattro Proline Sport S-tronic 190hp	**7 478 SEK/Month**
Mercedes-Benz C220d Estate 170hp	**6 092 SEK/Month**
VW Passat Sport combi GT Executive R Edition 2.0 TDI SCR 4MOTION 190hp	**5 769 SEK/Month**

Table 14 Comparison of monthly prices when leasing or subscribing to a car V60

In *Table 14,* in the benchmark for Volvo V60, the price range of these cars varies between 5 769 SEK/month for a VW Passat and 7 478 SEK/month for an Audi A4. Hence, the difference between the cheapest car and the most expensive car, in terms of monthly cost, corresponds to 1 709 SEK/month. Volvo V60 with Care by Volvo is the second most expensive car, with a monthly cost of 7 299 SEK/month.

Car model	Volvo V60 Care by Volvo	Volvo V60	BMW 320d	Audi A4	MB C220d	VW Passat
Sub mileage	0 SEK/km	0 SEK/km	0 SEK/km	0,375 SEK/km	0 SEK/km	0,375 SEK/km
Over mileage	0 SEK/km	1 SEK/km	1,25 SEK/km	0,75 SEK/km	1,25 SEK/km	0,75 SEK/km

Table 15 Comparison of price at sub and over mileage V60

In *Table 15,* in the benchmark for Volvo V60 in terms of sub mileage and over mileage, it can be seen that the price for sub mileage is always lower, or the same as for over mileage. Audi A4 and VW Passat have the same fees, corresponding to 0,375 SEK/km for sub mileage and 0,75 SEK/km for over mileage. BMW 320d and Mercedes-Benz C220d have the same fees, corresponding to 0 SEK/km for sub mileage and 1,25 SEK/km for over mileage. For V60 with Care by Volvo, sub mileage and over mileage corresponds to 0 SEK/km if the distance is up to

3 000 kilometers shorter or longer than the agreed distance. However, if the distance falls below 3 000 kilometers less than the agreed distance, the price for sub mileage is 0,60 SEK/km. Alike, if the distance exceeds 3 000 kilometers more than the agreed distance, the price for over mileage is 0,60 SEK/km.

Car model	**Volvo V60**	**BMW 320d**	**Audi A4**	**MB C220d**	**VW Passat**
Total Price	374 970SEK	490 900SEK	480 780SEK	443 650SEK	341 000SEK
Discount	0 SEK	–96 700SEK	–54 600SEK	–5 000SEK	0 SEK
Net Price	**374 970SEK**	**394 200SEK**	**426 180SEK**	**438 650SEK**	**371 396SEK**

Table 16 Comparison of net prices when buying a car V60

In the benchmark for Volvo V60, in terms of net price, it varies between 371 396 SEK for a VW Passat and 438 650 SEK for a Mercedes-Benz C220d, *see Table 16.* Hence, the difference between the cheapest car and the most expensive car, in terms of net price, corresponds to 67 254 SEK. Volvo V60 is the fourth most expensive car in terms of net price, which corresponds to 374 970 SEK.

4.3.2.2. Comparison of Safety Systems

Volvo V60 Care by Volvo	Volvo V60	BMW 320d	Audi A4	MB C220d	VW Passat
City Saftey Generation 3	City Saftey Generation 3	Driving assistant & Active Protection	Audi pre sense City & Traffic jam assist	Distronic Plus	Front assist with City Emergancy Brake & Traffic jam assist
Pedestrian Detection	Pedestrian Detection	Driving assistant	Audi pre sense City	Pedestrian Protection	Front assist with City Emergancy Brake & Traffic jam assist
Cyclist Detection	Cyclist Detection	-	-	Pre-safe brake	-
Connected Safety	Connected Safety	Driving assistant	-	-	-
Lane Keeping Aid	Lane Keeping Aid	Lane Change Warning & Assist	Lane change assistant	Active lane keeping assist	Lane Assist
Blind Spot Information System	Blind Spot Information System	Driving assistant	Audi Side Assist	Blind Spot Assistant	Side Assist och Rear Traffic Alert
Autobrake at Intersection	Autobrake at Intersection	Driving assistant	Cross traffic assist front	Bas Plus	Front assist with City Emergancy Brake & Pedestrian Protection
Driver Alert Control	Driver Alert Control	Driver Alert Control	Driver Alert Control	Attention Assist	Attention Assist
Oncoming Lane Mitigation	Oncoming Lane Mitigation	Driving assistant	Cross traffic assist front	Bas Plus	Emercency Assist
Run off Road Mitigation	Run off Road Mitigation	Driving assistant	Lane change assistant	Active lane keeping assist	Lane Assist
Collision Warning	Collision Warning	Driving assistant	Audi pre sense City	Collision Prevention Assist	Emercency Assist
Oncoming Mitigation By Braking	Oncoming Mitigation By Braking	-	Cross traffic assist front	Bas Plus	Emercency Assist
Adaptive cruise control	Adaptive cruise control	Adaptive cruise control with Stop & Go	Cruise Control	Adaptive cruise control with Stop & Go	Adaptive cruise control
-	-	-	Exit warning assist	-	-

Table 17 Comparison of safety systems V60

In *Table 17,* in the benchmark for Volvo V60 in terms of safety systems, it can be seen that Volvo V60 has 13 safety systems, which is more than the competitors. However, in this case, the difference between Volvo V60 and the other benchmarked cars is limited. The cars with the second most safety systems are Audi A4 and Mercedes-Benz C220d with 11 safety systems each. The cars with the least number of safety systems are BMW 320d and VW Passat, with ten safety systems each. Based on this information, all cars are comparable in terms of safety systems. There are a few safety systems which most of the cars lack. First, the cyclist detection is a system which only Volvo V60 and Mercedes-Benz C220d have. Connected safety is another example, which only Volvo V60 and BMW 320d have. Finally, there is one safety system which one car has, namely an exit warning assist, which belongs to Audi A4.

4.3.2.3 Comparison of Support Systems

	Volvo V60 Care by Volvo	Volvo V60	BMW 320d	Audi A4	MB C220d	VW Passat
Rain sensor	Included	Rain sensor	Rain sensor	Rain sensor	Rain sensor	Rain sensor
Traffic Information	Traffic Sign Recognition	Traffic Sign Recognition	Real-time traffic information	Traffic Sign Recognition	Live Traffic Information	Online Traffic Information
Hill Start Assist	Hill Start Assist	Hill Start Assist	Hill Start Assist	Hill Start Assist	Hill Start Assist	Hill Start Assist
Headlight LED	Headlight LED, auto flash On and Off	Headlight LED, auto flash On and Off	High beam assistent	Audi matrix LED headlamp	Adaptive LED headlamp	Dynamic Light Assist
Rear view mirror, automatic reflection	Rear view mirror, automatic reflection	Rear view mirror, automatic reflection	Rear view mirror, automatic reflection	Rear view mirror, automatic reflection	Rear view mirror and left exterior mirror, automatic reflection	Rear view mirror, automatic reflection
Parking assist	Parking sensor, rear	Parking sensor, rear	Park assist & Park distance control front and rear	The cross rear traffic assist	Parking Package	Parking sensor, rear
Emergancy Assistant	Volvo Assistans	Volvo Assistans	Intelligent Emergency Call	myService	Mercedes-Benz E-call	Emergency Call Service
Extras	-	-	-	Predictive effeciency assist	-	-

Table 18 Comparison of support systems V60

In the benchmark for Volvo V60 in terms of support systems, all cars have similar type of support systems, *see Table 18.* However, Audi A4 has a support system called Predictive efficiency assist, which all other cars lack.

4.3.2.4 Comparison of Services and Added Values

Specifications	Volvo V60 Care by Volvo		Volvo V60		BMW 320d		Audi A4		MB C220d		VW Passat	
Service		*Included*		*149 SEK/Month*		*Included*		*100 SEK/Month*		*389 SEK/Month*		*99 SEK/Month*
New car warranty	Whole leasingperiod	*Included*	2 years	*Included*	2 years	*Included*	2 years	*Included*	2 years	*Included*	2 years	*Included*
Insurance	Volvia försäkring	*Included*	Volvia Försäkring	*Included*	Half Insurance	*395 SEK/Month*	Half Insurance	*607 SEK/Month*	Half Insurance	*816 SEK/Month*	Half Insurance	*617 SEK/Month*
Wagon warranty	3 years	*Included*	3 years	*Included*	3 years	*Included*	3 years	*Included*	3 years	*Included*	3 years	*Included*
App	Volvo on Call	*Included*	Volvo on Call	*Included*	Connected Drive	*Included*	Audi MMI connect	*Included*	Mercedes me connect	*Included*	App-Connect	*Included*
Payment Card	Volvokort	*Included*	Volvokort	*Included*	Biliakort	*Included*	Audikort Visa	*Included*	Hedinkort	*Included*	Volkswagenkortet Visa	*Included*
Tire Hotel		*Included*	995 SEK/Season	*166 SEK/Month*	1500 SEK/Season	*250 SEK/Month*	985 SEK/Season	*164 SEK/Month*	800 SEK/Season	*133 SEK/Month*	995 SEK/Season	*166 SEK/Month*
In-car Delivery	In-car Delivery	*Included*	In-car Delivery	*Included*	-	-	-	-	-	-	-	-
Extra features	Extra car on 10 occasions	*Included*	-	-	-	-	-	-	-	-	-	-
	20 % at Hertz	*Included*	-	-	-	-	-	-	-	-	-	-

Table 19 Comparison of services and added values V60

In *Table 19,* in the benchmark for Volvo V60 in terms of services and added values, the service on the cars are free when having a Volvo V60 with Care by Volvo and BMW 320d. The price for service for the other cars varies between 99 SEK/month for VW Passat and 370 SEK/month for Mercedes-Benz C220d. Care by Volvo has a customized pick and leave service, if the customer is in Stockholm's County at the time for service. This is unique for Care by Volvo, and hence not available for the other benchmarked cars. A main difference between Volvo V60 with Care by Volvo and all other benchmarked car models, is that the new car warranty is valid for the whole leasing period, meaning that it can be valid for two years or three years, while the new car warranty is only valid for two years on the other cars. Regarding the insurance, it is included in Volvo V60, both with Care by Volvo, and private leasing. The price for insurance for the other cars varies from 395 SEK/month for BMW 320d and 816 SEK/month for a Mercedes-Benz C220d. All cars have a wagon warranty for three years, an app and a payment card. Tire hotel is included in Volvo V60 with Care by Volvo. For the other car models, tire hotel is available to a cost. The price varies from 133 SEK/month for Mercedes-Benz C220d, to 250 SEK/month for BMW 320d. In-car delivery is only available for Volvo V60, both with

Care by Volvo and private leasing. Extra features which are unique for Care by Volvo is that the customers get ten free trips with Sunfleet and 20 percent discount at Hertz. The main result from the *Table 19* is that all mentioned services are included in the monthly price with Care by Volvo, when these services are available to a price, in the other models.

4.3.3 Benchmark of V90

4.3.3.1 Comparison of Prices

Benchmark of the V90	**Price**
Volvo V90 D4 AWD Momentum Care by Volvo	**7 586 SEK/Month**
Volvo V90 D4 AWD Momentum	**6 436 SEK/Month**
BMW 520d xDrive Touring 190hp	**9 673 SEK/Month**
Audi A6 Avant 2.0 TDI Quattro Proline S-tronic 190hp	**7 338 SEK/Month**
Mercedes-Benz E220d 4MATIC Estate 194hp	**8 123 SEK/Month**
VW Passat Sport combi GT Executive R Edition 2.0 TDI SCR 4MOTION 190hp	**5 769 SEK/Month**

Table 20 Comparison of monthly prices when leasing or subscribing to a car V90

In *Table 20* in the benchmark for Volvo V90, the price range of these cars varies between 5 769 SEK/month for a VW Passat and 9 673 SEK/month for a BMW 520d. Hence, the difference between the cheapest car and the most expensive car, in terms of monthly cost, corresponds to 3 904 SEK/month. Volvo V90 with Care by Volvo is the third most expensive car, with a monthly cost at 7 586 SEK/month.

Car model	**Volvo V90 Care by Volvo**	**Volvo V90**	**BMW 520d**	**Audi A6**	**MB E220d**	**VW Passat**
Sub mileage	0 SEK/km	0 SEK/km	0 SEK/km	0,375 SEK/km	0 SEK/km	0,375 SEK/km
Over mileage	0 SEK/km	1 SEK/km	1,25 SEK/km	0,75 SEK/km	1,25 SEK/km	0,75 SEK/km

Table 21 Comparison of price at sub and over mileage V90

In *Table 21,* in the benchmark for Volvo V90 in terms of sub mileage and over mileage, it can be seen that the price for sub mileage is always lower, or the same as for over mileage. Audi A6 and VW Passat have the same fees, corresponding to 0,375 SEK/km for sub mileage and 0,75 SEK/km for over mileage. BMW 520d and Mercedes-Benz E220d have the same fees, corresponding to 0 SEK/km for sub mileage and 1,25 SEK/km for over mileage. For V90 with

Care by Volvo, sub mileage and over mileage corresponds to 0 SEK/km if the distance is up to 3 000 kilometers shorter or longer than the agreed distance. However, if the distance falls below 3 000 kilometers less than the agreed distance, the price for sub mileage is 0,60 SEK/km. Alike, if the distance exceeds 3 000 kilometers more than the agreed distance, the price for over mileage is 0,60 SEK/km.

Car model	**Volvo V90**	**BMW 520d**	**Audi A6**	**MB E220d**	**VW Passat**
Total Price	395 161SEK	583 160SEK	495 000SEK	574 400SEK	371 396SEK
Discount	0 SEK	- 81 900SEK	- 29 500SEK	−11 000SEK	0 SEK
Net Price	**395 161SEK**	**501 260SEK**	**465 500SEK**	**563 400SEK**	**371 396SEK**

Table 22 Comparison of prices when buying a car V90

In the benchmark for Volvo V90, in terms of net price, it varies between 371 396 SEK for a VW Passat and 563 400 SEK for a Mercedes-Benz E220d, *see Table 22*. Hence, the difference between the cheapest car and the most expensive car, in terms of net price, corresponds to 192 004 SEK. Volvo V90 is the fourth most expensive car in terms of net price, which corresponds to 395 161 SEK.

4.3.3.2 Comparison of Safety Systems

Volvo V90 Care by Volvo	Volvo V90	BMW 520d	Audi A6	MB E220d	VW Passat
City safety	City safety	Driving Assistant Plus & Taffic Jam Assist	Traffic Jam Assist	Traffic Jam Assist	Front assist with City Emergancy Brake & Traffic jam assist
Pedestrian detection	Pedestrian detection	Driving Assistant Plus	Pedestiran protecion	Pedestiran Protecion & Maneuver assistant	Front assist with City Emergancy Brake & Pedestrian Protection
Cyclist detection	Cyclist detection	-	-	-	-
Large animal detection	Large animal detection	-	-	-	-
Lane Keeping Aid & Lane departure warning	Lane Keeping Aid & Lane departure warning	Driving Assistant Plus	Audi active lane assist	Active Course Assistant	Lane Assist
Blind Sport Information System	Blind Sport Information System	Blind Spot Assist	Audi Side Assist	Active Blind Spot Assist	Side Assist och Rear Traffic Alert
Autobrake at intersection	Autobrake at intersection	Driving Assistant Plus	Audi pre sense plus	Active Braking Assistant	Front assist with City Emergency Brake
Driver alert control	Driver alert control	Active Protection	-	Attention Assist	Attention Assist
On coming lane mitigation	On coming lane mitigation	Driving Assistant Plus	-	Maneuver assistant	Emercency Assist
Collision warning	Collision warning	Driving Assistant Plus	Audi pre sense plus	Pre-safe protection system	Emercency Assist
Oncoming Mitigation By Braking	Oncoming Mitigation By Braking	Driving Assistant Plus	Audi pre sense plus	Active braking assistant	Emercency Assist
Adaptive cruise control	Adaptive cruise control	Adaptive cruise control with Stop & Go	Adaptive cruise control with Stop & Go	Adaptive cruise control with Stop & Go	Adaptive cruise control
Brake pedal collapse at crash	Brake pedal collapse at crash	-	-	-	-
Intellisafe	Intellisafe	Active Protection	-	Pre-Safe Plus, Rear Collision & Extended side protection	Pre-Crash, proactive passenger protection system

Table 23 Comparison of safety systems V90

In *Table 23,* in the benchmark for Volvo V90 in terms of safety systems, it can be seen that Volvo V90 has 14 safety systems, which is more than the competitors. Three cars have the same safety systems and they lack three safety systems compared to Volvo V90. These are BMW 520d, Mercedes-Benz E220d and VW Passat, which all lack a cyclist detection, large animal detection and brake pedal collapse at crash. Audi A6 lacks the same safety systems as the other cars, but Audi A6 also lacks driver alert control, oncoming lane mitigation and Intellisafe. Hence, Volvo V90 has most safety systems and Audi A6 has the least. However, a new Audi A6 will be released later this year, this can explain the lack of safety systems.

4.3.3.3 Comparison of Support Systems

	Volvo V90 Care by Volvo	**Volvo V90**	**BMW 520d**	**Audi A6**	**MB E220d**	**VW Passat**
Rain sensor	Rain sensor	Rain sensor	Rain sensor	Rain sensor	Rain sensor	Rain sensor
Traffic Information	Traffic Sign Recognition	Traffic Sign Recognition	Real Time Traffic Information	MMI navigation plus	Live Traffic Information	Online Traffic Information
Hill Start Assist	Hill descent control & Hill start assist	Hill descent control & Hill start assist	Hill start assist	Hill start assist	Hill start assist	Hill start assist
Headlight LED	Headlight LED, auto flash On and Off	Headlight LED, auto flash On and Off	High beam assistent	Audi matrix LED headlamp	LED headlamp	Dynamic Light Assist
Rear view mirror, automatic reflection	Rear view mirror, automatic reflection	Rear view mirror, automatic reflection	Rear view mirror, automatic reflection	Rear view mirror, automatic reflection	Rear view mirror, automatic reflection	Rear view mirror, automatic reflection
Parking assist	Parking sensor, rear	Parking sensor, rear	Parking Assistant	Parkering Assistent Plus	Rearview Camera & Park Pilot	Parking sensor, rear and front
Emergancy Assistant	Volvo Assistans	Volvo Assistans	Intelligent Emergency Call	myService	Mercedes-Benz E-call	Emergency Call Service
Extras	Que- och pilot assist	Que- och pilot assist	Driving Assistant Plus	-	-	-

Table 24 Comparison of support systems V90

In the benchmark for Volvo V90 in terms of support systems, all cars have similar type of support systems, *see Table 24.* However, Volvo V90 has a que-and pilot assist and BMW 520d has a similar support system. All the other cars lack this support system.

4.3.3.4 Comparison of Services and Added Values

Specifications	Volvo V90 Care by Volvo		Volvo V90		BMW 520d		Audi A6		MB E220d		VW Passat	
Service		*Included*		*149 SEK/Month*		*Included*		*100 SEK/Month*		*399 SEK/Month*		*99 SEK/Month*
New car warranty	Whole leasingperiod	*Included*	2 years	*Included*	2 years	*Included*	2 years	*Included*	2 years	*Included*	2 years	*Included*
Insurance	Volvia försäkring	*Included*	Volvia försäkring	*Included*	Half insurance	*395 SEK/Month*	Half insurance	*607 SEK/Month*	Half insurance	*967 SEK/Month*	Half insurance	*617 SEK/Month*
Wagon warranty	3 years	*Included*	3 years	*Included*	3 years	*Included*	3 years	*Included*	3 years	*Included*	3 years	*Included*
App	Volvo on Call	*Included*	Volvo on Call	*Included*	Connected Drive	*Included*	Audi MMI connect	*Included*	Mercedes me connect	*Included*	App-Connect	*Included*
Payment Card	Volvokort	*Included*	Volvokort	*Included*	Biliakort	*Included*	Audi kort	*Included*	Hedin kort	*Included*	Volkswagen kortet Visa	*Included*
Tire Hotel		*Included*	995 SEK/Season	*166 SEK/Month*	1500 SEK/Season	*250 SEK/Month*	985 SEK/Season	*164 SEK/Month*	800 SEK/Season	*133 SEK/Month*	995 SEK/Season	*166 SEK/Month*
In-car Delivery	In-car Delivery	*Included*	In-car Delivery	*Included*	-	-	-	-	-	-	-	-
Extra features	Extra car on 10 occasions	*Included*	-	-	-	-	-	-	-	-	-	-
	20 % at Hertz	*Included*	-	-	-	-	-	-	-	-	-	-

Table 25 Comparison of services and added values V90

In *Table 25,* in the benchmark for Volvo V90 in terms of services and added values, the service on the cars are free when having a Volvo V90 with Care by Volvo and BMW 520d. The price for service for the other cars varies between 99 SEK/month for VW Passat and 259 SEK/month for Mercedes-Benz E220d. Care by Volvo has a customized pick and leave service, if the customer is in Stockholm's County at the time for service. This is unique for Care by Volvo, and hence not available for the other benchmarked cars. A main difference between Volvo V90 with Care by Volvo and all other benchmarked car models, is that the new car warranty is valid for the whole leasing period, meaning that it can be valid for two years or three years, while the new car warranty is only valid for two years on the other cars. Regarding the insurance, it is included in Volvo V90, both with Care by Volvo, and private leasing. The price for insurance for the other cars varies from 395 SEK/month for BMW 520d and 967 SEK/month for a Mercedes-Benz E220d. All cars have a wagon warranty for three years, an app and a payment card. Tire hotel is included in Volvo V90 with Care by Volvo. For the other car models, tire hotel is available to a cost. The price varies from 133 SEK/month for Mercedes-Benz E220d, to 250 SEK/month for BMW 520d. In-car Delivery is only available for Volvo V90, both with Care by Volvo and private leasing. Extra features which are unique for Care by Volvo is that the customers get ten free trips with Sunfleet and 20 percent discount at Hertz. The main result from the *Table 25* is that all mentioned services are included in the monthly price with Care by Volvo, when these services are available to a price, in the other models.

4.3.3.5 Summary of Benchmark

	XC40	V60	V90
Prices when private leasing or subscribing	Second most expensive car	Second most expensive car	Third most expensive car
Net Price	Third most expensive car	Fourth most expensive car	Fourth most expensive car
Safety Systems	Many more safety systems	Small differences	Small differences
Support Systems	Similar	Similar	Similar
Services and Added Values	Small differences	Small differences	Small differences

Table 26 Summary of XC40, V60 and V90 compared to the benchmarked models

In *Table 26,* a summary of the main findings from the benchmarked models XC40, V60 and V90 is presented.

4.4 Empirical Findings from Survey

4.4.1 General Findings

In the *Empirical Findings* from the survey, it was found that 305 respondents responded to the survey. Of those, 215 respondents, corresponding to 70.5 percent do have a car, while 90 respondents, corresponding to 29.5 percent do not have a car. Of those 90 respondents who do not have a car, 63 of the respondents want to have a car, corresponding to 70 percent. The rest of the 27 respondents do not want to have a car, this corresponds to 30 percent of those who do not have a car and 9 percent of the total. The mean of the respondents ages corresponds to 43 years old and the majority, 71 percent of the respondents are men and 83 percent of the respondents with a car are currently Volvo customers. Most of the respondents have children and they live either in a single household or with a partner. The respondents have a monthly income that corresponds to a mean of 30.001-40.000 SEK/month. Many of the respondents, 24 percent are students, the reason for this is because a lot of the people reached via the authors social medias are students. For further details, *see Appendix 3.*

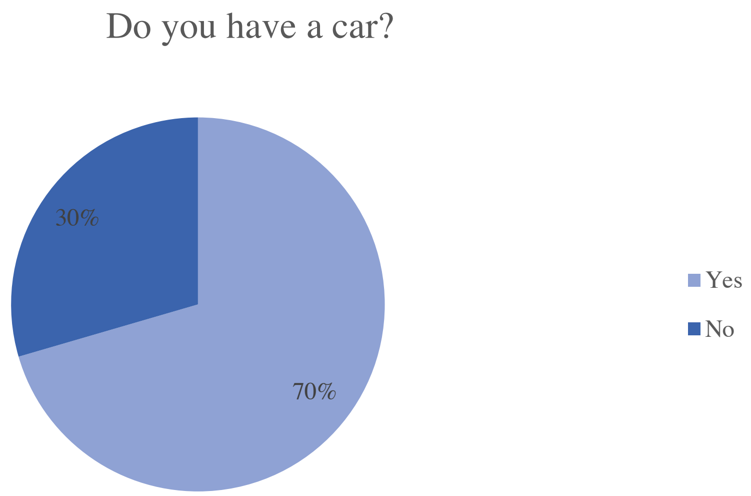

Diagram 1 Distribution of if the respondents do have a car or not

In *Diagram 1* about the distribution of having a car or not, it can be seen that 70 percent of the respondents have a car, while 30 percent do not have a car.

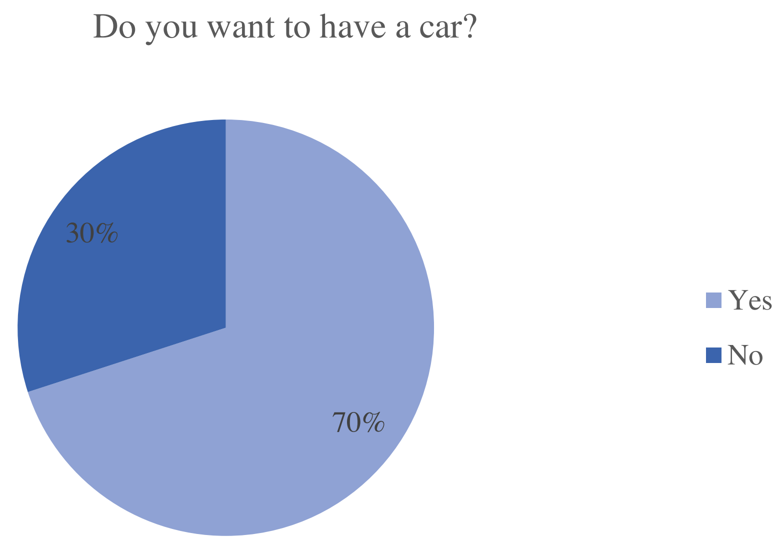

Diagram 2 Distribution of if the respondents who do not have a car want to have a car or not

A follow up question to *Diagram 1* was if those who do not have a car today want to have one in the future. In *Diagram 2,* it can be seen that 70 percent of those who do not have a car want to have one the future while the rest of the respondents who do not have a car today, corresponding to 30 percent, do not want to have a car in the future.

4.4.2 Monthly Spending

In this section, diagrams and tables regarding how much the respondents who have a car today spend each month and how much the respondents who do not have a car but want to have a car are willing to spend on the car each month. Other diagrams which are connected to monthly spending are presented as well.

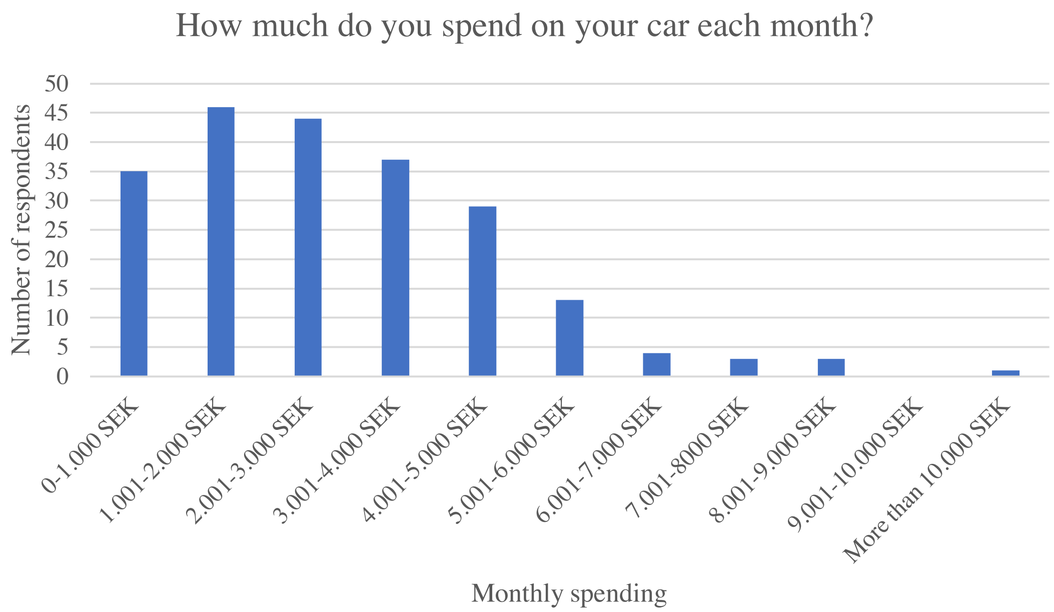

Diagram 3 Distribution of how much the respondents who have a car spends on their car each month

Spending/month	
Mean	2.001-3.000 SEK
Median	2.001-3.000 SEK
Mode	1.001-2.000 SEK

Table 27 Mean, median and mode of how much the respondents who have a car spend on their car each month

In *Diagram 3*, it can be seen that most respondents, corresponding to 21 percent of the respondents, spend between 1.001-2.000 SEK/month on a car. 20 percent of the respondents spend between 2.001-3 000 SEK/month on a car and 17 percent of the respondents spend 3.001-4.000 SEK/month on a car. Finally, one respondent spends more than 10.000 SEK/month for a car.

In *Table 27* about mean, median and mode of how much the respondents who do have a car, spend on a car each month, it can be seen that the mean and the median are the same, corresponding to 2.001-3 000 SEK/month. The mode corresponds to 1.001-2.000 SEK/month.

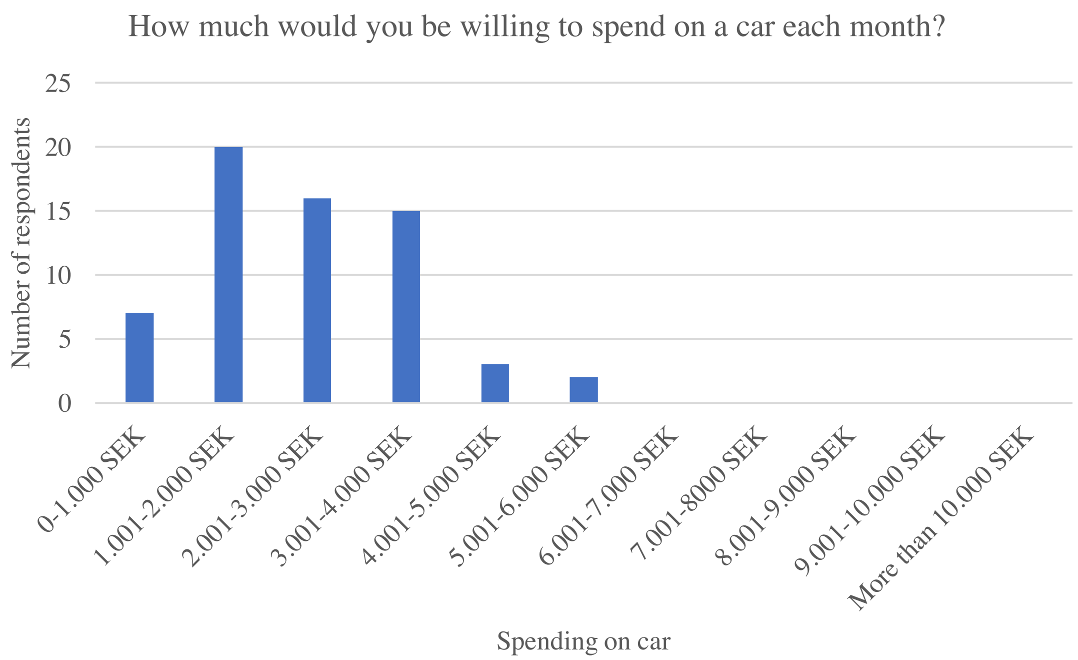

Diagram 4 Distribution of how much the respondents who do not have a car, but want to have a car are willing to spend on their car each month

Spending/month	
Mean	2.001-3.000 SEK
Median	2.001-3.000 SEK
Mode	1.001-2.000 SEK

Table 28 Mean, median and mode of how much the respondents who do not have a cat but want to have a car are willing to spend on their car each month.

In *Diagram 4*, it can be seen that most respondents, 32 percent are willing to spend between 1.001-2.000 SEK/month on a car. 25 percent of the respondents are willing to spend between 2.001-3 000 SEK/month on a car and 24 percent of the respondents are willing to spend 3.001-4.000 SEK/month on a car. None of the respondents are willing to spend more than 6.000 SEK/month on a car each month.

In *Table 28* about mean, median and mode of how much the respondents who do not have a car, are willing to spend on a car each month, it can be seen that the mean and the median are the same, namely 2.001-3 000 SEK/month. The mode corresponds to 1.001-2.000 SEK/month.

When combining *Diagram 3* and *Diagram 4* about how much the respondents spend on a car each month, if they have a car, or if they do not have a car, but want to have a car, some similarities and differences can be identified. A main similarity is that in both cases, most respondents answered that they either spend, or are willing to spend 1.001-2.000 SEK/month, followed by 2.001-3 000 SEK/month and 3.001-4.000 SEK/month in respective order. Regarding the differences, one main difference is that some of the respondents who do have a car spend more than 6.000 SEK/month on a car, while the respondents who do not have a car, maximum are willing to spend 6.000 SEK/month.

I *Table 27* and *Table 28,* it can be seen that the mean and the median is 2.001-3 000 SEK/month for both respondents who do have a car and for respondents who do not have a car, but want to have a car. The mode is also the same for these two groups, corresponding to 1.001-2.000 SEK/month.

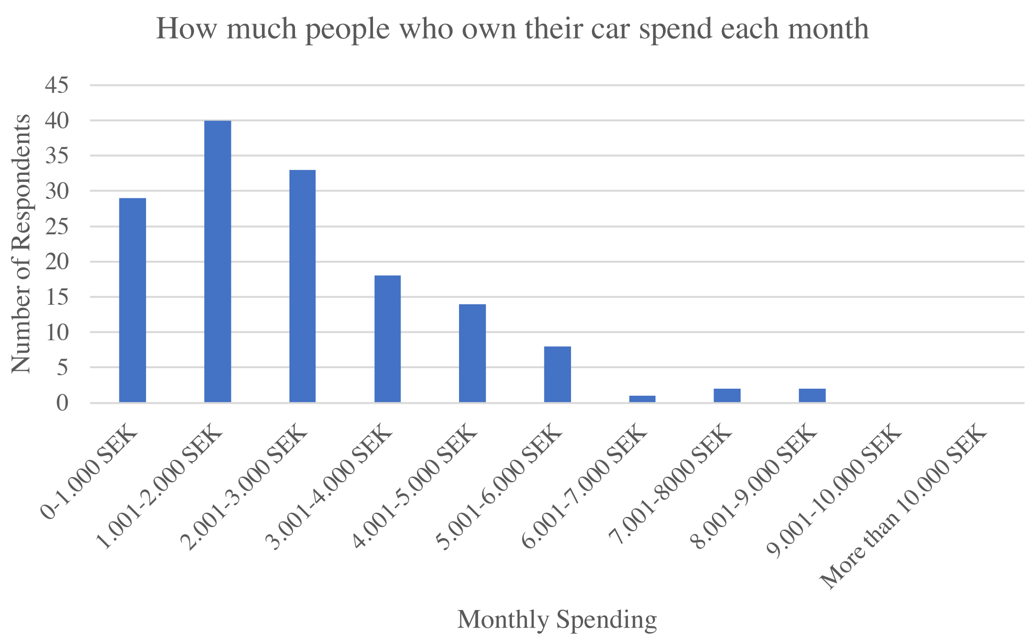

Diagram 5 Distribution of how much people who own their car spends on their car each month

Spending/month	
Mean	2.001-3.000 SEK
Median	2.001-3.000 SEK
Mode	1.001-2.000 SEK

Table 29 Mean, median and mode of how much people who own their car spends on their car each month

In *Diagram 5,* it can be seen that most respondents who own their car, corresponding to 27 percent of the respondents, spend between 1.001-2.000 SEK/month on their car. 22 percent of the respondents who own their car spend between 2.001-3 000 SEK/month on their car and 20 percent of the respondents who own their car spend between 0-1.000 SEK/month on their car. It can also be seen that 82 percent of the respondents spend up to 4.000 SEK/month on their car and that 91 percent of the respondents spend up to 5.000 SEK/month on a car. The rest spend more than 5.000 SEK/month on their car but no more than 9.000 SEK/month.

In *Table 29* about mean, median and mode of how much the respondents who own their car, are willing to spend on a car each month, it can be seen that the mean and the median are the same, corresponding to 2.001-3 000 SEK/month. The mode corresponds to 1.001-2.000 SEK/month.

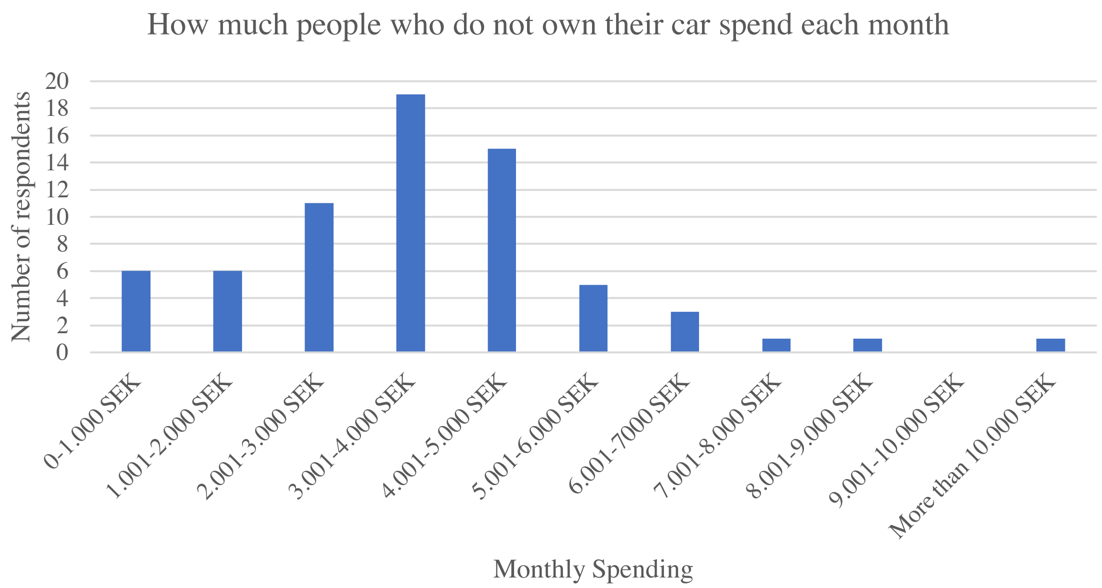

Diagram 6 Distribution of how much people who do not own their car but subscribe, private lease or have a company car, spend on their car each month

Spending/month	
Mean	3.001-4.000 SEK
Median	3.001-4.000 SEK
Mode	3.001-4.000 SEK

Table 30 Mean, median and mode of how much people who do not own their car spend on their car each month

Diagram 6 presents how much the respondents who do not own their car but subscribe, private lease or have a company car spend on their car each month. *Diagram 6* shows that a majority, corresponding to 28 percent of the respondents, spend between 3.001-4.000 SEK/month on their car. 22 percent of the respondents who do not own their car spend between 4.001-5.000 SEK/month on their car and 16 percent of the respondents who do not own their car spend between 2.001-3 000 SEK/month on their car. It can be seen that 62 percent of the respondents spend up to 4.000 SEK/month on their car and that 84 percent of the respondents spend up to 5.000 SEK/month on a car. The rest of the respondents, 16 percent of the respondents spend more than 5.000 SEK/month on their car.

In *Table 30* about mean, median and mode of how much the respondents who do not own their car, spend on a car each month, it can be seen that they all are the same, corresponding to 3.001-4.000 SEK/month.

4.4.3 Everyday Life Activities with a Car

In this section, tables regarding the everyday life activities with a car, are presented. The tables consist of data concerned with why the respondents have a car or want to have a car, and how time consuming different activities are perceived to be.

Rank the following alternatives based on why you have a car							
Activity	**1**	**2**	**3**	**4**	**5**	**Total**	**Average**
I have a car to take me from A-B	**9**	**3**	**16**	**35**	**152**	**215**	**4,5**
	4%	2%	7%	16%	71%		
I have a car because of its status	**114**	**50**	**30**	**17**	**4**	**215**	**1,8**
	53%	23%	14%	8%	2%		
I have a car because I am interested in cars and I like to drive	**41**	**38**	**45**	**40**	**51**	**215**	**3,1**
	19%	17%	21%	19%	24%		
I have a car because it facilitates my everyday life	**4**	**0**	**11**	**43**	**157**	**215**	**4,6**
	2%	0%	5%	20%	73%		
Total	**168**	**91**	**102**	**135**	**364**		

Table 31 Distribution of why the respondents with a car have a car

In *Table 31,* it can be seen that a great majority of the respondents with a car, corresponding to 71 percent *strongly agree (5)* that they have a car because they need to go from A-B. 16 percent of the respondents *agree (4)* that they have a car to go from A-B. The average of this is 4.5 of 5. Most of the respondents who do have a car, corresponding to 53 percent, *strongly disagree (1)* that they have a car for status. 23 percent of the respondents *disagree (2)* that they have a car for status. The average of this question is 1.8 of 5. Regarding the question about having a car because they are interested in cars and to like to drive a car, the responses are quite evenly spread, with an average on 3.1 of 5. 24 percent of the respondents *strongly agree (5)* that they have a car because they are interested in cars, 21 percent *neither disagree nor agree (3)*. Finally, a great majority of the respondents who do have a car *strongly agree (5)* that they have a car for facilitating their everyday life, corresponding to 73 percent of the respondents. 20 percent *agree (4)* that they have a car for this reason. The average is 4,6 of 5 in this question.

Rank the following alternatives based on why you want to have a car							
Activity	**1**	**2**	**3**	**4**	**5**	**Total**	**Average**
I want to have a car to take me from A-B	**2**	**0**	**4**	**18**	**39**	**63**	**4,6**
	3%	0%	6%	29%	62%		
I want to have a car because of its status	**32**	**17**	**10**	**4**	**0**	**63**	**1,8**
	51%	27%	16%	6%	0%		
I want to have a car because I am interested in cars and I like to drive	**16**	**19**	**14**	**9**	**5**	**63**	**2,5**
	26%	30%	22%	14%	8%		
I want to have a car because it facilitates my everyday life	**2**	**2**	**10**	**13**	**36**	**63**	**4,3**
	3%	3%	16%	21%	57%		
Total	**52**	**38**	**38**	**44**	**80**	**252**	

Table 32 Distribution of why the respondents without a car would like to have a car

In *Table 32*, it can be seen that a majority of the respondents who do not have a car but want to have a car, corresponding to 62 percent answered that they *strongly agree (5)* that they want to have a car to take them from A-B. 29 percent of the respondents answered that they *agree (4)* that they want to have a car to take them from A-B. The average of this question is 4.6 of 5. Regarding if the respondents want to have a car because of its status, 51 percent of the them *strongly disagree (1)* while 27 percent *disagree (2)*. The average is 1.8 of 5 of this question. Regarding the question about if the respondents want to have a car because they are interested in cars and like to drive, most of the respondents answered that they *disagree (2)*, corresponding to 30 percent and *strongly disagree (1)*, corresponding to 26 percent. The average of this question is 2.5 of 5. Finally, the question about wanting to have a car because it facilitates the everyday life, most of the respondents, corresponding to 57 percent, *strongly agree (5)* that they want to have a car for this reason and 21 percent of the respondents *agree (4)* to this. The average in this question is 4.3 of 5.

When comparing *Table 31* and *Table 32*, about the reasons for why respondents have a car and want to have a car, it can be seen that the main reasons in both cases are to go from A-B and because a car facilitates the everyday life.

Rank the following alternatives based on how time consuming they are							
Activity	**1**	**2**	**3**	**4**	**5**	**Total**	**Average**
Grocery shopping	**30**	**50**	**74**	**50**	**11**	**215**	**2,8**
	14%	23%	35%	23%	5%	100%	
Return products	**62**	**41**	**41**	**42**	**29**	**215**	**2,7**
	29%	19%	19%	20%	13%	100%	
Car-Wash	**28**	**73**	**65**	**35**	**14**	**215**	**2,7**
	13%	34%	30%	16%	7%	100%	
Refill oil, windshield washer fluid and coolant	**82**	**65**	**42**	**15**	**11**	**215**	**2,1**
	38%	30%	20%	7%	5%	100%	
Purchasing of extra products for the car such as a child seat and a roof box	**75**	**43**	**52**	**27**	**18**	**215**	**2,4**
	35%	20%	24%	13%	8%	100%	
Service and inspection of the car	**37**	**47**	**71**	**33**	**27**	**215**	**2,8**
	17%	22%	33%	15%	13%	100%	
Total	**314**	**319**	**345**	**202**	**110**		

Table 33 Ranking of how time-consuming the following activities are for the respondents with a car

In *Table 33*, it can be seen how time consuming the respondents perceive different activities with a car. Regarding how time-consuming grocery shopping is, most of the respondents, corresponding to 35 percent *neither disagree nor agree (3)* that it is time consuming. The respondents who *disagree (2)* correspond to 23 percent and 23 percent of the respondents *agree (4)*. The average of this question is 2.8 of 5. Regarding to return products, 29 percent of the respondents *strongly disagree (1)* that return products is a time-consuming activity and 20 percent *agree (4)*. The average is 2.7 of 5 in this question. Regarding how time-consuming car wash is, a majority of the respondents *disagree (2)* or *neither disagree nor agree (3),* which corresponds to 34 percent respectively 30 percent of the respondents. The average in this question is 2.7 of 5. Regarding to refill oil and other liquids, 38 percent of the respondents *strongly disagree (1)* that it is a time-consuming activity to do this and 30 percent of the respondents *disagree (2)*. The average is 2.1 of 5. Regarding to purchase extra products for the car 35 percent of the respondents *strongly disagree (1)* that this is time consuming and 24 percent *neither disagree nor agree (3)*. The average in this question is 2.4 of 5. Finally, regarding service and inspection of the car 33 percent of the respondents answered that they *neither disagree nor agree (3)* that it is a time-consuming activity and 22 percent of the respondents *disagree (2)*. The average in this question is 2.8 of 5.

4.4.4 Purchasing Behavior and Preferences

In this section, diagrams and tables about purchasing behaviors and preferences are presented. Examples of what will be presented are the preferences before ordering a car, to order a car online, negotiation preferences, monthly cost structure and subscription time.

Rank the following questions							
Activity	1	2	3	4	5	Total	Average
How important is it for you to meet a physical salesman when ordering a new car?	**30**	**29**	**58**	**63**	**98**	**278**	3,6
	11%	10%	21%	23%	35%		
How important is it for you to test drive a car before you order it?	**9**	**11**	**31**	**56**	**171**	**278**	4,3
	3%	4%	11%	20%	62%		
Total	39	40	89	119	269		

Table 34 Ranking of importance of meeting a physical salesman and to test drive a new car before ordering it

In *Table 34*, it can be seen that a majority of the respondents, 35 percent *strongly agree (5)* that it is important to meet a physical salesman when ordering a new car and 23 percent of the respondents *agree (4)* to the statement. The average of this question is 3,6 of 5. Regarding how important it is to test drive a car before ordering it, 62 percent of the respondents *strongly agree (5)* that this is important and 20 percent of the respondents *agree (4)*. The average is 4,3 of 5 in this question.

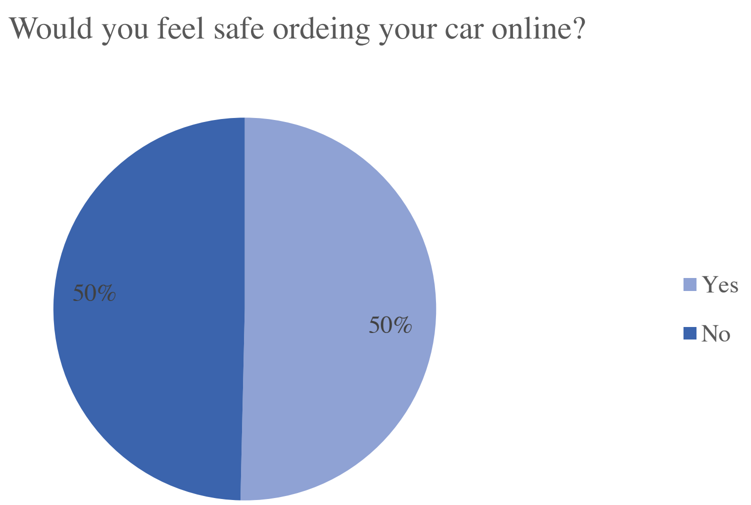

Diagram 7 Distribution of if the respondents would feel safe ordering their car online or not

Distribution of how many of respondent would feel safe ordering their car online compiled into age	
15-24	57%
25-34	63%
35-44	71%
45-54	44%
55-64	44%
65-74	29%
75-84	4%
85-94	0%

Table 35 Distribution of how many percent of the respondent would feel safe ordering their car online compiled into age and shown

In *Diagram 7*, it can be seen that 50 percent of the respondents would feel safe ordering their car online, while 50 percent would not feel safe when ordering the car online. In *Table 35*, it can be seen that the age group that would feel most safe ordering their car online, is 35-44 years, corresponding to 71 percent of the respondents in this range. In the age group 25-34, 63 percent of the respondents would feel safe ordering their car online, and this group is followed by age 15-24, where 57 percent of the respondents would feel safe when ordering their car online. Hence, it can be seen that from 35-44, to 25-34 and 15-24, the respondents would in general feel safe when ordering the car online, but in a decreasing order. 44 percent of the respondents between 45-54 and 44 percent of the respondents between 55-64 would feel safe ordering their car online. How safe the respondents would feel decreases in the age ranges from 35-44 and older.

Activity	Yes	No
Via a chat	**10**	**128**
	7%	93%
Via e-mail	**12**	**126**
	9%	91%
Via telephone	**47**	**91**
	34%	66%
Total	**69**	**345**

Table 36 Distribution of if the respondents would be willing order a car online with support

In *Table 36,* it can be seen that of the respondents who would not feel safe ordering their car online, 7 percent would feel safe ordering their online if they could get assistance via a chat and 93 percent would still not feel safe ordering their car online if they could get assistance via a chat. 9 percent of the respondents would feel safe ordering their car online if they could get assistance via e-mail and 91 percent would still not feel safe ordering their car online if they could get assistance via e-mail. 34 percent of the respondents would feel safe ordering their car online if they could get assistance via telephone and 66 percent would still not feel safe ordering their car online if they could get assistance via telephone.

Rank the following alternatives							
Activity	**1**	**2**	**3**	**4**	**5**	**Total**	**Average**
I prefer to negotiate with a dealer about the price	**51**	**55**	**44**	**65**	**63**	**278**	**3,1**
	18%	20%	16%	23%	23%		
I prefer a pre-negotiated national price	**37**	**43**	**62**	**54**	**82**	**278**	**3,4**
	14%	16%	22%	19%	29%		
Total	**88**	**98**	**106**	**119**	**145**		

Table 37 Ranking of if the respondents prefer to negotiate with a dealer or to have a national price

In *Table 37*, regarding the question about negotiate with a dealer about the price, it can be seen that the range goes from 16 percent to 23 percent, which indicates a very narrow range. The average is 3.1 of 5, which means that the respondents agree slightly more that they want to negotiate with a dealer about the price, than how much they disagree to this. Regarding if the respondents prefer a pre-negotiated and national price, the range is broader, from 14 percent who *strongly disagree (1)* to 29 percent who *strongly agree (5).* The average is 3.4 of 5, meaning that the respondents to a larger extent agree to this, than disagree. Furthermore, since the average is higher in this question, compared to the previous one, it can be stated that the respondents prefer to have a pre-negotiated and national price, to negotiate with a dealer about the price.

Rank the following alternatives							
Activity	**1**	**2**	**3**	**4**	**5**	**Total**	**Average**
A lower monthly cost where extra costs can be added, like the cost for service	**62**	**70**	**84**	**42**	**20**	**278**	**2,6**
	22%	25%	30%	15%	8%		
A higher monthly cost where everything is included	**21**	**29**	**59**	**81**	**88**	**278**	**3,7**
	8%	10%	21%	29%	32%		
Total	**83**	**99**	**143**	**123**	**108**		

Table 38 Ranking of what type of cost the respondents prefer

In *Table 38*, the respondents have ranked two different alternatives, regarding cost structure. In the alternative with a lower monthly cost, where extra costs can be added, it can be seen that 30 percent of the respondents *neither disagree nor agree (3)* and 25 percent *disagree (2)*. The average of this question is 2.6 of 5. The second alternative, a higher monthly cost where everything is included, the result is quite the opposite. 32 percent of the respondents *strongly agree (5)* and 29 percent of the respondents *agree (4)* that they would prefer a higher cost, where everything is included. The average of this question is 3.7 of 5.

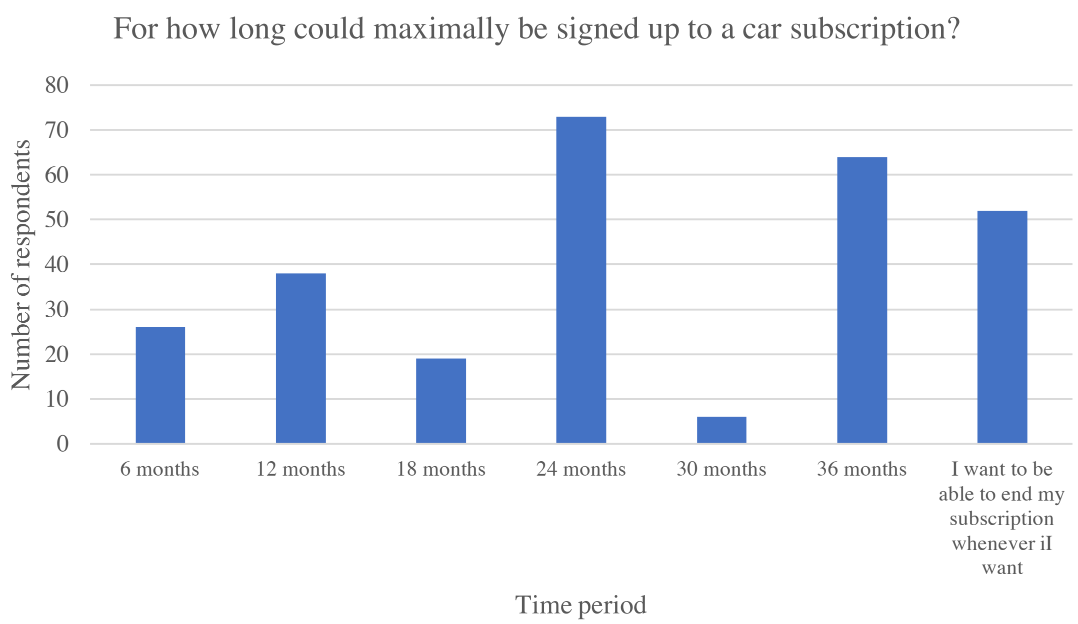

Diagram 8 Distribution of how long the respondents are willing to sign up for a car subscription

In *Diagram 8*, it can be seen that 26 percent of the respondents are willing to sign up for 24 months and 23 percent of the respondents are willing to sign up for 36 months. 19 percent of the respondents want to be able to end the subscription whenever he/she want, hence to have a flexible subscription period. 14 percent of the respondents are willing to sign up for 12 months. The least popular lengths of subscription time according to the respondents are 6 months which corresponds to 9 percent, 18 months which corresponds to 7 percent and 30 months which corresponds to 2 percent.

4.4.5 Communication and Awareness of Care by Volvo

In this section, diagrams and tables related to communication and the awareness of Care by Volvo will be presented. Examples of what will be presented is if the respondents have heard about Care by Volvo, where the respondents have heard about it, and what the respondents know about Care by Volvo. Finally, a question about preferred communication is presented.

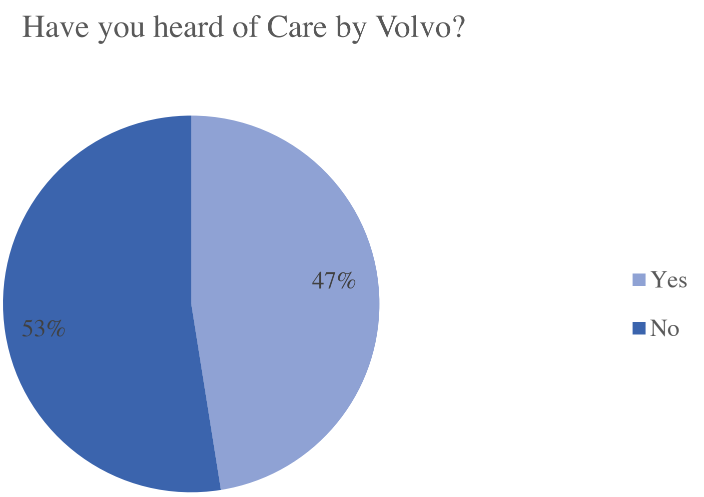

Diagram 9 Distribution of if the respondents have heard about Care by Volvo

In *Diagram 9*, it can be seen that 47 percent of the respondents have heard about Care by Volvo and 53 percent of the respondents have not heard about Care by Volvo.

Where have you heard about Care by Volvo?		
Activity	**Yes**	**No**
Tv-commercial	**32**	**100**
	24%	76%
Newspaper advertisements	**23**	**109**
	17%	83%
Online advertisements	**35**	**97**
	27%	73%
Radio advertisements	**2**	**130**
	2%	98%
Social media	**41**	**91**
	31%	69%
Outdoor avertisements	**17**	**115**
	13%	87%
On Volvo Cars website	**56**	**76**
	42%	58%
Word of mouth	**65**	**67**
	49%	51%
Other	**18**	**114**
	14%	86%

Table 39 Distribution of where the respondents who are aware about Care by Volvo have heard about it

In *Table 39,* it can be seen that 44 percent of the respondents have heard about Care by Volvo via word of mouth. 42 percent of the respondents have heard about it from Volvo Cars website and 31 percent of the respondents have heard about it from other social media. 27 percent of the respondents have heard about Care by Volvo from online advertisements. Hence, Internet sources seems to be a common alternative, to where the respondents have heard about Care by Volvo.

What do you know about Care by Volvo?		
Activity	**Yes**	**No**
It is a car you subscribe to	**126**	**6**
	95%	5%
Everything is pre-negotiated	**65**	**67**
	49%	51%
The price is national	**31**	**101**
	23%	77%
You order the car online	**75**	**57**
	57%	43%
Service and insurance is included	**83**	**49**
	63%	37%
Winter wheels and tire hotel is included	**64**	**68**
	48%	52%
Volvo on Call and the climate package is always included	**37**	**95**
	28%	72%
As a Care by Volvo customer you get 20% at Hertz	**14**	**118**
	11%	89%
As a Care by Volvo customer you get 10 free trips with Sunfleet	**17**	**115**
	13%	87%
Warranty during the whole subscription period	**53**	**79**
	60%	40%
New car warranty during the whole subscription period	**43**	**89**
	33%	67%
"Trygghetsförsäkring"	**40**	**92**
	30%	70%

Table 40 Distribution of what the respondents know about what is included in Care by Volvo

In *Table 40,* it can be seen that what a great majority of the respondents know about Care by Volvo is that one subscribes to a car, corresponding to 95 percent of the respondents. 63 percent of the respondents know that service and insurance are included, while 60 percent of the respondents know that there is a warranty during the whole leasing period. Further, 57 percent of the respondents know that one can order the car online. Hence, regarding all until now mentioned characteristics of Care by Volvo, more than 50 percent of the respondents are aware of these characteristics. Regarding the characteristics of Care by Volvo that less than 50 percent f the respondents are aware of, 49 percent know that Care by Volvo is pre-negotiated and 48 percent know that winter wheels and tire hotel is included. Further, 33 percent of the respondents know that the new car warranty is valid during the whole subscription period and 30 percent know that there is a ”Trygghetsförsäkring” included in Care by Volvo. 28 percent know that Volvo on Call and the climate package is always included, and 23 percent know that the price is national. Finally, the two characteristics of Care by Volvo that least respondents are aware of are that ten free trips with Sunfleet is included, corresponding to 13 percent of the respondents, and only 11 percent of the respondents are aware of that Care by Volvo customers get 20 percent discount at Hertz.

Rank the following alternatives based on how you take in new advertisements in the best way							
Activity	**1**	**2**	**3**	**4**	**5**	**Total**	**Average**
Oral communication	**20**	**50**	**99**	**63**	**46**	**278**	**3,2**
	7%	18%	35%	23%	17%	100%	
Written communication	**15**	**38**	**91**	**89**	**45**	**278**	**3,4**
	5%	14%	33%	32%	16%	100%	
Visual communication	**9**	**17**	**75**	**96**	**81**	**278**	**3,8**
	3%	6%	27%	35%	29%	100%	
Total	**44**	**105**	**265**	**248**	**172**		

Table 41 Ranking of via what type of communication the respondents find most easy when absorbing information about a new product or service

In *Table 41*, regarding oral communication, it can be seen that a majority of the respondents, namely 35 percent *neither disagree nor agree (3)* that they find it easy to absorb information this way and 23 percent *agree (4)*. The average in this question is 3,2 of 5. Regarding written communication, it can be seen that 33 percent of the respondents *neither disagree nor agree (3)* and 32 percent of the respondents *agree (4)* that they find it easy to absorb written information. The average to this question is 3,4 of 5. Finally, in terms of visual communication, it can be seen that a majority of the respondents, namely 35 percent *agree (4)* that they find it easy to absorb visual communication and 29 percent of the respondents *strongly agree (5)*. The average of this question is 3,8 of 5.

4.4.6 Flexibility and Value Adding Activities of Care by Volvo

In this section, tables about flexibility and what the respondents would like to add to Care by Volvo is presented. This section end with how interested the respondents would be in subscribing to a Care by Volvo car.

Rank the following alternatives based on what flexibility is for you							
Activity	**1**	**2**	**3**	**4**	**5**	**Total**	**Average**
Flexibility is to be able to change car during the subscription period	**30**	**35**	**61**	**75**	**77**	**278**	**3,5**
	11%	13%	21%	27%	28%		
Flexibility is to have access to extra products such as child seat and roofbox "on-demand"	**39**	**42**	**62**	**66**	**69**	**278**	**3,3**
	14%	15%	22%	24%	25%		
Flexibility is to have access to extra services "on-demand"	**29**	**37**	**96**	**57**	**59**	**278**	**3,3**
	10%	13%	35%	21%	21%		
Flexibility is to make your everyday life easier because you know your monthly cost	**22**	**25**	**62**	**83**	**86**	**278**	**3,7**
	8%	9%	22%	30%	31%		
Flexibility is to be able to switch your subscription on and off during the subscription period	**26**	**21**	**58**	**65**	**108**	**278**	**3,7**
	9%	8%	21%	23%	39%		
Flexibility is to be able to terminate the subscription whenever you want	**12**	**9**	**40**	**60**	**157**	**278**	**4,2**
	4%	3%	14%	22%	57%		
Total	**158**	**169**	**379**	**406**	**556**		

Table 42 Ranking of what type of activity that the respondent think is flexible

In *Table 42*, it can be seen that the respondents in general agree to all the statements of flexibility, because the average has a range from 3,3 of 5 to 4,2 of 5. Regarding if flexibility is to be able to change car during the subscription period, most of the respondents, corresponding to 28 percent *strongly agree (5)* and 27 percent *agree (4)* to this. The average of this question is 3,5 of 5. The next statement about flexibility, to have access to products on demand, has a similar distribution as the first one. 25 percent of the respondents *strongly agree (5)* and 24 percent *agree (4)*. The average in this question is 3,3 of 5. To have access to services on demand has the same average, 3,3 of 5, as the statement having access to products on demand. However, the distribution differs and most of the respondents, corresponding to 35 percent *neither disagree nor agree (3)* that having access to extra services is flexibility. 21 percent of the respondents *agree (4)* to this statement and 21 percent *strongly agree (5)*. Regarding if flexibility is to know your monthly cost, 31 percent *strongly agree (5)* and 30 percent of the respondents *agree (4)*. The average of this question is 3,7 of 5. Regarding if flexibility is to be able to switch your subscription on and off, 39 percent *strongly agree (5)* and 23 percent of the respondents *agree (4)*. The average to this question is 3,7 of 5. Finally, the statement that the respondents agree most to is that flexibility is to be able to terminate the subscription whenever you want. A majority of the respondents, corresponding to 57 percent *strongly agree (5)* to this and 22 percent *agree (4)*. The average to this question is 4,3 of 5.

Rank the following alternatives based on what you would like to add to a subscription car or private leasing car							
Activity	**1**	**2**	**3**	**4**	**5**	**Total**	**Average**
Subscribe to a "second-hand" car	**68**	**32**	**58**	**57**	**63**	**278**	**3,1**
	24%	12%	21%	20%	23%		
Add extra products such as car seat, roofbox and cycle hook	**51**	**45**	**78**	**57**	**47**	**278**	**3,0**
	18%	16%	28%	21%	17%		
Out-car Delivery	**66**	**43**	**70**	**41**	**58**	**278**	**2,9**
	24%	15%	25%	15%	21%		
Change car during the subscription period	**28**	**32**	**69**	**78**	**71**	**278**	**3,5**
	9%	12%	25%	28%	26%		
Subscription to entertainment like music and audiobooks	**114**	**71**	**54**	**19**	**20**	**278**	**2,1**
	41%	26%	19%	7%	7%		
Hotel and travel checks when using Care by Volvos services	**89**	**64**	**62**	**36**	**27**	**278**	**2,5**
	32%	23%	22%	13%	10%		
Free car-wash once a month	**50**	**36**	**51**	**69**	**72**	**278**	**3,3**
	18%	13%	18%	25%	26%		
Better payment solutions when parking	**29**	**19**	**61**	**71**	**98**	**278**	**3,7**
	10%	7%	22%	26%	35%		
Total	**495**	**342**	**503**	**428**	**456**		

Table 43 Ranking of what the respondents would like to add when subscribing or private leasing a car

In *Table 43*, it can be seen that 24 percent of the respondents *strongly disagree (1)* that they would like to subscribe to a "second-hand" car. However, 23 percent of the respondents *strongly agree (5)* that they would like to do this. The average in this question is 3,1 of 5. Regarding to have to possibility to add extra products to Care by Volvo, 28 percent of the respondents *neither disagree nor agree (3)* to this and 21 percent *agree (4)*. The average to this question is 3,0 of 5. Regarding if the respondents are interested in adding Out-car Delivery to Care by Volvo, 25 percent of the respondents *neither disagree nor agree (3)* and 24 percent of the respondents *strongly disagree (1)*. However, the range of the responses are evenly spread. The average is 2,9 of 5. Regarding the possibility to change car during the subscription period, 28 percent *agree (4)* and 26 percent *strongly agree (5).* The average to this question is 3,5 of 5. Regarding to add entertainment subscription, it can be seen that 41 percent of the respondents *strongly disagree (1)* that this should be added to Care by Volvo and 26 percent *disagree* to this. The average of this question is 2,1 of 5. Regarding to get hotel and travel checks when having a Care by Volvo, 32 percent of the respondents *strongly disagree (1)* to this and 23 percent *disagree (2).* The average of this question is 2,5 of 5. Regarding to have a free car-wash once a month for Care by Volvo customers, 26 percent of the respondents *strongly agree (5)* that this is a good idea and 25 percent *agree (4).* The average to this question is 3,3 of 5. Finally, 35 percent of the respondents *strongly agree (5)* that it would be good to add a better payment solution when parking, to Care by Volvo and 26 percent *agree (4)* to this. The average of this question is 3,7 of 5.

Rank the following question							
Activity	**1**	**2**	**3**	**4**	**5**	**Total**	**Average**
How interested would you be in subscribing to Care by Volvo?	**43**	**45**	**87**	**79**	**24**	**278**	**3,0**
	15%	16%	31%	29%	9%		
Total	**43**	**45**	**87**	**79**	**24**		

Table 44 Ranking of how interested the respondents are in subscribing to Care by Volvo

Willingness to subscribe to Care by Volvo	
Mean	3
Median	3
Mode	3

Table 45 Mean, median and mode of if the respondents would be willing to subscribe to Care by Volvo

In *Table 44,* it can be seen that a majority of the respondents *neither disagree nor agree (3)* to how interested they would be to subscribe to a Care by Volvo. 29 percent of the respondents *agree (4)* and 9 percent *strongly agree (5)* that they would be interested to subscribe to a Care by Volvo. 15 percent of the respondents *strongly disagree (1)* and 16 percent *disagree (2).* The average is 3,0 of 5, meaning that most of the respondents *neither disagree nor agree (3)* that they would be interested in subscribing to a Care by Volvo. In *Table 45*, it can be seen that the mean, median and the mode of if the respondents would be willing to subscribe to a Care by Volvo is 3, in all cases.

4.4.7 Correlation and Statistical Significance

Variables	Correlation	p-value
What is your monthly income? Vs Do you have a car?	0,55	2,64908E-25
What is your monthly income? Vs How much do you spend on your car each month?	0,34	2,59613E-07
How old are you? Vs For how long could you maximally be signed up to a car subscription?	0,19	0,001318295
How old are you? Vs Willingness to subscribe to a second-hand car	0,23	0,000135983
Flexibility is to have access to extra products on-demand vs Willingness to add extra products on-demand	0,55	4,25856E-23
Ranking of how time consuming it is to return products vs Willingness to add out-car delivery	0,25	0,000176078
How old are you? Vs Willingness to change car during the subscription period	0,18	0,002158556
How old are you? Vs Willingness to subscribe to entraintment	0,21	0,000337625
How old are you? Vs Willingness to receive hotel and travel checks when using Care by Volvo services	0,29	9,31433E-07
How old are you? Vs Willingness to receive free car wash	0,26	1,49879E-05
How old are you? Willingness to add better payment solutions when parking	0,23	0,000131378

Table 46 Correlations and statistical significance (p-value) for different variables

As can be seen in *Table 46,* all correlations are statistically significant. Hence, the authors can draw the conclusion that all the correlations in this chapter are accurate. All the correlations are positive with a range from 0,18 to 0,55.

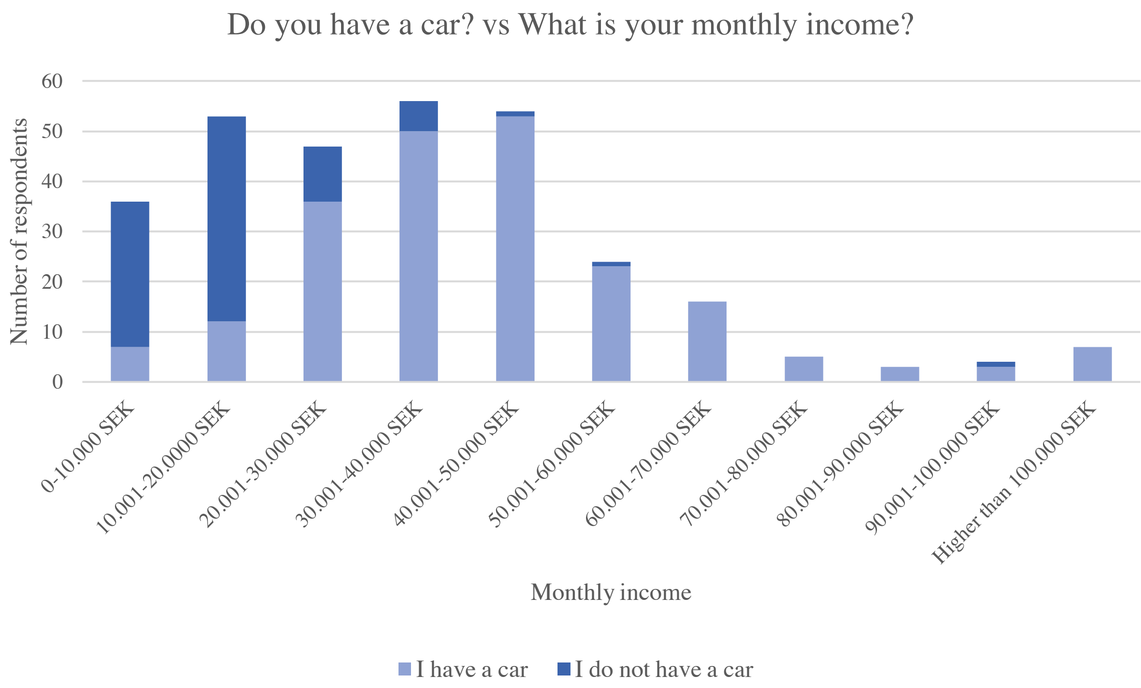

Diagram 10 Distribution of income and if the respondents have a car or not

In *Diagram 10*, it can be seen that a majority of the respondents who do not have a car, have an income between 0-10.000 SEK/month and 10.001-20.000 SEK/month, which corresponds to the lowest incomes. It can also be seen that most of the respondents with an income of 20.001 SEK/month or above have a car. In *Table 46*, it can be seen that there is a positive, relatively strong correlation of 0,55 between income and if the respondents have a car or not. Hence, respondents with a higher income have a car to a larger extent compared to respondents with a lower income. In *Table 46* it can be seen that the p-value is statistically significant.

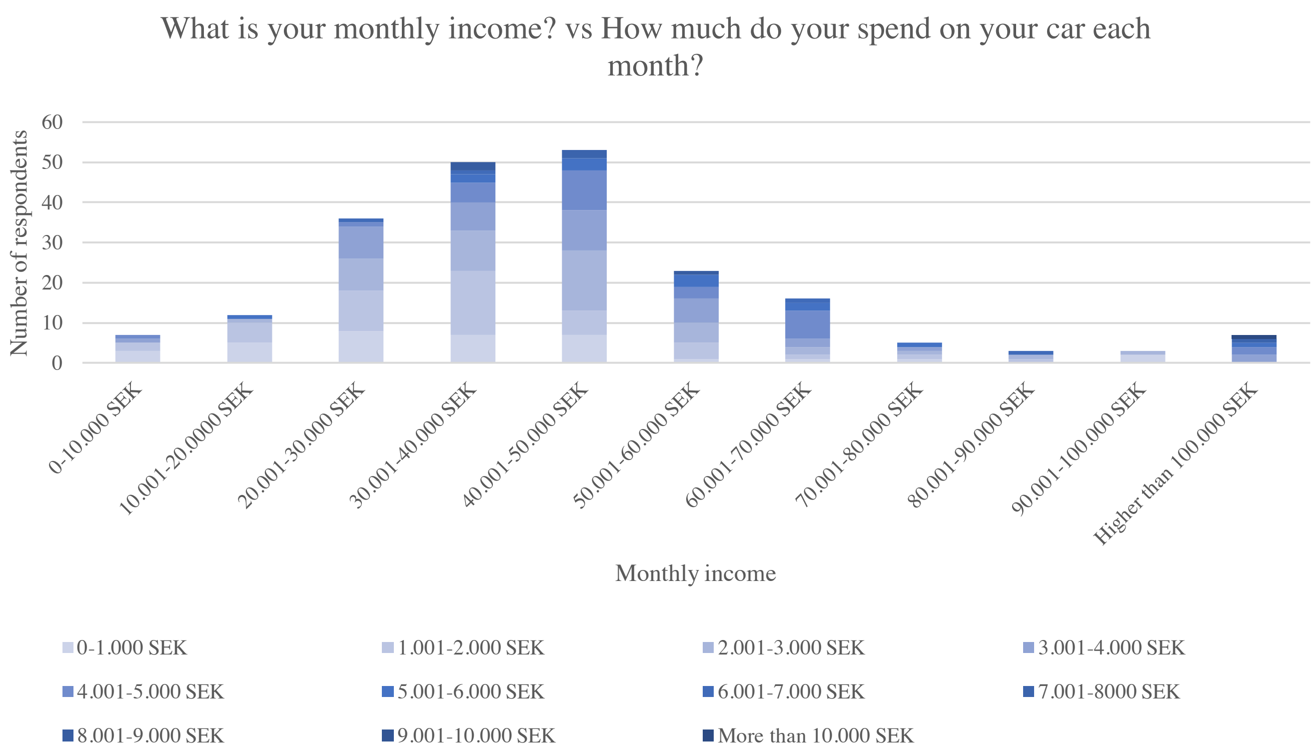

Diagram 11 Distribution of the respondent's monthly income and how much they spend on their car each month

In *Diagram 11*, it can be seen that the respondents with a higher income, in general spend more money on their car each month compared to how much the respondents with lower incomes in general spend on their car each month. In *Table 46,* it can be seen that there is a positive correlation of 0,34 between monthly income and how much the respondents spend on their car each month. In *Table 46,* it can also be seen that the p-value is statistically significant.

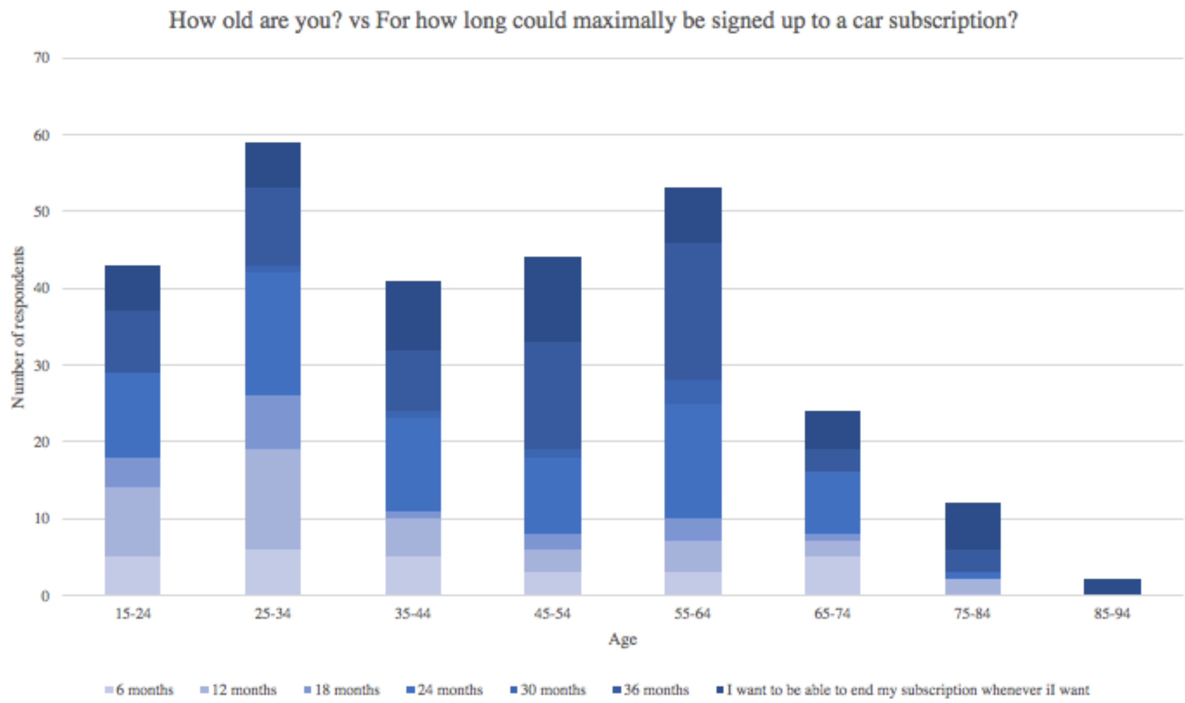

Diagram 12 Distribution of the respondents age and for how long they want to be tied to a subscription

In *Diagram 12,* it can be seen that the older respondents, the longer time are they willing to be tied to a subscription, in general. Furthermore, it can also be seen that approximately the same number of respondents in all ages want to be able to end the subscription whenever they want. In *Table 46,* it can be seen that the correlation is positive and low, corresponding to 0,19 between age and subscription period, it can also be seen that the p-value is statistically significant.

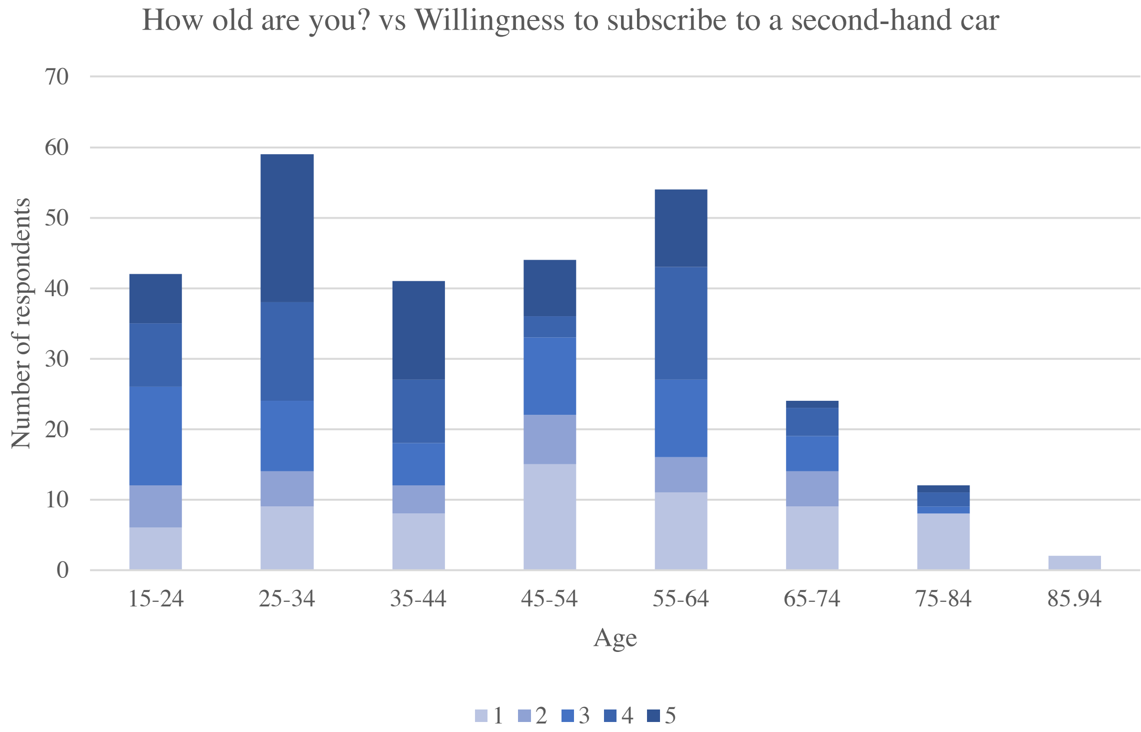

Diagram 13 Distribution of the respondent age and their ranking 1-5 to subscribe to a second-hand car

In *Diagram 13,* it can be seen that a quite even number of respondents in all ages *strongly disagree (1)* that they are willing to subscribe to a second-hand car. It can also be seen that respondents in all ages *strongly agree (5)* that they would be interested in subscribing to a second-hand car. In *Table 46*, it can be seen that there is a positive correlation of 0,23 between age and willingness to subscribe to a second-hand car. In *Table 46,* it can also be seen that the p-value is statistically significant.

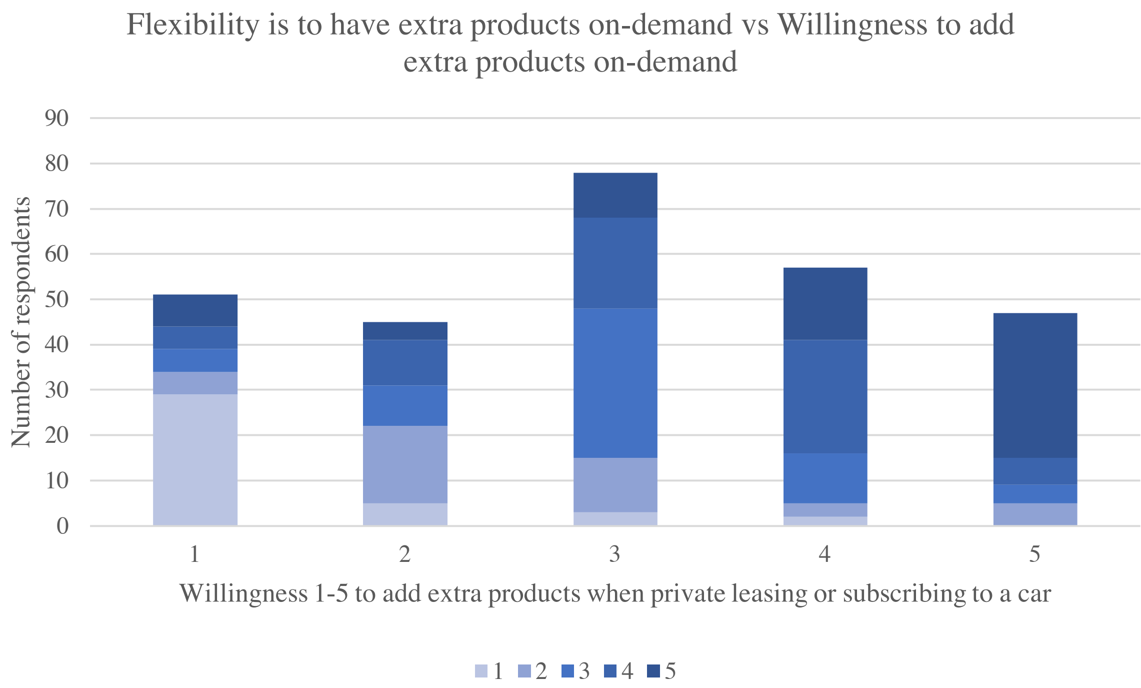

Diagram 14 Distribution of the respondents ranking 1-5 of that flexibility is to have access to extra products on demand and their willingness 1-5 to add extra products when subscribing or private leasing a car

In *Diagram 14,* it can be seen that the respondents who rank that flexibility is to have access to extra products on demand low, also have a low willingness to add extra products when subscribing or private leasing a car. It can also be seen that those who rank that flexibility is to have access to extra products on demand high, also have a high willingness to add extra products when subscribing or private leasing a car. In *Table 46,* it can be seen that there is a positive, high correlation between the respondents ranking of that flexibility is to have access to extra products on demand and their willingness to add extra products when subscribing or private leasing a car, corresponding to 0,55. In *Table 46,* it can also be seen that the p-value is statistically significant.

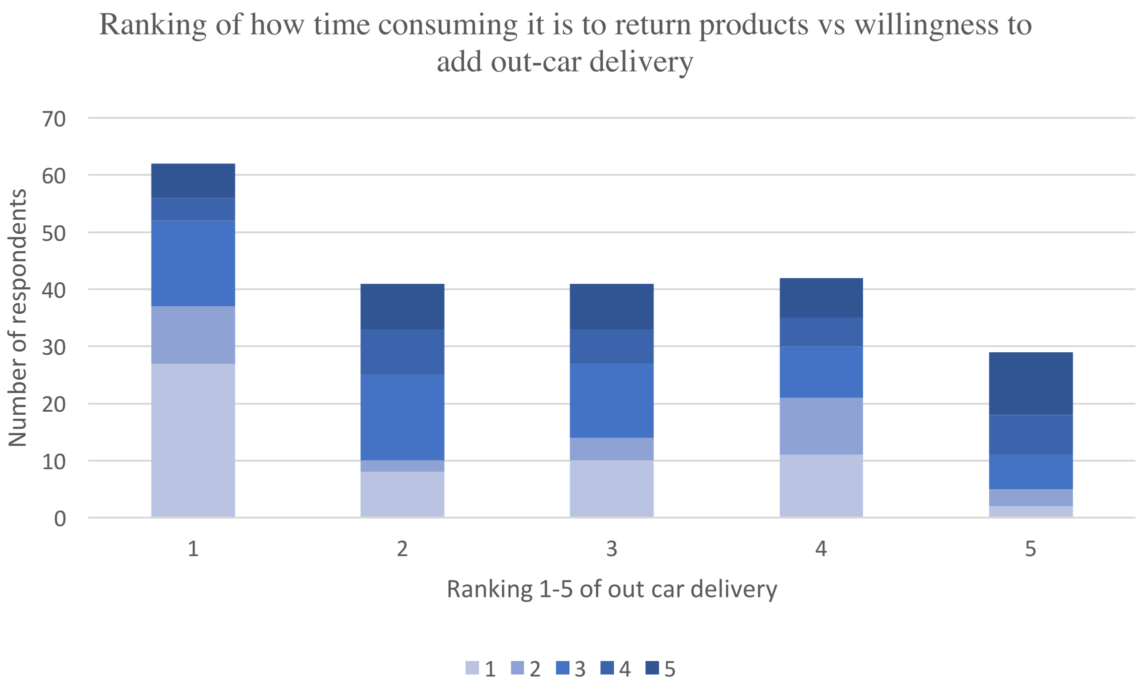

Diagram 15 Distribution of the respondents ranking 1-5 to add Out-car Delivery to private leasing and subscription and how time consuming the respondents think returning products is

In *Diagram 15* it can be seen that most of the respondents rank both the alternative to add Out-car Delivery to private leasing and subscription and how time consuming the respondents think returning products is low. The ranking *strongly disagree (1)* in both alternatives is the most common. In *Table 46,* it can be seen that there is a positive correlation between the two variables, even though it is low, corresponding to 0,25, between the respondent's willingness to add Out-car Delivery to private leasing and subscription and how time consuming the respondents think returning products is. In *Table 46*, it can also be seen that the p-value is statistically significant.

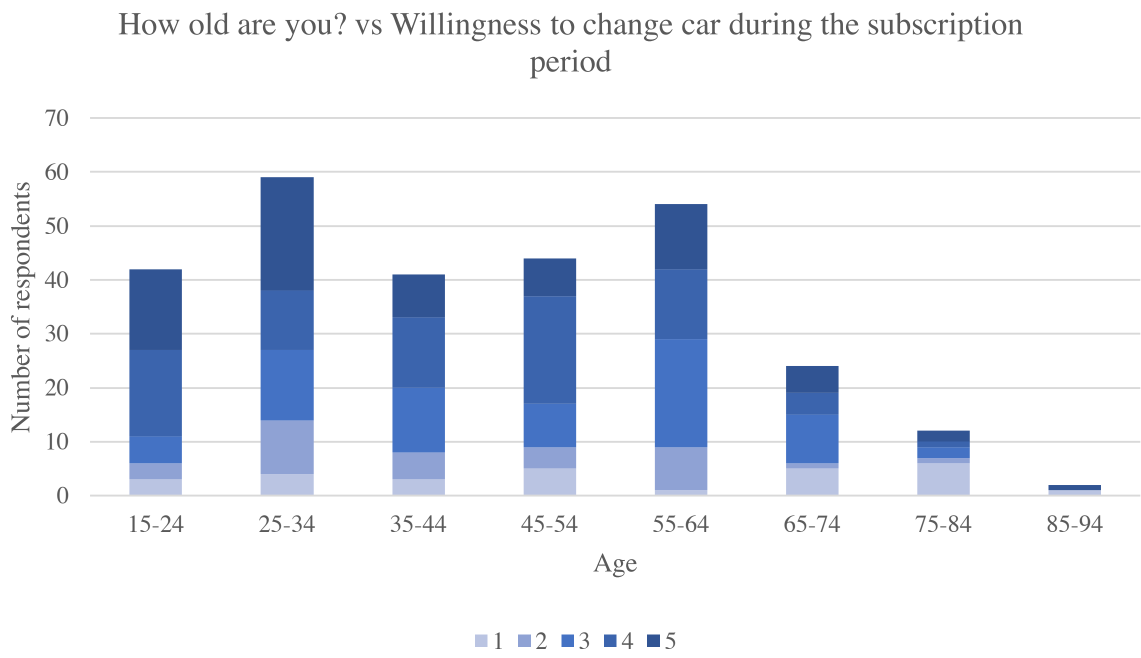

Diagram 16 Distribution of the respondents age and their ranking 1-5 to change car during the subscription period

In *Diagram 16,* it can be seen that most of the respondents independent of age rank the alternative to change car during the subscription period high. It can also be seen that the ranking *strongly agree (5)* is most common in the two youngest age groups. In *Table 46,* it can be seen that there is a positive correlation between the two variables, corresponding to 0,18, between age and the alternative to change car during the subscription period. In *Table 46,* it can also be seen that the p-value is statistically significant.

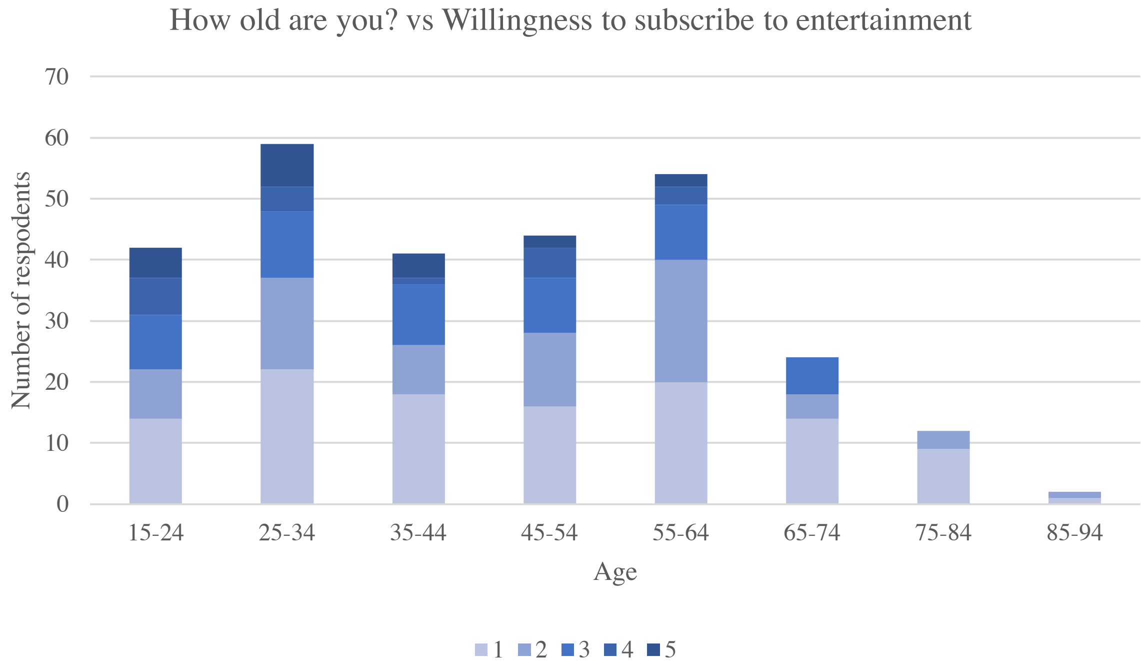

Diagram 17 Distribution of the respondents age and their ranking 1-5 to add subscription of entertainment when private leasing or subscribing to a car

In *Diagram 17*, it can be seen that most of the respondents independent of age rank the alternative to add subscription of entertainment when leasing or subscribing to a car low. However, it can be seen that none of the two oldest age groups rank the alternative higher than *disagree (2)* while some respondents in the younger age groups rank the alternative with either *agree (4)* or *strongly agree (5)*. In *Table 46*, it can be seen that there is a positive correlation between the two variables, corresponding to 0,21, between age and how they rank adding entertainment when private leasing or subscribing to a car. In *Table 46*, it can also be seen that the p-value is statistically significant.

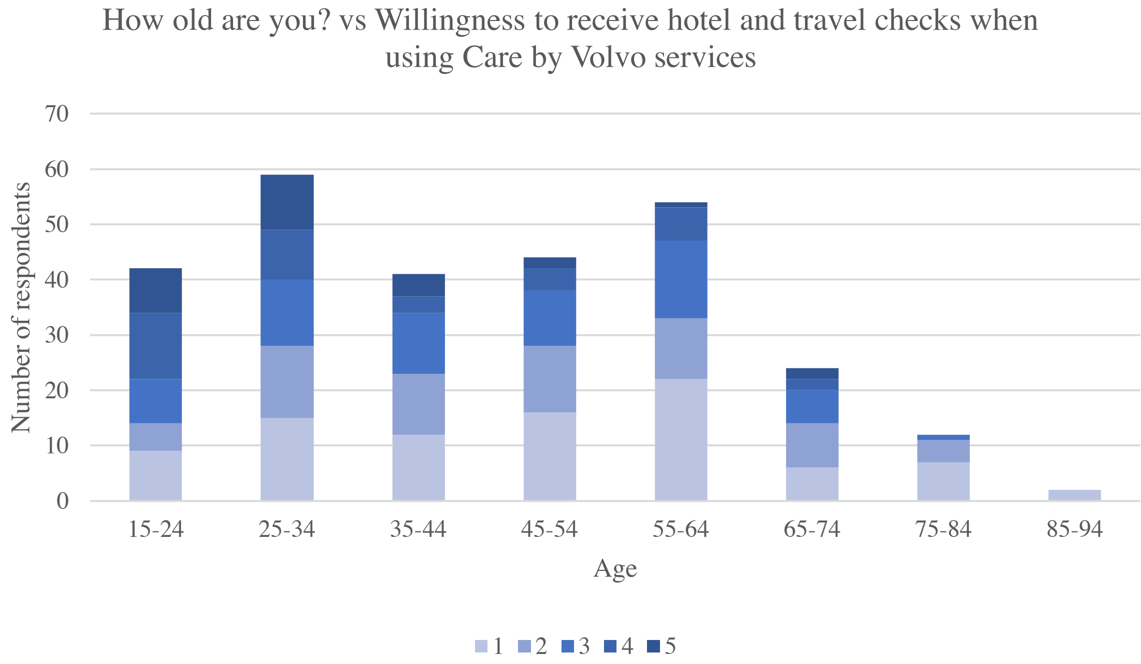

Diagram 18 Distribution of the respondents age and their ranking 1-5 to receive hotel and travel checks when using Care by Volvo services

In *Diagram 18*, it can be seen that the younger respondents rank the alternative of receiving hotel and travel checks when using Care by Volvo services higher than the older respondents. For example, none of the two oldest compiled age groups rank the alternative higher than *neither disagree nor agree (3)*. However most of the respondent independent of age have ranked this alternative as *disagree (1)*. In *Table 46,* it can be seen that there is a positive correlation between the two variables, corresponding to 0,29, between age and how the respondents rank the alternative of receiving hotel and travel checks when using Care by Volvo services. In *Table 46,* it can also be seen that the p-value is statistically significant.

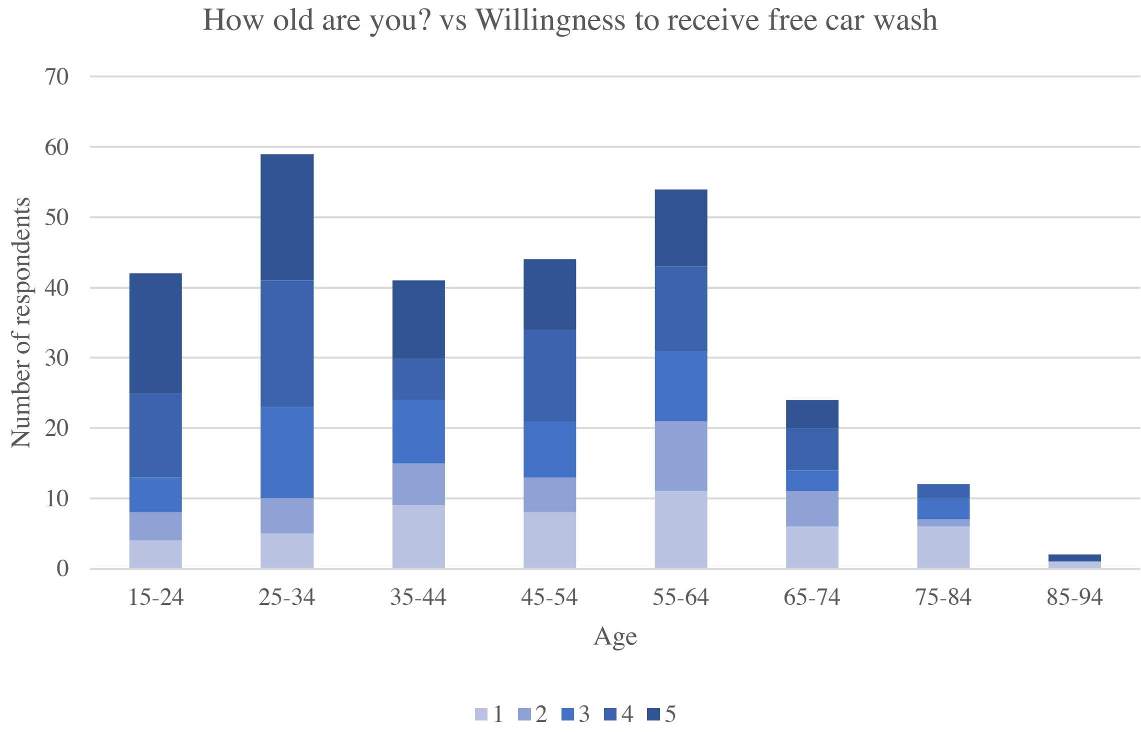

Diagram 19 Distribution of the respondents age and their ranking 1-5 to add free car-wash once a month when private leasing or subscribing to a car

In *Diagram 19*, it can be seen that the ages of the respondents and how they rank the alternative of adding free car-wash once a month when leasing or subscribing are similar over the different ages. However, the correlation is 0,26 which indicates that there is a positive relation between age and adding car wash to Care by Volvo, *see Diagram 19* and *Table 46*. In *Table 46,* it can also be seen that the p-value is statistically significant.

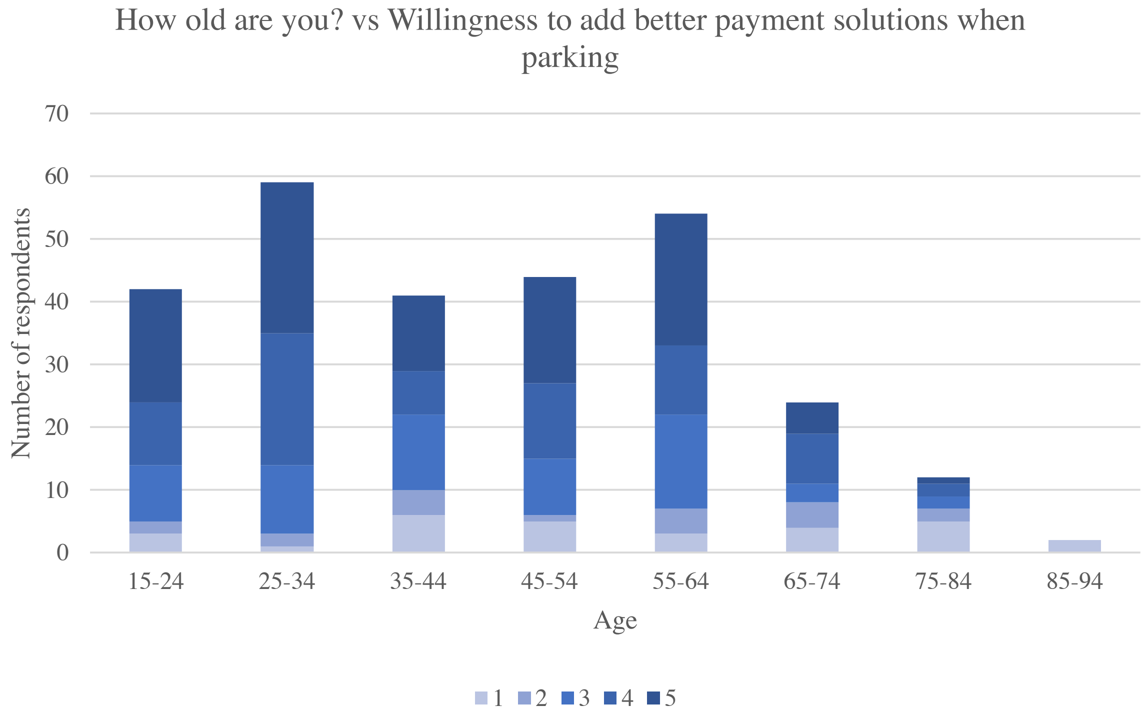

Diagram 20 Distribution of the respondents ages and their ranking 1-5 to receive a better payment solution when parking when private leasing or subscribing to a car

In *Diagram 20*, it can be seen that the respondents in different ages, in general highly values to get a better payment solution when parking. In *Table 46,* it can be seen that there is a positive correlation of 0,23 between the two variables. In *Table 46,* it can also be seen that the p-value is statistically significant.

5. Analysis

In this section, the three Research Questions of the thesis will be analyzed, with help from the Empirical Findings and the Theoretical Framework. The Analysis is divided into three parts, which are all interlinked to one another.

5.1 Research Question 1

How can Care by Volvo solve the problem regarding that the potential customers do not completely understand the new concept and the added values?

5.1.1 Reasons for an Unsuccessful Service Delivery

The concept of Care by Volvo is a new business model in the car industry and as can be seen in the benchmark, it is an all-inclusive package that none of Volvo´s competitors offer. However, due to its uniqueness, communication is essential for the potential customers to fully understand it. Kotler & Keller (2016), describe several reasons to why an unsuccessful delivery of a service can occur. Among these, there can be a "*Gap between external communications and service delivery",* there can be a *"Gap between perceived service and expected service"* and there can be a *"Gap between consumer expectations and management perception"*. Hence, these are important to keep in mind when working with services and therefore, these reasons for an unsuccessful service delivery are important to use when answering this *Research Question,* to increase the awareness of Care by Volvo. From the semi-structured interviews, it was found that all four interviewees mentioned that one of the main challenges of Care by Volvo is to make the customers and potential customers to understand the whole concept of Care by Volvo and to understand the added values of the new business model.

5.1.2 Low Awareness of Care by Volvo

From the survey, it was found that 53 percent of the respondents, i.e. a majority had not heard about Care by Volvo, *see Diagram 9.* Based on this information, the external communication is not sufficient enough. Therefore, this needs to be improved to increase the awareness of Care by Volvo. Because of the low awareness of Care by Volvo, there is currently a "*Gap between external communications and service delivery"*. This means that even though services are delivered by Care by Volvo, this is not clearly communicated. With a lack of clear communications, it is hard for the potential customers to understand the new concept and what added values it brings. This is further connected to a *"Gap between perceived service and expected service".* Since most of the respondents of the survey had not even heard about Care by Volvo, it can be assumed that it is impossible for them to know what is included in Care by Volvo. Hence, they do not know what to expect. Therefore, the customers do not have an expectation of the service and therefore, there will be a *"Gap between perceived service and expected service"*. Hence, even though the service is performed by Care by Volvo, it is hard for the customers to evaluate this, due to the lack of awareness and hence expectations. The third reason for why an unsuccessful service delivery can occur, that will be discussed in this *Analysis* is that there can be a *"Gap between consumer expectations and management perception"*. This is related to the previous gap, because the customers have no expectations in this case either. Even though there might be a management perception, this is not enough to succeed. From this *Analysis*, it can be seen that all these three mentioned reasons for an unsuccessful service delivery are all affecting Care by Volvo, based on that 53 percent of the respondents of the survey does not know about Care by Volvo. However, 47 percent of the respondents of the survey have heard about Care by Volvo. This will be further discussed below. *See Diagram 9.*

5.1.3 Some Awareness of Care by Volvo

In the survey, it was found that 47 percent of the respondents have heard about Care by Volvo, *see Diagram 9.* Hence, there is a "*Gap between external communications and service delivery"*, because all respondents do not know about Care by Volvo. The respondents who had heard about Care by Volvo answered a follow up question about what they know about Care by Volvo. Hence, since some respondents had heard about Care by Volvo, it can be assumed that they are aware of some of the services, value adding activities or characteristics that are included in Care by Volvo. Hence, the *"Gap between perceived service and expected service"* might be lower because of this awareness. However, it was found that the awareness of the different services and value adding activities were very different, where the respondents were highly aware of some of the services. On the contrary, there were some services that very few respondents were aware of. To precede this *Analysis* in a logical way, the two next parts will be divided based on "low awareness", meaning that less than 50 percent of the respondents are aware of the service and "high awareness", meaning that more than 50 percent, or 50 percent are aware of the service.

5.1.3.1 Services with Low Awareness

In many cases, the respondents who have heard about Care by Volvo are not aware of the included services. This shows that Care by Volvo have not succeeded in their external communications, hence there is a "*Gap between external communications and service delivery"* in many cases. Furthermore, when the respondents do not know what is included in Care by Volvo they cannot have the correct expectations, hence there is a *"Gap between perceived service and expected service.* The service that the respondents are least aware of, corresponding to 11 percent, is that a Care by Volvo customer get 20 percent of at Hertz. *See Table 40.* The service that the respondents are secondly least aware of is that ten free trips with Sunfleet is included. Only 13 percent of the respondents are aware of this service, *see Table 40.* As identified in benchmark*,* these two services differentiate Care by Volvo from their competitors. Therefore, it is important for them to clearly communicate these services in order for the customers to better understand the whole concept, the added values and most importantly what differs Care by Volvo from its competitors. In *Research Question 2*, it will be further discussed about what opportunity these two services can create for Care by Volvo, if they are clearly communicated.

Furthermore, the result from the survey shows that 49 percent of the respondents who have heard about Care by Volvo know that everything is pre-negotiated in Care by Volvo and 23 percent of the respondents know that the price is national, *see Table 40.* The respondents also prefer to have a pre-negotiated and national price, compared to negotiating with a dealer about the price, *see Table 37*. Since Care by Volvo has a pre-negotiated and national price, and since this is preferred by the respondents, it is important to keep this in mind when communicating with the customers and the potential customers. Hence, there is a possibility to further differentiate Care by Volvo if this is clearly communicated. Furthermore, since the respondents prefer a higher monthly cost where everything is included, compared to a lower monthly cost where extra costs can be added, *see Table 38,* Care by Volvo should also focus on communicating this message.

Moreover, other services included in Care by Volvo that has a low awareness is that 28 percent of the respondents know that Volvo on Call is included, 30 percent of the respondents are aware of "Trygghetsförsäkring" and 33 percent of the respondents know that the new car warranty is valid during the whole subscription period. *See table 40* for these numbers. From the benchmark, it was found that the new car warranty was only valid in two years for all the other benchmarked cars, hence this is something that Care by Volvo preferably could further communicate, because it differs Care by Volvo from other leasing models.

Finally, the last service that less than 50 percent of the respondents who have heard about Care by Volvo are aware of is that winter wheel and tire hotel is included in the price. This corresponds to 48 percent of the respondents, *see Table 40.* Since winter wheel is necessary to have, everyone with a car will be affected by this. An interesting aspect is that many of the respondents perceive that Care by Volvo as more expensive than what they pay for their car today, or are willing to pay, *see Diagram 3* and *Diagram 4.* Therefore, it can be argued that it is important for Volvo to communicate that winter wheel and tire hotel is included in Care by Volvo, because a person with a car will have to pay for this anyways, which is often expensive.

5.1.3.2 Services with High Awareness

In many cases, the respondents who have heard about Care by Volvo are to some extent aware of the included services. This shows that Care by Volvo have succeeded in their external communications, hence the "*Gap between external communications and service delivery"* is limited for some services. Furthermore, when the respondents know what is included in Care by Volvo, they can have an expectation of the service, hence, the *"Gap between perceived service and expected service"* can be limited because of the awareness. However, it is important to keep in mind that it is not enough to make an expectation for the potential customers, the perceived service needs to be of high quality as well in order to completely limit this gap.

From the survey, it was found that 57 percent of the respondents know that you order the car online, *see Table 40.* Since this is something that differentiates Care by Volvo from other competitors, it can be assumed that this is important to further focus on communicating, in order to increase the awareness of this differentiator. Furthermore, 60 percent of the respondents know that warranty is included during the whole subscription period and 63 percent of the respondents know that services and insurance is included, *see Table 40.* However, there is still a "*Gap between external communications and service delivery"* because all respondents are not aware of those services. Hence, these is a potential for improvement.

Lastly, the most successful external communication is that 95 percent of the respondents know that Care by Volvo is a car one subscribes to, *see Table 40.* From the semi-structured interviews, it was found that three of four respondents mentioned that one of the chief aims of Care by

Volvo is to drive business with a subscription model. The respondents of the semi-structured interviews were also quite aligned when they described subscription. Furthermore, it can also be seen that Care by Volvo fits within the definition of subscription used in this thesis, namely *"An arrangement that facilitates regular delivery or long-term use of a service or product. The arrangement settles what the product/service is, frequency of usage/delivery, at what cost, and within what timeframe"* (ING Economics Department, 2018). Since this definition is general for subscription and since Care by Volvo fits within the definition, it can be assumed that it is easy to understand what it means to subscribe to a car. Furthermore, it can be assumed that this has been clearly communicated because it is the core of Care by Volvo. When looking at Volvo Cars commercials for Care by Volvo, it can be seen that they have focused on communicating the fact that it is a car that you subscribe to. This indicates that what Volvo Cars communicate is what the respondents know about. Therefore, it can be assumed that what is communicated via commercial is what the customers and potential customers will be aware of. Hence, they need to focus on communicating what is unique with Care by Volvo and by this explain the added values and what differs them from their competitors. By doing this, the potential customer will have a better awareness of Care by Volvo.

5.1.4 Preferred Communication

From the survey, it was found that out of those who have heard about Care by Volvo, many of them have heard about it from TV-commercial, online advertisements, social media and Volvo Car´s website, *see Table 39.* Hence, these are within the frame of visual communication. It was also found that the respondents prefer visual communication over written and oral communication, *see Table 41.* The reason for this is because it is easier to absorb information via visual communication. Therefore, these findings are important for Care by Volvo to keep in mind, meaning that it is important to use visual communication when communicating with customers and potential customers. Hence, in order to limit the "*Gap between external communications and service delivery",* visual communication can preferably be used in order for more people to understand the external communication. When making the external communication easier to absorb, it is also easier to understand what the service delivery will be. Hence, good communications can help to limit the *"Gap between perceived service and expected service".*

Furthermore, customers are often demanding solution-based offerings and hence, services can be used as a marketing tool. Using services to market a product can influence the decision to purchase a product or not (Baines et al., 2009; Oliva & Kallenberg, 2003; Pistoni & Songini, 2017). Since Care by Volvo is an all-inclusive model, in line with a solution-based offering, and since Care by Volvo mostly differentiates from its competitors regarding services, this is something they should focus on communicating. Hence, it is essential for the customers and potential customers to really understand the service delivery, otherwise, there is a risk that Care by Volvo will only be seen as an expensive leasing model. If the communication is not clear enough, the "*Gap between external communications and service delivery",* will remain.

5.1.4.1 Word of Mouth

As can be seen in the survey, out of those who have heard about Care by Volvo, most of the respondents have heard about it via word of mouth, *see Table 39.* This shows that word of mouth is a powerful tool when communicating. Furthermore, from the semi-structured interviews, two of the respondents mentioned that customers can show loyalty by spreading the word about Care by Volvo, i.e. using word of mouth. Furthermore, word of mouth is suitable when communicating services, this because it is an embedded insecurity of what will actually be delivered, due to the unique characteristics of services, compared to products which are easier to advertise (Kotler & Keller, 2016). Since Care by Volvo is using servitization, word of mouth can be a suitable way to spread the word and hence increase the awareness and understanding of Care by Volvo. On the other hand, it can be a challenge for Volvo Cars to control this communication, because the communication is spread by customers and not by the company. In order to increase the control of this communication, one way is to try to limit the *"Gap between the perceived and expected service"*, because if these are aligned, or if the perceived service is even better than the expected service, customers will be satisfied and therefore, they will more likely spread a positive word about Care by Volvo. Furthermore, satisfied customers tend to become more loyal and in a service setting, loyal customers are more profitable than new customers (Gebauer et.al 2011). Hence, it is essential that the provided services are of high quality. Furthermore, from the semi-structured interviews, it was found that the interviewees mentioned that customers can show loyalty by using word of mouth. A limitation of word of mouth is that the communication only reaches a limited number of persons. However, a more efficient way is to use e-word of mouth, which means that the communication is spread online, rather than face to face. Since this communication will reach more people, it is even more important to try to control this communication by providing high quality services to the customers. Otherwise, there is a risk that negative words about Care by Volvo will be spread. Furthermore, to control the e-word of mouth, it could be assumed that it is beneficial to keep this communication in one place, for example in a platform online. There, the Care by Volvo customers can rate and review their experiences and thoughts about the services included in Care by Volvo. By doing this, the potential customers will become more aware about what Care by Volvo is and what is included in the concept. The customers and potential customers will also get an expectation, i.e an expected service, which would not happen if the customers and potential customers did not even know what is included in Care by Volvo. Hence, it can be assumed that the *"Gap between the perceived and expected service"* could be limited, when the potential customers gets an expectation. Furthermore, by creating a platform, it is also easier for Care by Volvo to limit another gap, namely the *"Gap between consumer expectations and management perception"*. It is important for companies to manage customer expectations (Kotler & Keller, 2016). Through the platform, Care by Volvo can get a deeper understanding about the what the customers really want and understand when and why the expectations of the customers are not aligned with the management perception of the same service. Hence, an adjustment in the external communication, or an adjustment in the service delivery can be used, in order to limit this gap. Furthermore, by gaining a deeper understanding about the customers, it is easier for a company to shift focus from the manufacturing process, to focus more on the customers. To change the culture of focusing on the manufacturing process, to focus more on the customers is the third prerequisite in order to succeed with servitization (Pistoni & Songini, 2017). Hence, this prerequisite can be solved by creating a platform.

Finally, by creating a platform where it is possible to use e-word of mouth, the *"Gap between perceived service and expected service"* can be limited due to the possible increased awareness about Care by Volvo that can be spread there. Furthermore, the "*Gap between external communications and service delivery",* can be improved because more communication will be used. The *"Gap between consumer expectations and management perception"* can also be limited because Volvo can get deeper insights about the customers and hence adapt the services to them. It is important to remember to always strive for providing high quality services in order to limit the risk for getting negative or bad reviews.

5.2 Research Question 2

How does Care by Volvo differentiate from their competitors?

The answer of this *Research Question* will be divided into four different sub-headlines where XC40 is analyzed in the first section, V60 in the second and V90 in the third. The reason for this structure is because each Volvo model is only relevant to be analyzed to the compared models, and not to other models. For this reason, the text can be perceived repetitive. However, all car models are analyzed together in the fourth sub-headline in this *Analysis,* where the general findings from the three first analyses are further discussed.

5.2.1 Analysis of XC40

5.2.1.1 Comparison of Price and Safety Systems

Based on the benchmark of Volvo XC40 and the compared cars, it can be seen that Volvo XC40 with Care by Volvo is the second most expensive car, per month, *see Table 8.* The monthly cost of all the benchmarked cars is far higher than what the respondents pay today, *see Diagram 3* and are willing to pay, *see Diagram 4,* and therefore, these cars can be seen as expensive. Furthermore, the respondents who own their car spend less than those who do not own their car, but have a car, as can be seen in *Diagram 5* and *Diagram 6.* Respondents with a higher income spend more money on their car each month, with a correlation of 0,34, *see Diagram 11* and *Table 46.* It can also be seen that the respondents with higher incomes to a larger extent have a car, compared to respondents with lower incomes, corresponding to a correlation of 0,55, *see Diagram 11*. However, it is important to keep in mind that all cars, except Volkswagen are in the premium segment. Therefore, higher prices can be expected.

In recent years, safety systems are order qualifiers in the market (Jacobs & Chase, 2014). Hence, it is necessary to have good safety systems to compete in the market. In the benchmark, Volvo XC40 with Care by Volvo and hence Volvo XC40 with private leasing has most safety systems of all the benchmarked cars, *see Table 11.* However, in this case, it can be assumed that the safety systems of Volvo X40 can be seen as order winners, this because some of the benchmarked cars lack many of the safety systems which are included in Volvo XC40. In terms of support systems, all the benchmarked cars are very similar, *see Table 12.* Hence, the support systems can only be seen as order qualifiers in the market.

When comparing the monthly cost of each car with the number of safety systems, Volvo XC40 with Care by Volvo is expensive but has many safety systems. In this sense, Volvo XC40 with private leasing can be seen as more worth its price, compared to Volvo XC40 with Care by Volvo. BMW X1 is the most expensive car in terms of monthly cost and it has also the lowest amount of safety systems, together with Audi Q3. Hence, BMW X1 is from this perspective not worth its price. Mercedes-Benz A180d is worth its price because it is the cheapest car among the benchmarked models and it has almost the same amount of safety systems as Volvo XC40. Regarding Audi Q3, it is the second cheapest car and it has also the lowest number of safety systems, together with BMW X1. Hence, one pays less but gets less safety. However, it is important to keep in mind that a new Audi Q3 will be released later this year and it can be assumed that it will have more safety systems in order to keep up the competition against the other benchmarked cars. Finally, VW Tiguan is the third most expensive car, and it is in the middle range in terms of number of safety systems. Hence, one pays quite much for the car, but also get many safety systems.

5.2.1.2 Services and Added Values

Based on the benchmark in terms of price and product, some cars are more worth its price than others. However, by only taking price and product into consideration it cannot be seen that Care by Volvo is differencing to a large extent in the market. Therefore, services and other value adding activities need to be investigated as well, to get a complete picture of what the competition looks like for Volvo XC40 with Care by Volvo. In terms of services and value adding activities, the majority are the same for all cars, but a main difference is that everything is included in Care by Volvo, while it is available to a cost for the other cars, *see Table 13.* The fact that Care by Volvo is an all-inclusive private leasing model is also mentioned in the semi-structured interviews as one of three unique characteristics of the concept. However, Volvo XC40 with Care by Volvo does not differ so much from the other cars in terms of available services, but what differs Volvo XC40 with Care by Volvo from the other cars are the pick and leave service (which is also available with Volvos private leasing), the extra car via Sunfleet and the Hertz discount. Another thing that differs Care by Volvo from the competitors is that it has a more *careful* strategy towards sub mileage and over mileage than the competitors, *see Table 9.* For all other benchmarked cars, the sub mileage and the over mileage is valid when the actual driven distance differs from what is stated in the contract. In the case of Care by Volvo, there is a range of 3 000 kilometers less than the contract and 3 000 kilometers over the contract before sub mileage and over mileage is applied. Hence, subscribing to a Care by Volvo, a customer can be more *carefree,* compared to when private leasing another car. However, it can be discussed how *care* it is to not pay sub mileage to the customers who drive less than what is stated in the contract, but not so short that the sub mileage is repaid. Furthermore, other unique characteristics of Care by Volvo mentioned in the semi-structured interviews are that one can order the car online and that the price is pre-negotiated.

Hence, for Volvo XC40 with Care by Volvo to further differentiate in the market, some extra value adding activities could preferably be added. This because adding services to a product increases the differentiation (Pistoni & Songini, 2017). Since Volvo XC40 with Care by Volvo already possess many order qualifiers and also some order winners, in terms of the safety systems, a preferable focus could be to further add order winners in terms of services and value adding activities. This will be further analysed in *Research Question 3.*

5.2.2 Analysis of V60

5.2.2.1 Comparison of Price and Safety Systems

Based on the benchmark of Volvo V60 and the compared cars, it can be seen that Volvo V60 with Care by Volvo is the second most expensive car, per month, *see Table 14.* The monthly cost of all the benchmarked cars is far higher than what the respondents pay today, *see Diagram 3* and are willing to pay, *see Diagram 4,* and therefore, these cars can be seen as expensive. Furthermore, the respondents who own their car spend less than those who do not own their car, but have a car, as can be seen in *Diagram 5* and *Diagram 6.* Respondents with a higher income spend more money on their car each month, with a correlation of 0,34, *see Diagram 11* and *Table 46.* It can also be seen that the respondents with higher incomes to a larger extent have a car, compared to respondents with lower incomes, corresponding to a correlation of 0,55, *see Diagram 11*. However, it is important to keep in mind that all cars, except Volkswagen are in the premium segment. Therefore, higher prices can be expected.

In recent years, safety systems are order qualifiers in the market (Jacobs & Chase, 2014). Hence, it is necessary to have good safety systems to compete in the market. In the benchmark, Volvo V60 with Care by Volvo and hence Volvo V60 with private leasing has most safety systems of all the benchmarked cars. However, in this case, the other benchmarked cars only lack a few safety systems compared to Volvo V60, *see Table 17.* Hence, the safety systems can be seen as order qualifiers. In terms of support systems, all the benchmarked cars are very similar, *see Table 18.* Hence, all the support systems are order qualifiers in the market.

When comparing the monthly cost for each car, with the number of safety systems, Volvo V60 with Care by Volvo is both expensive and has the highest number of safety systems. In this sense, Volvo V60 with private leasing can be seen as more worth its price, compared to Volvo V60 with Care by Volvo. Audi A4 is the most expensive car and it only lacks two of the safety systems that Volvo V60 has, but it also has one safety system that Volvo V60 does not have. Hence, Audi A4 has one safety system less than Volvo V60. Therefore, Audi A4 can be seen as more expensive than Volvo V60 with Care by Volvo because it is slightly more expensive and has one safety system less. Mercedes-Benz C220d has the same number of safety systems as Audi A4, but it is cheaper. Therefore, it can be said that this car is worth its price. BMW 320d and Volkswagen Passat have the same and the lowest number of safety systems. BMW 320d is the third most expensive car and therefore, it might not be worth its price due to combination of price and safety systems. The opposite is true for Volkswagen Passat, because it is the cheapest car among the benchmarked cars.

5.2.2.2 Services and Added Values

Based on the benchmark in terms of price and product, some cars are more worth its price than others. However, by only taking price and product into consideration it cannot be seen that Care by Volvo is differencing to a large extent in the market. Therefore, services and other value adding activities need to be investigated as well, this to get a complete picture of what the competition looks like for Volvo V60 with Care by Volvo. In terms of services and value adding activities, the majority are the same for all cars, but a main difference is that everything is included in Care by Volvo, while it is available to a cost for the other cars, *see Table 19.* The fact that Care by Volvo is an all-inclusive private leasing model is also mentioned in the semi-structured interviews as one of three unique characteristics of the concept. However, Volvo V60 with Care by Volvo does not differ so much from the other cars in terms of available services, but what differs Volvo V60 with Care by Volvo from the other cars are the pick and leave service (which is also available with Volvo private leasing), the extra car via Sunfleet and the Hertz discount. Something else that differs Care by Volvo from the competitors is that it has a more *careful* strategy towards sub mileage and over mileage than the competitors, *see Table 15.* For all other benchmarked cars, the sub mileage and the over mileage is valid when the actual driven distance differs from what is stated in the contract. In the case of Care by Volvo, there is a range of 3 000 kilometers less than the contract and 3 000 kilometers over the contract before sub mileage and over mileage is applied. Hence, subscribing to a Care by Volvo, a customer can be more *carefree,* compared to when private leasing another car. However, it can be discussed how *care* it is to not pay sub mileage to the customers who drive less than what is stated in the contract, but not so short that the sub mileage is repaid. Furthermore, other unique characteristics of Care by Volvo mentioned in the semi-structured interviews are that one can order the car online and that the price is pre-negotiated.

Hence, for Volvo V60 with Care by Volvo to further differentiate in the market, some extra value adding activities could preferably be added. This because adding services to a product increases the differentiation (Pistoni & Songini, 2017). Since Volvo V60 with Care by Volvo already possess many order qualifiers in terms of the safety systems, a preferable focus could be to further add order winners in terms of services and value adding activities. This will be further analysed in *Research Question 3*.

5.2.3 Analysis of V90

5.2.3.1 Comparison of Price and Safety Systems

Based on the benchmark of Volvo V90 and the compared cars, it can be seen that Volvo V90 with Care by Volvo is the third most expensive car, per month, *see Table 20.* The monthly cost of all the benchmarked cars is far higher than what the respondents pay today, *see Diagram 3* and are willing to pay, *see Diagram 4,* and therefore, these cars can be seen as expensive. Furthermore, the respondents who own their car spend less than those who do not own their car, but have a car, as can be seen in *Diagram 5* and *Diagram 6.* Respondents with a higher income spend more money on their car each month, with a correlation of 0,34, *see Diagram 11* and *Table 46.* It can also be seen that the respondents with higher income to a larger extent have a car, compared to respondents with lower incomes, corresponding to a correlation of 0.55, *see Diagram 11*. However, it is important to keep in mind that all cars, except Volkswagen are in the premium segment. Therefore, higher prices can be expected.

In recent years, safety systems are order qualifiers in the market (Jacobs & Chase, 2014). Hence, it is necessary to have good safety systems to compete in the market. In the benchmark, Volvo V90 with Care by Volvo and hence Volvo V90 with private leasing has most safety systems of all the benchmarked cars, *see Table 23.* However, in this case, the other benchmarked cars only lack a few safety systems compared to Volvo V90, except Audi A6 which has less than the half number of safety systems compared to Volvo V90. However, it is important to keep in mind that a new Audi A6 will be released later this year and it can be assumed that it will have more safety systems in order to keep up the competition against the other benchmarked cars. Hence, the safety systems can be seen as order qualifiers in the market because most of the cars possess the same systems. In terms of support systems, all the benchmarked cars are very similar, *see Table 24.* Hence, all the support systems are order qualifiers in the market.

When comparing the monthly cost for each car, with the number of safety systems, Volvo V90 with Care by Volvo is the third most expensive car, but at the same time, it has the highest number of safety systems. In this sense, Volvo V90 with private leasing can be seen as more worth its price, compared to Volvo V90 with Care by Volvo. BMW 520d, Mercedes-Benz E220d and Volkswagen Passat have the same number of safety systems as Volvo V90. Among those, BMW 520d is the most expensive car, followed by Mercedes-Benz E220d which is the second most expensive car. Volkswagen Passat is the cheapest car among the benchmarked cars and therefore, the combination of price and safety system makes this car worth its price. Regarding BMW 520d and Mercedes-Benz E220d, they can be seen as less wort its price compared to Volvo V90 with Care by Volvo since they are both more expensive and also have less safety systems. Audi A6 lacks many of the systems that the rest of the benchmarked cars have. Hence, it is not worth its price today, even though it is the third cheapest car. As stated above, it is important to keep in mind that a new Audi A6 will be released this year.

5.2.3.2 Services and Added Values

Based on the benchmark in terms of price and product, some cars are more worth its price than others. However, by only taking price and product into consideration it cannot be seen that Care by Volvo is differencing to a large extent in the market. Therefore, services and other value adding activities need to be investigated as well, to get a complete picture of what the competition looks like for Volvo V90 with Care by Volvo. In terms of services and value adding activities, the majority are the same for all cars, but a main difference is that everything is included in Care by Volvo, while it is available to a cost for the other cars, *see Table 25.* The fact that Care by Volvo is an all-inclusive private leasing model is also mentioned in the semi-structured interviews as one of three unique characteristics of the concept. However, Volvo V90 with Care by Volvo does not differ so much from the other cars in terms of available services, but what differs Volvo V90 with Care by Volvo from the other cars is the pick and leave service (which is also available with Volvo private leasing), the extra car via Sunfleet and the Hertz discount. Something else that differs Care by Volvo from the competitors is that it has a more *careful* strategy towards sub mileage and over mileage than the competitors, *see Table 21.* For all other benchmarked cars, the sub mileage and the over mileage is valid when the actual driven distance differs from what is stated in the contract. In the case of Care by Volvo, there is a range of 3 000 kilometers less than the contract and 3 000 kilometers over the contract before sub mileage and over mileage is applied. Hence, subscribing to a Care by Volvo, a customer can be more *carefree*, compared to when private leasing another car. However, it can be discussed how *care* it is to not pay sub mileage to the customers who drive less than what is stated in the contract, but not so short that the sub mileage is repaid. Furthermore, other unique characteristics of Care by Volvo mentioned in the semi-structured interviews are that one can order the car online and that the price is pre-negotiated.

Hence, for Volvo V90 with Care by Volvo to further differentiate in the market, some extra value adding activities could preferably be added. This because adding services to a product increases the differentiation (Pistoni & Songini, 2017). Since Volvo V90 with Care by Volvo already possess many order qualifiers in terms of the safety systems, a preferable focus could be to further add order winners in terms of services and value adding activities. This will be further analysed in *Research Question 3.*

5.2.4 Analysis of Volvo XC40, Volvo V60 & Volvo V90

Based on the above *Analysis* of the three Care by Volvo cars, there are two services which are only included in Care by Volvo and not available for the other cars. Hence, what differs Care by Volvo from all the other benchmarked cars, for XC40, V60 and V90 in terms of services are that the customers get ten free trips with Sunfleet and 20 percent discount on Hertz every year. An interesting finding is that very few of the respondents are aware of those two services. More specifically, only 13 percent of the respondents are aware of the ten free trips with Sunfleet and only 11 percent are aware of the discount at Hertz, *see Table 40.* Hence, these two services are the ones that the least number of respondents are aware of, among all services included in Care by Volvo. Hence, it is logical that customers and potential customers do not understand what is unique with Care by Volvo and how the concept differs from private leasing a car. Furthermore, these two services are both connected to mobility. During the semi- structured interviews, it was found that two of the respondents mentioned mobility as a very important aspect of Care by Volvo. An interesting finding is that mobility is very important for the respondents. Hence, the main reasons for why the respondents who have a car, do have a car is connected to mobility. More specifically, *"I have a car to take me from A-B"* has an average of 4,48 of 5 and *"I have a car because it facilitates my everyday life"* has an average of 4,62 of 5, *see Table 31.* When the respondents who do not have a car answered the question why they want to have a car, the average was 4,6 of 5 for *"I want to have a car to take me from A-B"* and 4,25 of 5 for *"I want to have a car because it can facilitate my everyday life", see Table 32.* Due to the high averages regarding mobility solutions, mobility can be seen as a very important reason to why the respondents have a car or want to have a car. Based on the fact that few respondents are aware of the mobility solution of Care by Volvo, in combination with that most of the respondents have or want to have a car because of the mobility, these findings are important for Care by Volvo to use. Based on this, Care by Volvo differentiates in the market with two relevant services. However, as long as this is not clearly communicated, the differentiation will be limited.

5.3 Research Question 3

What type of service could be added to Care by Volvo in order to increase the customer value?

5.3.1 Categories of Service Mix

In order to answer this *Research Question,* the first step is to state where Care by Volvo is today, in terms of products and services. Hence, the *"Categories of service mix"* is a useful model for this. The model consists of five different categories, with an increasing percentage of services, and a decreasing percentage of products (Kotler & Keller, 2016). In order for the authors to analyze where Care by Volvo is today, these five different categories have been divided into percentage where one describes how big part product versus services are in each category. Hence, it can be assumed that category one consists of most products and category five consist of least products. *See Table 47* below.

Category of service mix	Percentage product	Percentage service
Pure tangible product	100% to 80%	0% to 20%
Tangible products with services	79% to 60%	21% to 40%
Hybrid	59% to 40%	41% to 60%
Major services with minor products and services	39% to 20%	61% to 80%
Pure services	19% to 0%	81% to 100%

Table 47 Category of service mix (Kotler & Keller, 2016) revised by the authors where percentage of products and services have been added

Based on the answers from the semi-structured interviews, about where Care by Volvo is today, in terms of products and services, the average was 68,75 percent product and 31,25 percent service. Based on this, Care by Volvo is currently at the second category, *"Tangible products with services"*. It was also found that the team-members of Care by Volvo wanted the concept to be further focused towards services, "tomorrow". The average corresponded to 18,75 percent product and 81,25 percent service. Hence, Care by Volvo "tomorrow" can be placed in category five of the service mix, *"Pure services"*. However, according the four characteristics of service (Tehter, 2014) it is not possible to place Care by Volvo in stage five, because the concept is not only *intangible, inseparable, perishable and heterogeneous*, because the car, i.e. a tangible product will always be an important part of Care by Volvo. Hence, Care by Volvo "tomorrow" will be placed in category four, *"Major services with minor products and services"*.

In order to evolve from category two, *"Tangible products with services"* to category four *"Major services with minor products and services"*, a car manufacturer can servitize its offering more. Hence, adding more services can help Care by Volvo to increase the customer value. However, it is important to add services that the customers demand (Ravald & Grönroos, 1996). Further, the customer value can be increased if the company provides customers with services that the customer previously conducted themselves (Pistoni & Songini, 2017).

5.3.2 The Evolution of Servitization

According to the classic theory about servitization which was presented by Vandermerwe & Rada in 1988, servitization consist of three stages, *see Figure 3.* However, the model is old, and the authors found that the third stage of the model was no longer sufficient in order to describe the servitization of Care by Volvo. Hence, it was necessary to add a fourth stage, in order to adapt the model to where Care by Volvo is today. *See Figure 8* below, where the three first stages are based on Vandermerwe & Rada´s (1988) model, and the fourth stage is modified by the authors. The reason for why stage three is not always sufficient in order to explain servitization in Care by Volvo, is because *"Self-service"*, can today be replaced with *"Services provided by someone else",* even though many services are still in the "*Self-service"* category. One concrete example of where *"Self-service"* has been replaced by *"Services provided by someone else"* in Care by Volvo, is the pick and leave service, where someone picks up the car and take it to service, and then drives back the car. This was previously conducted by the person, i.e. *"Self-service"*. In-car Delivery is another concrete example of a service that was previously conducted by the person, i.e. *"Self-service"*, but which has now been replaced by *"Services* *provided by someone else"* because someone else leaves food and other things in the trunk of the car. Hence, the Care by Volvo customers does not need to do shopping, i.e. *"Self-service",* but can utilize *"Services provided by someone else"* instead. Finally, instead of replacing *"Self-service"* with *"Services provided by someone else"*, the authors have added the latter to the model, to correspond to the previous structure of the model where components of the service offering have been added, instead of removed. *See Figure 3* in the *Theoretical Framework* and *Figure 8* in the *Analysis* for the revised version of the model.

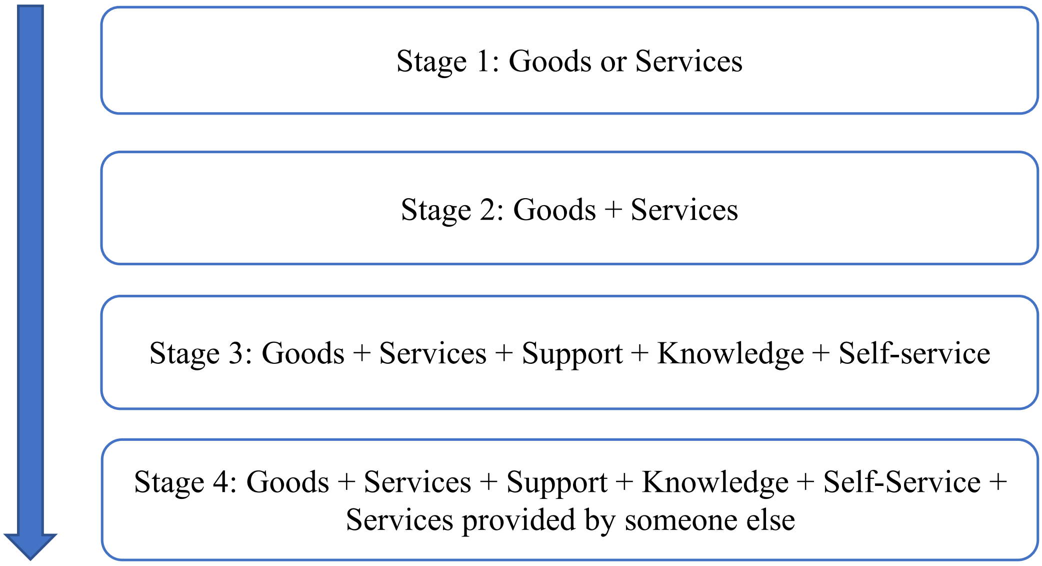

Figure 8 Revised version of the authors based on Vandermerves & Radas "The evolution of servitization" from 1988

5.3.3 Assessing Subscription Attractiveness for Consumers

In order to increase the customer value of Care by Volvo, other *"Services provided by someone else"* can be added to the subscription model. There is another framework, "*Assessing subscription attractiveness for consumers"*, where value adding is one of two main factors to take into consideration. In order to assess how attractive customers find subscription, compared to a one-off transaction i.e. buying a product, two perspectives need to be considered. Hence, this framework assesses how attractive it is for a customer to subscribe to a car, compared to buying a car, on the country to the benchmark where a subscription model, Care by Volvo was compared to other leasing models. The first perspective is about the total price of the subscription compared to a one-off transaction, i.e. when buying buy the same product. The second perspective is about what extra value the subscription adds, compared to the one-off transaction of the same product (ING Economics Department, 2018). These perspectives are combined into a framework, *see Figure 5* in the *Theoretical Framework.* In *Table 48* and *Table 49* below, Care by Volvo has been evaluated based on price and added values of a subscription model.

5.3.3.1 Durable Goods Subscription and Price

Phase of customer journey	Factor	Drives costs and price down	Drives costs and price up
Acquire	1.No upfront investment	***Potentially larger customer base, economics of scale:*** A Care by Volvo does not require an upfront investment. Instead a monthly payment are used, hence Care by Volvo can attract more customers, who cannot afford to buy a new car.	***Adverse selection: might attract customers that are not creditworthy thus higher risk costs:*** A prerequisite for subscribing to a Care by Volvo is that the customer is creditworthy (CarebyVolvo, 2018)
Use	2.Maintenance	***Supplier can ensure proper preventative maintenance thereby reducing breakdown risk: lower risk costs:*** Service is included in Care by Volvo. Available pick and leave service.	
Use	3.Repair	***Supplier can negotiate better rates with maintenance companies than individual consumers (scale advantages), lower maintenance costs:*** Service is included in Care by Volvo. Available pick and leave service.	***Moral hazard: Consumers might not be as cautious with products they do not own, thereby increasing breakdown risk: higher risk costs:*** Obligations of how to treat the Care by Volvo is presented in the terms and conditions (CarebyVolvo, 2018).
End of usage	4. Sell	***Supplier can extract more value of the residual product than consumer: lower depreciation costs, through better access to/negotiation skills in the second-hand market:*** When the subscription period is ended, the car should be returned to Volvo.	***Moral hazard: Consumers might not be as cautious with products they do not own, thereby increasing breakdown risk: higher risk costs:*** Obligations of how to treat the Care by Volvo is presented in the terms and conditions (CarebyVolvo, 2018).
End of usage	5. Reuse	***More users per product → lower cost per user:*** Today, it is not yet decided what to do with the already used Care by Volvo cars.	Higher costs for refurbishment and logistics

Table 48 Revised table by authors by applying Care by Volvo (see Table 1)

Regarding factors affecting the price, when subscribing to a Care by Volvo one does not need an upfront investment, which drives costs and price down. Since there are some prerequisites for being able to subscribe to a Care by Volvo car, it can be assumed that the risk for adverse selection decreases. Hence, since no upfront investment is needed it, can be assumed that this drives costs and price down more than what adverse selection drives costs and price up. However, it is important to take into consideration that the monthly payments during the whole subscription period will be high. To read more in detail about the numbers, *see Benchmark Table 8, 10, 14, 16, 20* and *22*. To summarize the result from these, it can be seen that Volvo XC40 Momentum with Care by Volvo is 33 percent cheaper than buying the same car. Volvo V60 Momentum with Care by Volvo is 30 percent cheaper than buying the same car and Volvo V90 Momentum with Care by Volvo is 31 percent cheaper than buying the same car. However, it is important to keep in mind that one can sell a car that one own and therefore decrease the total price. A Care by Volvo will only be returned to Volvo. When owning a car, costs can come up during the years, while correspondingly everything is included in Care by Volvo. Hence, it is hard to say what will be the best alternative for each customer. However, one factor that customers highly value with subscription, compared to a one-off transaction is the possibility to have an up to date and modern product and to not pay a high purchase price. Furthermore, no risk of maintenance or repair cost is also something that is highly valued by customers (ING Economics Department, 2018). Maintenance is included in Care by Volvo and therefore, this service is highly valued. Hence, the price for maintenance for the customer is lower when subscribing to a Care by Volvo compared to when owning a car. Included maintenance drives costs and price down. In terms if repair, it is also included in Care by Volvo and therefore, it drives costs and price down. However, moral hazard can occur when the customers do not own the car. To limit this, Care by Volvo has some obligations that the customer need to follow. Hence, this can decrease moral hazard and it can be assumed that when repair is included, this drives costs and price down, more than up. Furthermore, when it is time for end of usage, a Care by Volvo customer hands back the car to Volvo and thereafter it is up to Volvo to decide what they want to do with the car. Hence, the customer does not have to sell it in the second-hand market. To limit the moral hazard, that customers do not take *care* of their products, there are some terms and conditions that need to be followed. Finally, reuse is the last stage of the customer journey. Today, it is not yet decided what should happen with the already used Care by Volvo cars. However, for the customer, it does not matter because the subscription period is over. Hence, it is hard to say if this either drives costs and price down or up for the customer. For Volvo, it can be seen as valuable to get back the cars after the subscription period, because the cars are still relatively new.

Based on this *Analysis* about factors driving costs and price down and factors driving costs and price up, in different phases of the customer journey, it can be seen that factor 1, 2 and 3 rather drives costs and price down than up. Regarding factor 4, it is out of the scope of this thesis to investigate if a customer would benefit from selling a three-year-old car in the market, or subscribing to a Care by Volvo which is returned to Volvo. Regarding factor 5, the customer will not be directly affected by this and this is also out of the scope of this thesis to calculate on. Based on that three factors rather drives costs and price down for Care by Volvo compared to buying the same car, and that two of the factors are hard to fully investigate for the authors, due to lack of time and information, Care by Volvo should be placed in the right side of the framework, on the horizontal axis, when price and cost is evaluated, *see Figure 9.* This because the total price of subscription compared to one-off transaction is lower, based on the analysed parts of the customer journey. Before being able to clearly place Care by Volvo in one of the four boxes in the framework, value adding activities need to be evaluated as well. *See Table 49.*

5.3.3.2 Durable Goods Subscription and Added Value

Phase of customer journey	Issue	Added value of subscription model
Acquire	6. Too high upfront investment	***Small periodic payments allowed:*** A customer pays a monthly fee for a Care by Volvo.
Acquire	7. I do not like buying new products and then throwing them away	***The product lifetime can be optimized, when there is a focus on take-back and reuse:*** After the subscription period of 24 or 36 months, Volvo takes back the Care by Volvo car.
Use	8. I want to use my product immediately without hassle	***Ready to use product:*** The car cannot be used immediately, because it needs to be built first. However, it is possible to use the services that are included in Care by Volvo before the actual car is delivered.
Use	9. I want my product to work properly, without having to plan and conduct maintenance	***Proactive maintenance is offered:*** Service is included in Care by Volvo. Available pick and leave service.
Use	10. If my product breaks down, I face high costs	***Repair/replacement is offered without extra cost:*** This is included in Care by Volvo.
End of usage	11. I am afraid to get a bad price in the second-hand market	***Supplier accept burden of risk and incorporates residual value in subscription price:*** In the end of usage, the customer gives back the Care by Volvo car to Volvo.
End of usage	12. I want to get rid of the product easily	***The company collected the product after use:*** In the end of usage, the customer gives back the Care by Volvo car to Volvo.
End of usage	13. I only need the product temporarily	***Consumer pays only for agreed subscription period:*** In Care by Volvo, the subscription period is 24 or 36 months.

Table 49 Revised table by authors by applying Care by Volvo (see Table 2)

It is important to keep in mind that added value differs from offering to offering. It can for example consist of extra services, extra convenience, a reduction in transaction costs, the ability to get the latest model and the flexibility to up-/downgrade (ING Economics Department, 2018). Regarding factors affecting the added value of Care by Volvo, there is an added value with a subscription model compared to when buying a car, because of the monthly payments and this makes it possible for customers to get access to a new car. The possible issue with a too high upfront investment is vanished. Since Care by Volvo has a national price, the customers do not have to negotiate with a dealer about the price. The respondents of the survey seem to prefer a pre-negotiated price over negotiating with a dealer, *see Table 37.* Hence, this can be seen as value adding for customers who prefer a pre-negotiated price, because of the extra convenience. Furthermore, regarding the issue that customers do not like to buy a product and then throw it away, this issue is solved by Care by Volvo because the customer returns the car after the subscription period. Hence, this can be seen as a value adding activity. Regarding usage, and the fact that customers would like to use a car immediately, Care by Volvo has a solution to this. When ordering a Care by Volvo car, it will take a while before the car is delivered. In the meanwhile, the customer can use services connected to Care by Volvo. Hence, the customer get access to the offering, not the product per se, earlier, which is value adding. Since a Care by Volvo car is ordered online, it can be assumed that it is a convenient ordering process. However, 50 percent of the respondents of the survey would not feel safe ordering their car online and 50 percent would feel safe ordering their car online, *see Diagram 7.* Younger respondents feel safer than older respondents to a larger extent, to order their car online, *see Table 35.* Hence, for the respondents who feel safe ordering their car online, this can be seen as a value adding activity. To make the activity of ordering a car online more attractive for more customers, it can be seen that 34 percent of the respondents who do not feel safe order online, would feel safe order the car online if they could get telephone assistance, *see Table 36.* Hence, to have a better telephone service would be a value adding activity. Furthermore, proactive maintenance is offered in Care by Volvo and therefore, the product should work well. This can be seen as value adding to the customers. However, when buying a completely new car, it can be assumed that the car will work fine as well and therefore, it can be hard to say that a Care by Volvo should work better than when buying the same car. On the other hand, when it is time for service, a Care by Volvo customer can use the pick and leave service, which can be seen as a value adding activity because it saves time for the customers. Since Care by Volvo take *care* of "everything else", it can be seen as value adding for the customers, compared to when owning the car and one need to pay for repair and replacement. In the end of usage, the customer returns the Care by Volvo car to Volvo and hence does not need to sell it in the second-hand market and risk getting a bad price. This can be seen as value adding for the Care by Volvo customers because of the extra convenience. Finally, for a customer who only need the product temporarily, Care by Volvo can add value because one subscribes for 24 or 36 months. In the results from the survey, it can be seen that many of the respondents would not be willing to be tied to a subscription for 36 months, *see Diagram 8.* Furthermore, there is a correlation of 0,19 between age and for how long time the respondents would be willing to be tied to a subscription, *see Diagram 12* and *Table 46.* Hence, the younger the respondent is, the shorter time would that respondent be willing to be tied to a subscription. Hence, to be tied for a longer subscription period than one prefers does not create value for the customers. When owning your own car, one can sell the car earlier.

There is an added value of Care by Volvo compared to buying the same car due to the monthly payments, and that a Care by Volvo customer can return the car after the subscription period is over, which is issue 6 and 7. Furthermore, issue 8 is also solved by Care by Volvo and hence, this can be seen as value adding as well. However, to order the car online does not have to be a value adding activity for some customers, hence issue 8 can be seen as both value adding and not. Regarding issue 9, it can be assumed that it does not add extra value for a Care by Volvo car to have proactive maintenance compared to when buying a car, because the cars are all new. Furthermore, issue 10 has a value adding solution and the customer does not have to worry about issue 11, 12 and 13 which can be seen as value adding. Based on this, it can be seen that six of these eight factors add value to Care by Volvo, compared to when buying the same car. Hence, based on the *Analysis* of the added value, it can be seen that Care by Volvo should be placed on the upper side of the framework, on the vertical axis because the added value of a subscription model, Care by Volvo is higher compared to a one-off transaction, *see Figure 9.*

Now, when costs and price and added value have been taken into consideration, Care by Volvo can be placed in the right-hand side, upper box, namely *"Attractive".* The characteristic for this box is that the total price of subscription compared to one-off transactions is lower, in combination with added value of subscription compared to one-off transaction is higher. Based on this *Analysis* of the current situation of Care by Volvo, it can be said that it is attractive. The respondents rank the attractiveness of subscribing to a Care by Volvo car to 3,0 of 5, *see Table 44.* Hence, there is an area of improvement for Care by Volvo to increase the attractiveness of the offering and make it more attractive to more customers. It is important to renew and improve. Therefore, the next step of this *Analysis* will investigate how to further improve the value adding activities of Care by Volvo, in order to make the subscription even more attractive.

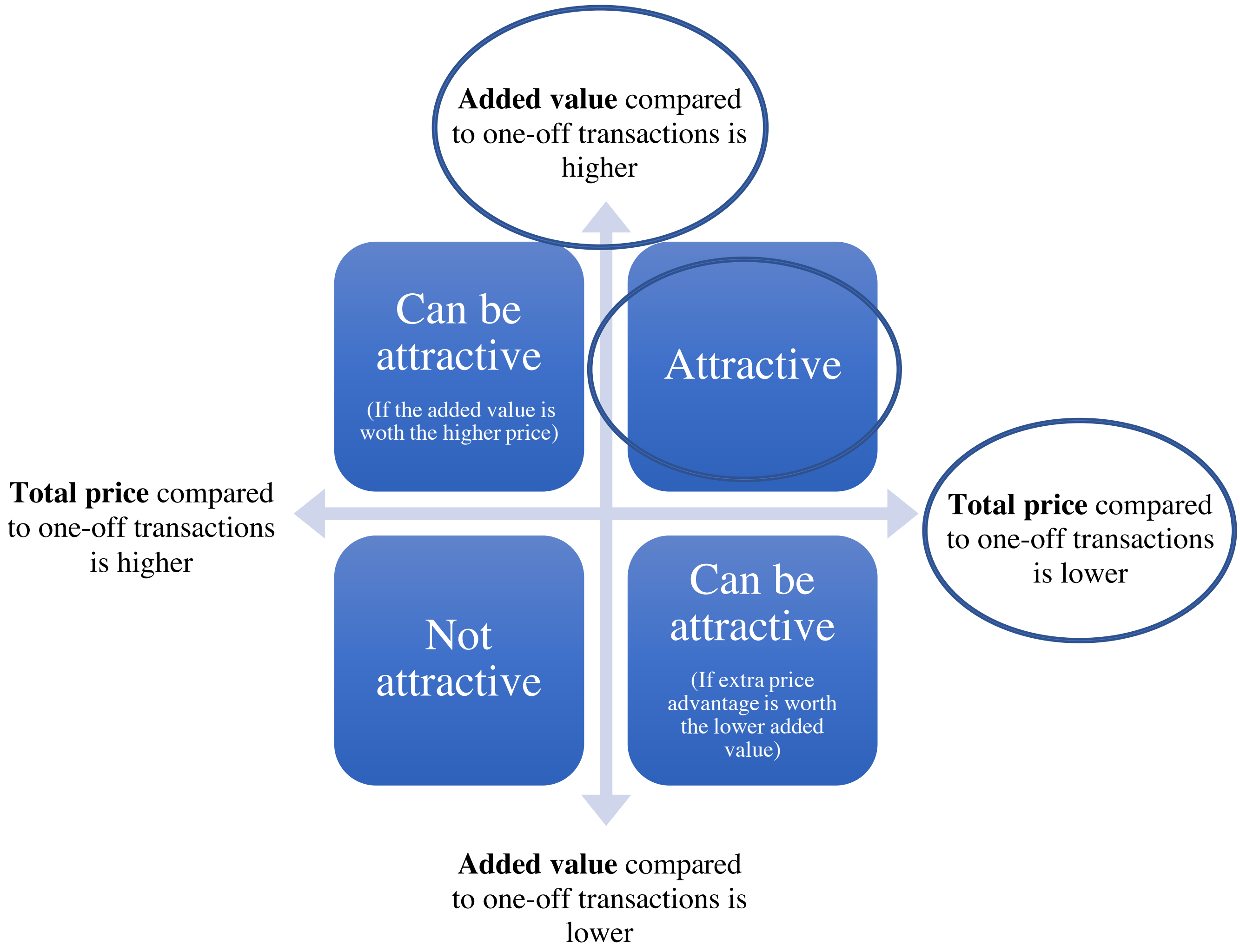

Figure 9 Revised figure by authors by applying Care by Volvo (See figure 5)

A customer can evaluate a specific offering different over time and one customer does not have to perceive an offering in the same way as another customer (Ravald & Grönroos, 1996). Hence, even though Care by Volvo is assessed as an attractive offering in the framework above, it is important to think about how the added value for the customers can be increased. This is especially important now in the beginning, since it is not yet completely clear which are the main customers of Care by Volvo. Perceived value is *"The ratio of perceived benefits relative to perceived sacrifice"* (Ravald & Grönroos, 1996). For Care by Volvo, the perceived benefits can be translated into added value or to increase the convenience of the offering. The perceived sacrifice can be translated to price. Hence, the added value can differ between different customers and it can also differ during the time. It is important to remember that customers are usually more sensitive to an increased sacrifice than to a gained benefit. Hence, increasing both the added value and the price can therefore have a negative effect on the perception of the whole offering. Furthermore, it can be seen that respondents with higher incomes spend more money on their car each month, with a positive correlation of 0,34, *see Table 46* and *Diagram 11.* It can be assumed that the perceived sacrifice in terms of price is lower for a person with higher income, and that the perceived sacrifice for a person with a lower income can be perceived as higher. Based on this, it is important for Care by Volvo to constantly increase the added value of the offering, in order to attract as many customers as possible. Based on the extended framework above about *"The evolution of servitization"*, the authors found that *"Services provided by someone else"* is a very important aspect of servitization today. From the semi-structured interviews, it was found that all four respondents thought that flexibility is a very important aspect of Care by Volvo. Hence, those two aspects, *"Services provided by someone else"* and flexibility need to be taken into consideration when adding services to Care by Volvo, with the purpose of increasing the value for the customers and to evolve from category two, *"Tangible products with services"* to category four *"Major services with minor products and services".* The value for the customers can be increased when a company satisfies the entire, or a major part of the customer's needs, which can be connected to the products and services provided by the company (Ravald & Grönroos, 1996). Hence, the customer loyalty can be increased when the right services are added. Based on the *Analysis* above and the result from the survey a few specific services to add to Care by Volvo have been identified. Before presenting the services, some prerequisites that have been used to evaluate what services to add to Care by Volvo are presented below.

5.3.4 Adding Services to Care by Volvo

In the below sections, the authors will evaluate and discuss four different services that could be added to Care by Volvo, to increase the customer value. Before presenting the services, some prerequisites will be discussed.

5.3.4.1 Prerequisites for Evaluating New Services

The prerequisites are all based on the previous findings in this thesis and are all in line with both how a car manufacturer can servitize its offering and also in line with the unique characteristics of Care by Volvo. The first prerequisite is that the services should be either *"Self-service"* or *"Services provided by someone else",* or a combination of both. The motivation to why these are important to evaluate is that these are components of *"The Evolution of Servitization"*, in the third and fourth stages, i.e. the servitization stages. Furthermore, the services should add value to the customers of Care by Volvo by being convenient. These are connected to a perceived benefit of the offering, which is an important aspect. Price, corresponding to perceived sacrifice, needs to be taken into consideration as well, because for the customers, added value and price is always a trade-off (ING Economics Department, 2018). An increased flexibility is also an important aspect to take into consideration when adding services to Care by Volvo. The chief reason for this is because flexibility was mentioned as very important during the semi-structured interviews. Finally, based on Volvo´s strategy *"By 2025, our customers should get back one week of time per year, through our products and services"* (Volvocars, 2018c), the services added to Care by Volvo should be in line with this, and hence save time for the customers. Furthermore, all the below mentioned services can be connected to *"The use phase"* of *"The customer journey", see Table 48* and *Table 49*. *"The use phase"* is the longest phase of *"The customer journey"* and therefore most value can be created in this one. This is the motivation behind why the authors decided to only focus on adding services in this phase. Furthermore, all below mentioned services seek to provide the customers of Care by Volvo with extra value, compared to buying a car. It also seeks to further differentiate Care by Volvo from other leasing models because it was found that there are not so many differences in the benchmark, which was investigated in *Research Question 2*. Furthermore, servitization enables for manufacturers to create more customized solutions and hence please the customers (Martín- Peña, Díaz- Garrido & Sánchez- López, 2018). Hence, the services presented below will help Care by Volvo to make their offering even more customized. The services will also be examples of how a car manufacturer can servitize its offering. All services that are presented below will be analysed from the different prerequisites. However, the services are only analysed from a strategic point of view, and hence, a cost analysis and a technical perspective are both out of the scope of this thesis. The services are initial strategic suggestions for what to add to Care by Volvo, in order to increase the customer value.

5.3.4.2 Out-car Delivery

Out-car Delivery is connected to stage four in *Figure 8*, *"Services provided by someone else"*. This service means that a Care by Volvo customer can leave a product that he or she want to return in the trunk of the car, and a company will during the day come and pick up and return the product. Hence, Out-car Delivery is an extension of a *"Self-service",* where people had to return the products themselves. Since someone else can provide this service for the Care by Volvo customers, it can be seen as a very convenient service and hence add value. An added value also increases the perceived benefit for the customers. Furthermore, Out-car Delivery can be connected to an increased flexibility as well, because since this service aims to save time for the customer, the everyday life can be more flexible. When asking the respondents in the survey what they would like to add to Care by Volvo or private leasing models, the average response for adding Out-car Delivery to Care by Volvo was 2,9 of 5, *see Table 43,* which shows that there is an interest in this service. When comparing the interest for Out-car Delivery with how time consuming the respondents think it is to return products, there is a correlation of 0,25, *see Table 46* and *Diagram 15.* This shows that there is a positive relation between the variables. Hence, to add Out-car Delivery to Care by Volvo can make the life of the Care by Volvo customers more flexible and convenient by saving time for them. With an increasing trend towards online shopping, it can be assumed that returning products will be become even more time-consuming in the future. Hence, this can be seen as a possible delight for the Care by Volvo customers, because it is hard to evaluate how pleased they will be with this service now, before using it. Hence, for customers who do not perceive Out-car Delivery as a value adding activity today, might change opinion “tomorrow” and therefore, it can be a suitable service to add to increase the *care.* Furthermore, since this is a new service, it can be assumed that it is hard for the customers to fully understand it. Hence, it can be a good idea to for example give the customer the opportunity to try Out-car Delivery for free once, in order for them to experience how convenient this service is. It can be assumed that it is especially suitable for a service that is perceived to be a delight, to invite the customers to try it, because the service needs to be tried, before really feeling the value of it.

Furthermore, to increase the benefit and reduce the sacrifice, a suitable way for making this service is to use “pay per use”. Hence, customers who are not interested in this service does not need to pay anything extra, and for the customers who perceive this as a valuable service, the added value is probably higher than the price, i.e sacrifice. Furthermore, a reduced sacrifice is not only a reduced price, but can also be a more convenient service. Hence, a more convenient everyday life, with Out-car Delivery can probably make the perceived benefit higher than the perceived sacrifice.

Out-car Delivery is the opposite to the existing In-car Delivery. From the survey, it was found that the respondents rank grocery shopping as relatively time consuming, namely 2,8 of 5, *see Table 33.* Hence, to further develop In-car Delivery could be a suitable service to add. This could help to evolve from *“Self-services”* and increase *“Services provided by someone else”* and alike Out-car Delivery, In-car Delivery is a flexible service, that takes extra *care* of the customers. Both these services help the customer of Care by Volvo to safe time, which is in line with Volvo Cars strategy in 2025, namely *"By 2025, our customers should get back one week of time per year, through our products and services"* (Volvocars, 2018c).

The easiest way of performing these kinds of services is by collaborating with a third party. By doing this, Care by Volvo will not need to change their capabilities but can instead use abilities from other companies in order to succeed. Hence, the second prerequisite to succeed with servitization, namely that a company need to have the right capabilities and competences, can be facilitated (Pistoni & Songini, 2017). Furthermore, this is in line with the definition of servitization used in this thesis, namely *"The innovation of an organization's capabilities and processes to shift from selling products to selling integrated products and services that deliver value in use"* (Baines et al., 2009a, p.547). However, since Care by Volvo can collaborate with a third party, the capabilities from that company can be used instead of changing the own capabilities, and still deliver value in use to the customers. Here, it is very important for Care by Volvo to find suitable companies to collaborate with and that these companies provide high quality services. Otherwise, there is a risk that Care by Volvo and more specifically the brand and reputation of Volvo Car can be damaged.

5.3.4.3 Better Payment Solution When Parking

A second service that has been identified as a possibility to add to Care by Volvo to increase the customer value is a better payment solution when parking. When asking the respondents in the survey what they would like to add to Care by Volvo or private leasing models, the average response was 3,7 of 5, for adding a better payment solution. This shows that there is an interest in adding this type of service to Care by Volvo, *see Table 43.* Furthermore, respondents in different ages are interested in this service. However, there is a positive correlation of 0,23, meaning that there is a relation between age and willingness to add a better payment solution to Care by Volvo, *see Diagram 20* and *Table 46.* This type of service can be connected to a *"Self-service",* which corresponds to the third stage in the *"Evolution of Servitization".* This service cannot be connected to a *"Service provided by someone else"* because the customer of Care by Volvo still need to pay the parking in some way. Preferably, this kind of solution could be integrated into the Volvo on Call app, which could enable an easy use. Hence, this can increase the convenience for the Care by Volvo customers, by being integrated into the app, instead of using another app or pay the parking fee in a machine. The convenience of having a better payment solution integrated in the Volvo on Call app can then increase the perceived benefit for the customers. The perceived sacrifice, meaning the price for the specific parking lot can remain the same. Because of the relationship between perceived benefit and perceived sacrifice, the value for the customer can increase when the perceived benefit is increased, while the perceived sacrifice remains the same (Ravald & Grönroos, 1996).

When integrating a better payment solution into the Volvo on Call app, it can be assumed that the customers will perceive an increased flexibility, because of the convenience the app brings. Further, the Care by Volvo customer can also save some time by having a convenient app, when parking. Even though the time the customer will save each time is rather limited, it can be assumed that a Care by Volvo customer who use the car often, eventually will save some time. Hence, this is in line with the overall strategy of Volvo Car for 2025. It can be suggested that this service should be integrated into the Volvo on Call app, but that the customers themselves can decide if they want to use it or not. By doing so, the value for the customers who would like to use the service will increase, while the customers who do not want to try this new service do not have to use it. However, it is important to remember that the customers might already have a parking app or similar, which they are pleased with. Therefore, it is important that this app should be even better than the ones in the market today.

5.3.4.4 Free Car Wash

Thirdly, when asking the respondents in the survey what they would like to add to Care by Volvo or private leasing models, an average of 3,3 of 5 wanted to add free car wash once a month, *see Table 43.* Furthermore, there is a positive correlation corresponding to 0,26 between age and willingness to add free Car wash to Care by Volvo, *see Table 46* and *Diagram 19.* This service is connected to a *"Self-service",* meaning that the customer still has to provide the service themselves. Hence, adding a free car wash to Care by Volvo is not connected to *"Service provided by someone else".* However, it can be assumed that having a free car wash each month can increase the convenience for the Care by Volvo customers. The chief reasons for this is that the customers do not have to pay for this service every time they use it, and that they will have a clean car most of the time. Alike the previous service, this could be integrated into the Volvo on Call app, or to the Volvo card. Hence, by being a Care by Volvo customer, one does not need to pay for having a car wash but can instead use the app or the card. Furthermore, the flexibility is not affected by this service, but it brings value for other reasons, such as the ones mentioned above. The reasons for why the flexibility is not affected in a positive way is because it is very important to have a good collaboration with the third parties, in this case for example gas stations. Hence, it can be assumed that for some customers, the gas station that they usually use when washing the car, might not be included in this service, and hence, this is not as flexible as it could be if all gas stations was included. The same reasoning is for if the customer saves time with help from this service or not. Since the wash for the Care by Volvo customers is not quicker than for others, this does not save time. However, by adding a free car wash every month, it can be assumed that the customers will take more *care* of their cars, which is good for Volvo when the cars will be handed back in the end of the subscription period. Finally, in order to finance this service, it can be assumed that the monthly cost for the customers must be slightly increased. In this case, it is important to remember that an increased sacrifice is perceived more than a perceived benefit, by the customers (Ravald & Grönroos, 1996). Therefore, it is important to collaborate with a third party, and to negotiate a good deal, in order to keep the extra price for the customers as low as possible. Otherwise, there is a risk that the perceived sacrifice, i.e. the increased price will be perceived as to high for the added value it brings.

5.3.4.5 Extra Products On Demand

Lastly, an average of 3 of 5 of the respondents would like to add extra products on demand to Care by Volvo, meaning that the respondents find it attractive to have access to products on demand such as a roof box when going skiing, *see Table 43.* To add products on demand was also mentioned by two of the respondents in the semi-structured interviews as something suitable to add to Care by Volvo. This service could be connected to *"Service provided by someone else"* if a pick and leave service would be added to this service but it could also be seen as a *"Self-service"* if the Care by Volvo customer could pick up and install the product themselves.

A concrete example of that extra products on demand could be connected to a *"Service provided by someone else"* is that a Care by Volvo customer can order a product via the Volvo on Call app and someone else delivers the product to the car, and also install it in the car. This can be seen as very *care,* and it also adds value to the Care by Volvo customers by being convenient. Furthermore, the flexibility can be increased as well because it saves time for the customers. Moreover, from the survey it was found that there is a correlation of 0,55 of that flexibility is to add extra products on demand and the willingness of adding extra products on demand to a subscription or leasing model, *see Table 46* and *Diagram 14.*

If this service is instead a *"Self-service",* it would not be as *care* as in the example above. On the other hand, this solution would be cheaper and therefore, the perceived sacrifice would be lower compared to the example above. This service could also be seen as convenient for the customers because it is easy to order extra products on demand via the Volvo on Call app. A more convenient service can decrease the perceived sacrifice for the customers (Ravald & Grönroos, 1996). Furthermore, the flexibility could also increase since the customers get access to products instead of buying it. Further, it saves time for the customers since they do not need to buy it, or search for information about where to rent a roof-box or similar. It can be suggested that the Care by Volvo customers should only pay for this service when it is used. Hence, for the customers that do not demand any extra products, they do not need to use this service and hence does not need to pay for it. On the contrary, for the customers who demand extra services, it is available to for a small fee, or for a slightly higher fee if they want to use the pick and leave service as well.

5.3.4.6 Summary of Added Services

All the above mentioned services contribute to the journey of moving from category two *"Tangible products with services"* to category four *"Major services with minor products and services",* in *"Categories of Service Mix" see Figure 2.* All the added services can be seen as either order winners or possible delights. However, the customers need to use and evaluate the services before feeling that it is a delight to them. Since all these services are demanded by the respondents of the survey, it can be assumed that all of them increase the customer value when they are added to Care by Volvo. Hence, the added value of the subscription model will increase compared to when buying a car. Furthermore, the whole offering will further differentiate from the competitors in terms of services and value adding activities. For all the added services, it is important to keep in mind that there is always a trade-off between the perceived benefit, i.e. added value and the perceived sacrifice i.e. price. Hence, these two factors always need to be taken into consideration in order to provide the customers with an *"Attractive"* offering, *see Figure 9* and then trying to differentiate even more from the competitors. Finally, all the presented services and the reasoning behind these are concrete examples of how a car manufacturer can servitize its offering. Below, a summary of the prerequisites for the added services and the added services are presented. *See Table 50.*

Added Services	Self-Service	Services provided by someone else	Added value by being convenient	Increased flexibility	Save time for the customers
Out-car delivery		X	X	X	X
Better payment solutions when parking	X		X	X	X
Free car wash	X		X		
Extra products on-demand	X	X	X	X	X

Table 50 Prerequisites for the suggested added services to Care by Volvo

In *Table 50,* it can be seen that Out-car Delivery fulfills all prerequisites, except *"Self-service"*. Better payment solutions when parking fulfills all prerequisites except *"Services provided by someone else"*. Further, free car wash only fulfills *"Self-service"* and that it adds value by being convenient. However, it can still be seen as a relevant service to add because of the demand, seen in the survey. Finally, extra products on demand fulfills all of the prerequisites.

6. Conclusions

In this section, the Conclusion and findings based on the Research Questions are presented. The Conclusion is divided into three parts where each Research Question is concluded. Furthermore, recommendations to Care by Volvo and recommendations for future research is presented.

The main objective of this master thesis has been to investigate how a car manufacturer can servitize its offering. This was done by using three sub *Research Questions* where the first *Research Question* investigated how to make potential customers understand the whole offering of Care by Volvo. The second *Research Question* was related to the competitive market of Care by Volvo, and lastly, the third *Research Question* was concerned with examples of what types of services that could be added to Care by Volvo to increase the customer value. The main findings are summarized below.

6.1 Research Question 1

How can Care by Volvo solve the problem regarding that the potential customers do not completely understand the new concept and the added values?

From the *Analysis,* the authors can draw the conclusion that Volvo Cars fulfill several reasons to why an unsuccessful service delivery can occur. Hence, most of the respondents are not aware of most of the services included in Care by Volvo. However, Volvo Cars have successfully communicated that Care by Volvo is a car that one subscribes to. From this, it can be concluded that what is clearly communicated from Volvo Cars is what the customers and potential customers are aware of. Furthermore, based on the *Analysis,* the authors can conclude that the best way for Volvo Cars to succeed with their external communication is by creating a platform where e-word of mouth is used. By this, the three reasons for an unsuccessful service delivery dan be limited and hence, the understanding can be improved.

6.2 Research Question 2

How does Care by Volvo differentiate from their competitors?

Based on the *Analysis,* it can be concluded that Care by Volvo in all cases, together with Volvo private leasing have the most safety systems. It can also be concluded that the support systems do not differ between the benchmarked companies. In the benchmark, it was also found that a Care by Volvo car is never the most expensive car. Based on this together with the *Analysis,* it can be concluded that a Care by Volvo car do not differentiate in terms of price and product compared to the other benchmarked cars. However, Care by Volvo somehow differentiates from its competitors in terms of extra services, more specifically in terms of mobility services. However, the difference is limited.

6.3 Research Question 3

What type of services could be added to Care by Volvo in order to increase the customer value?

It can be concluded that Care by Volvo wants to move towards more servitization. The model *"The evolution of servitization"* has been revised and extended with a fourth stage, namely *"Goods + services + support + knowledge + self-service + services provided by someone else".* Lastly an assessment of subscription attractiveness for customers was conducted, and the conclusion of this is that Care by Volvo can be seen as an attractive offering. Finally, the authors have suggested that four different services should be added to Care by Volvo, in order to make the offering even more attractive, and to strive towards using more servitization. The suggested services are *Out-car Delivery, Better payment solutions when parking, free car-wash* and *extra products on demand.*

6.4 Future Research

The aim of this thesis has been to investigate how a car manufacturer can servitize its offering, based on a single case study of Care by Volvo. After finishing the investigation, the authors have identified some areas that could be further developed. This thesis is limited towards focusing on Volvo Car Sweden and the specific concept Care by Volvo in Sweden. Therefore, one suggestion for future research is to examining Care by Volvo worldwide and see how they differ between countries.

Another suggestion for future research is to include more case companies and more respondents from these companies in order to gain deeper understanding of how a car manufacturer can servitize its offering.

Due to limited time and resources, the authors have not been able to examine all possible combinations and correlations between the variables from the survey. Therefore, a third recommendation for future research it to further investigate the *Empirical Findings* from the survey, this could be done either by Volvo Cars or another researcher.

In this thesis, the authors have focused on Business-to-Consumer (B2C). Therefore, a recommendation for future research is to investigate how a car manufacturer can servitize in Business-to-Business.

6.5 Recommendations

6.5.1 Research Question 1

How can Care by Volvo solve the problem regarding that the potential customers do not completely understand the new concept and the added values?

With the *Analysis* and *Conclusion* as a foundation, the authors recommend that Care by Volvo needs to become more clear in their external communication of what they actually are offering. This can preferable be done by using visual communication where the most important services are highlighted. The authors also recommend to create a platform where e-word of mouth can be used through rates and reviews.

6.5.2 Research Question 2

How does Care by Volvo differentiate from their competitors?

Based on the analysis and the *Conclusion* it can be seen that the there are no big differences between Care by Volvo and their competitor. Therefore, the authors recommend that Care by Volvo should continue to further differentiate from their competitors by adding more services and other value adding activities.

6.5.3 Research Question 3

What type of services could be added to Care by Volvo in order to increase the customer value?

Based on the *Analysis* and *Conclusions,* the authors recommend that Care by Volvo should add more services. More specifically *Out-car Delivery, better payment solutions when parking, free car wash once a month* and lastly the opportunity to *add extra products on demand.*

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8. Appendix

8.1 Appendix 1: Interview Guide

Frågor från introduktionsdag

Introduktionsfrågor

1. Vilken position/roll i Care By Volvo har du?
2. Hur länge har du jobbat med Care By Volvo?
3. Vad vill ni uppnå med Care By Volvo?
4. (Vad är ditt professionella mål/ vad är Volvos mål med Care By Volvo?)

Care By Volvo

1. På hemsidan står det att Care By Volvo skall vara enkelt, smidigt, tryggt och bekymmersfritt bilägande. Vad innebär detta?
2. Vad är det som gör Care By Volvo unikt enligt dig?
3. Hur ser du på Care By Volvo konceptet? Abonnerar kunden på en produkt med en service som add-on eller abonnerar kunden på en service med en produkt som add-on?

1. Vilka utmaningar ser ni med Care By Volvo?
2. Strida mot nuvarande affärsmodell?
3. Vad anser du att ni ska göra med de bilar som återlämnas efter abonnering?
4. Hur definierar du abonnering?

Benchmark

1. Vilka anser ni är er huvudsakliga kunder?
2. Är ert mål att nå en speciell typ av kund eller alla?
3. Vilket eller vilka segment anser ni att ni verkar i?
4. Vilket eller vilka segment vill ni verka i?
5. Vilka konkurrenter anser ni att ni har?

Care By Volvo ur ett kundperspektiv

1. Vad menar ni med Care?

1. Varför tror du att kunderna väljer Care By Volvo?
2. Vad är största skillnaden för kunden mellan att leasa en bil versus abonnera en bil via Care By Volvo?

3. Vilken av tjänsterna som ingår i Care By Volvo konceptet skapar mest
4. Vilken typ av tjänst tror du kunderna skulle vilja addera till Care By Volvo?
5. Hur mäter ni kundnöjdhet?
6. Hur beskriver du kundlojalitet?

Avslutande fråga

1. Har du något mer att tillägga?

8.2 Appendix 2: Coding of the Semi-Structured Interviews

Assigned number and position of the respondent	Date	Length (Mins)	Channel
(1) Direct Sales Specialist	21 Feb	54	F2F
(2) Program Manager	23 Feb	49	F2F
(3) Direct Sales Manager	27 Feb	53	F2F
(4) Director Customer Experience and Retail	22 March	40	F2F

Table 51 Information about the semi-structured interviews

Theme 1: General characteristics of Care by Volvo

Aim of Care by Volvo	Theme 1: General characteristics of Care by Volvo
Respondent	Citations
CBV (1)	- To establish the concept in Sweden and show the company and the world that subscription works and that you no longer need to own things and that subscription might be the way forward. - Another goal is to increase the sale, that is our primary task right now. - The goal is to develop Care by Volvo. It is a new way of thinking, I think that Care by Volvo will be something else in the future. I believe that subscription will be the future way of buying a car.
CBV (2)	-It is strategically important to come closer to the customers. Previously, it has been more business to business and we sell cars to the consumers. In this case, Volvo stands for the direct contact with the consumers, in a different way than before. - The goal is also to create a product that will simplify for the customer or consumer. We want to make it simple and create safety for the customers.

CBV (3)	- The first goal is to drive sales with subscription to create long-term relations with customers and to be profitable in this model. - The second goal is to be a part of Volvo's strategy and to create new ways of car usage which should save time for our consumer. - The third is both a consequence and a focus, it is to have tighter relations with our users.
CBV (4)	- Specially to listen to the behaviours of the customers and adapt to that. We believe in the subscription form where one does not only buy a car, but a whole concept. - The two most important goals of mine is to reach customers who are not attracted by the traditional way of having a car and this is something that can be more attractive for women and younger customers, compared to traditional car owning. As young and newly employed, with an okey salary, it might be hard to save money to a large buffer, therefore, a monthly fee can be suitable.

Table 52 Theme 1: General characteristics of Care by Volvo

Challenges with Care by Volvo	Theme 1: General characteristics of Care by Volvo
Respondent	Citations
CBV (1)	- It is challenging, because we are standing on a new ground. There are no best practices to use, especially not in our industry. - Today, we only offer Care by Volvo to private consumers so an important step for us to take is to offer the concept to companies. The idea is that they are not as price sensitive and that they want everything pre-negotiated and ready. - We also want our dealers to be able to offer the concept in a simple way. - There have some some challenges, the customer have not really understood what they have bought and what Care by Volvo is and what is included.
CBV (2)	- To go from focusing on a car and product towards an aspect of how to address the customers and make this kind of process work creates different type of requirements. So this is a challenge, definitely. - One challenge is to really explain to the customers what the concept is about and what is unique with it. - Another challenge is that we are now consumer facing. - We believe that there is a quite low awareness of the possibility to order the product online and that there is a ripeness for the customer to feel safe in that. I think that there is a connection with the fact that the customers still see it as a product. Therefore it is an extra obstacle to order it online, compared with an a telephone subscription which one easily can turn on and off. - In theory, the concept could change Volvo's entire business model. - Other challenges for us is to think "subscription". It is a new area for us to have end-consumer contact and to think subscription.

CBV (3)	- The customers do not really understand what is included in Care by Volvo, they understand the monthly cost but they do not understand why it is so expensive. The price can be seen as an obstacle of subscribing, here we have not succeeded with explaining that these costs will come even if you own or lease your car. The difference is that the costs is not seen each month. Here we will have a great journey towards explaining and getting customers and potential customers to understand this. Everything we do is from a customer perspective. -It is a challenge to find the right differentiators, which differs from other offerings we have today. Challenges is a positive word, there are things to do and we can do it. That is what we need to do, to differentiate, to find a strongly differentiating aspect in the product, in that way, the price will be more worth. - The whole concept needs to be built on technical solutions, platforms and other functions and here we have a strong legacy, which makes it hard to convert fast. It would have been easier if we would have been a start up company without the legacy, and then we would have had another speed in the change process.
CBV (4)	- A challenge is to change the mindset. We are a large car company and internally, we need to focus more towards customers, customer insights, to think outside the box, to take *care* of the customers and to work with our sales channels in another way. - Another challenge is to make the customer aware of Care by Volvo. Most people know about Volvo, but how many know about Care by Volvo? To increase the knowledge about this is not that easy, so that is a challenge. - The external mindset, to understand what the difference between private leasing and Care by Volvo is and to explain this in an understandable way, which the customers really get.

Table 53 Theme 1: General characteristics of Care by Volvo

Unique characteristics of Care by Volvo	Theme 1: General characteristics of Care by Volvo
Respondent	Citations
CBV (1)	- It is pre-negotiated, you know the monthly cost and you can also feel safe knowing that whatever happens you will be assisted by Volvo and they will take *care* of the problem without any extra costs. For example if you get a flat tire or if you are in an accident, Volvo will send assistant. - If the customer at some point need a large or a smaller car, it is included in the subscription. - Another benefit is that you can start your subscription digitally, at the Volvo website, you do not have to go to a Volvo dealer for negotiation.
CBV (2)	- It is the mindset where we try to put the customers first, in all situations. We want to put the customers in centre.
CBV (3)	- We have enabled and created private leasing of a physical product, which we have made digital and to which we have added Sunfleet and Hertz. - Care by Volvo is the only all inclusive product where everything is pre-negotiated and that you can buy online.

CBV (4)	- It is important for the customers to feel safe and to know that they pay the same price, regardless of where they live or come from. To have a national price is important for us. Some can perceive that it takes time and is unpleasant to go to different dealers to compare price, one can feel insecure. Therefore, it is a safety with Care by Volvo. Since it is based online, it is very transparent. - The digital journey. We believe that there should be transparency and to have the possibility to start or end the journey digitally. - The purpose behind Care by Volvo is what makes it unique. It might be hard for the customers today to understand that, but we want to go from buying a car, to offer a complete service with *care*. That is the unique. We think this is more complete than leasing. - Many customers think that it is a convenient process. We have a customer consultation where we call the customer and I don't think everyone is aware of that, because we do not advertise that enough. It is a surprise for the customer that someone calls and go through the order. It is not always easy to build a car. - What the customers like is that it is convenient and that they get some extra *care*. They can be a bit insecure of what is actually included in Care by Volvo, but they feel safe because they bought a complete package. - Care by Volvo is more complete and more *care*. It is an easier arrangement for the customer and I definitely want the difference to increase. I want the customer to perceive that it is even more *care.*

Table 54 Theme 1: General characteristics of Care by Volvo

Customers of Care by Volvo	Theme 1: General characteristics of Care by Volvo
Respondent	Citations
CBV (1)	- Today, we cannot see that the customers have a lot in common in terms of age and occupation. We can see that they like the simplicity of ordering cars online.
CBV (2)	- In theory it could be people who need access to transportation. - Care by Volvo is for customers who are willing to pay for simplicity.
CBV (3)	- We have made it possible for our customers to subscribe on all of our car-models, therefore our cars attract different types of consumers, we have enables a digital opportunity and an opportunity to subscribe. - You can see it from three different angles. It can be that the consumer have chosen an XC90, which can be a trigger. The consumer might like the subscription alternative were everything is pre-negotiated an ready, which also can be a trigger. Lastly to buy online can be a trigger. These are three completely different customers, they can differ in age and living situation.
CBV (4)	-It is a challenge because the average age of buying a car is according to me, too high, on all brands. We want to have a balance between the genders in terms of ownership of our products. - We have always had the focus towards millennials, which means born in the 80s and younger. But Volvo is so big in Sweden so we cannot make this limitation. It will not work out then.

Table 55 Theme 1: General characteristics of Care by Volvo

Why Care by Volvo?	Theme 1: General characteristics of Care by Volvo
Respondent	Citations
CBV (1)	- It is simplicity of starting a subscription online, it is a fixed monthly cost and you always know the price. It is in that way very safe and simple. I believe that these are the main aspects that interests the customers. - The big difference between private leasing and Care by Volvo is that in the latter you get more value. So the products differ in some ways. In Care by Volvo you get much more but you also pay a higher price.
CBV (2)	-The whole negotiation process is avoided, this process can be frustrating and hard for the customer. - I also believe that the Volvo brand attracts customer and convince that the concept works.
CBV (3)	- The customer who have chosen Care by Volvo have done so because they feel safe, they know the price, they think that it is convenient to make the purchase from their own couch in peace and quiet and they have felt safe in that. - To be able to make the purchase when and where it suits is a strong argument. - I think that the fact that the customers know that the price is not negotiable and everyone pays the same price for a certain product is a strong argument. - It is pre-negotiated and ready and the customer knows that there will be no other costs when subscribing.

CBV (4)	- Compared to leasing, this is more complete and caring. With leasing, there is a guaranteed or non guaranteed rest value. If it is not guaranteed, one might be forced to pay a certain amount when the car is handed back to the company. - Compared with buying a car, I would say that one own the car in both cases, even it the customer hands in the car after the subscription time. One own the car, but in a different way compared to when buying a car.

Table 56 Theme 1: General characteristics of Care by Volvo

Customer loyalty of Care by Volvo	Theme 1: General characteristics of Care by Volvo
Respondent	Citations
CBV (1)	- It is about how satisfied a customer is with the product or service and the brand. If the customers are re-buying, it indicates loyalty. - It is important to create a "wow-feeling" for the customer, in order to create customer loyalty. It is important to work with the customers in order to create customer satisfaction during the whole journey. - We want the customers to be so satisfied with their subscription that they recreate it when the subscription time runs out. - We are working with more with lock ons, where it is free to leave whenever you want, but it should be "painful" to leave.
CBV (2)	- Customer loyalty for us is when the customer are loyal to the brand during a longer time period. There should also be a connection to the fact that we make money and how these two factors can be connected. - It is too early to see if a customer re-buys a subscription. A way for us to measure customer loyalty is to measure how they use the services for example if they use the service of an extra car. - The customer should strive towards becoming a loyal customer and Volvo wants them to feel that this is not something they want to leave.

CBV (3)	- For me customer loyalty is when there are high barriers to leave. These barriers can be emotional structural but the first aspect is the most important. - Loyalty for me is when I feel something in my heart while if somehow built an structural obstacle that is hard to overcome I am not loyal but i still have a hard time to leave. - Loyalty is to be an ambassador and to spread positive word about Care by Volvo. - By using the services that are included in the subscription the customers can show that they are loyal and that they have are "all in".
CBV (4)	-Customer loyalty is when a customer is so satisfied that he buys again. That is high customer loyalty. - We want the customers to be so satisfied so they stay within the company and to spread the word about Care by Volvo. We want to have the spontaneous diffusion.

Table 57 Theme 1: General characteristics of Care by Volvo

Theme 2: Benchmark of Care by Volvo

Segment of Care by Volvo	Theme 2: Benchmark of Care by Volvo
Respondent	Citations
CBV (1)	- Volvo have a broad range of car models, with Care by Volvo in Sweden you can subscribe to all models, from V40 to XC90.
CBV (2)	- Today i would say that Care by Volvo is in the premium segment based on the products and additional services.
CBV (3)	-Due to the relatively high price, Care by Volvo is perceived to be in the premium segment, by the customers.
CBV (4)	- With our products and services, we are in the premium segment but on the other hand, one should afford a Care by Volvo with an average income as well, I think. I want us to give the opportunity to many people. Of course, we want our products, services and concept to be premium.

Table 58 Theme 2: Benchmark of Care by Volvo

Competitors of Care by Volvo	Theme 2: Benchmark of Care by Volvo
Respondent	Citations
CBV (1)	- Premium brands, that offers some kind of private leasing are seen as our main competitors. For example, Audi, Mercedes-Benz and BMW. - I think that people want to have access on demand. - I think that Sunfleet is more of a complement than a competitor of Care by Volvo.

CBV (2)	- I do not think that we compete with transportation by bus but rather with premium private leasing models.
CBV (3)	- We compete with Mercedes-Benz, BMW and Audi, this makes use a premium product. - All mobility is competing with Care by Volvo. It includes renting cars, car pools, Sunfleet, which is our own brand. You can even take it one step further and include public transportation, Uber and taxis. The only question is how we can take advantage of these business models instead of limiting our business.
CBV (4)	-Mercedes Benz, Audi and BMW i.e premium brands. We are there, when cars are compared. We were not there a couple of years ago, so it is really fun! - One example of other competitors can be volume based brands such as Volkswagen.

Table 59 Theme 2: Benchmark of Care by Volvo

Theme 3: Servitizaion of Care by Volvo

Definition of subscription	Theme 3: Servitizaion of Care by Volvo
Respondent	Citations
CBV (1)	- In my opinion subscription is something that I sign up for during an unlimited time period but also something that i can terminate within three months.
CBV (2)	- I believe that subscription is connected to monthly payments. The period of the subscription can differ
CBV (3)	- A fixed price, with regularity and time based, but it does not have to be based on time. - The offering should be so attractive that the consumer do not want to leave Care by Volvo, therefor the subscription do not have to be time based.
CBV (4)	-A fee and that the customer know its price. There are no surprises, no rises in price and it should be predictable, easy, convenient and preferably flexible. - To subscribe gives many advantages in several industries. To know the monthly fee and to have a complete *care*. Service is included in Care by Volvo and therefore the customers do not have to wonder and worry about how much it is going to cost.

Table 60 Theme 3: Servitizaion of Care by Volvo

Servitization of Care by Volvo today	Theme 3: Servitizaion of Care by Volvo
Respondent	Citations
CBV (1)	- Today the products are in centre and the services are add-ons. - Today the concept is still seen as a leasing product with additional services. - Today I would say that it is 65 percent product and 35 percent services.
CBV (2)	- Historically the car have been in focus, meaning that there have been a lot of product focus. I would say that we still are here but we have added some services. - Today I would say that it is 90 percent product and 10 percent services.
CBV (3)	Today we more or less offer a product, but we have bundled services to it. We have enabled the opportunity to purchase online. I would say that it is 90 percent product and 10 percent service.
CBV (4)	- I do not think that the customers perceive it like this, but in my opinion it is 30 percent product and 70 percent service today, but we have some things to work on. I want the customers and the organization internally to see it in this way.

Table 61 Theme 3: Servitizaion of Care by Volvo

Servitization of Care by Volvo "tomorrow"	Theme 3: Servitizaion of Care by Volvo
Respondent	Citations
CBV (1)	-Currently, we want to reach a level where one can subscribe on a service, where the product is an add on. - It is a subscription, even if we are still in the starting point. Our ambition is to create a full subscription with much flexibility, but we have to see in the future, because we do not fully know yet. - In the future, I believe that we have an ambition of 25 percent product and 75 percent service. Hopefully this will happen in the near future, maybe 2 to 5 years. However, it is hard to know, it might take 3 months, 1 year or 10 years. - All this depends on which Internet condition we will have. Today we have a relationship with our dealers which is very unique for Sweden. They account for the major part of our sales and we do not want to lose that. We still believe that the dealer will have a very strong position in the future even if the customer decided to use digital channels.
CBV (2)	- In the future it might be 10 percent product and 90 percent service.
CBV (3)	- Were we want to be in the future is not 100 percent clear. The fact that our product accounts for a great majority of the value adding, we can never be 100 percent a service offering. Perhaps in the future it can be 10 percent product and 90 percent service. - If a customer can perceive 50/50, it would have been a reasonable ambition. The customer cannot say if it is 50/50 until after two or three years, after the utilization phase.
CBV (4)	-Tomorrow, I want to stand even further than 30 percent product and 70 percent service. The product is in the centre, so we cannot take the product away. I believe that there will be a limit on approximately 10-

	20 percent that must be focused towards the product, but the feeling for the customers should be that there is much services included.

Table 62 Theme 3: Servitizaion of Care by Volvo

Theme 4: Value adding activities of Care by Volvo

Services of Care by Volvo	Theme 4: Value adding activities of Care by Volvo
Respondent	Citations
CBV (1)	- I think that the safety of the package is what creates most customer value, that you get road assistance, insurance and warranty. - What have triggered the customers most is the simplicity of starting a subscription and the fact that you know your monthly cost. - A service that i think that the customers would like to add to the concept is the possibility to change car more often.

CBV (2)	- I think that one interesting feature is the pick and leave service when the car is going into service. - The extra cars which are included in Care by Volvo is connected to mobility. Customers move around in different cities quite often, and sometimes need an extra car. The access to cars is increased. - I think it is important to create a stable base of services before adding more advanced services. - Further, I think that adding extras such as a roof box and a cycle rack or similar is a good idea. - Some extra services could be included in the subscription while the customer could be charged on demand for some other extras. - Today, we often get stuck in the mindset where the car is the foundation of what kind of services the customer wants. But I think that the customers that might want to have things that lies outside of the physical car, for example food subscription. One should remove the car ownership and leave the simple, convenient safe and *carefree*.
CBV (3)	- The thing that I think creates most customer value is that they know their monthly cost, this in combination with the fact that you can order it online. - I think that the pick and leave service in Stockholm is an interesting feature, where the customer might feel that the service creates more value than what it costs. - I think more flexibility is important.

CBV (4)	-I think that the pick and leave service is very good. It can be applied some times per year, when one should change tyres or similar. It is a very good service if one does not have so much time. If someone else could do this for you, I think that the value for the customer is really high. -Everything is about additional services in relation to the price. Maybe car-wash could be added. It could be simple. Everything need to work practically. - I would like to add something practical, which can help in the everyday life. An example could be to choose from different kinds of In-Car Deliveries.

Table 63 Theme 4: Value adding activities of Care by Volvo

Flexibility of Care by Volvo	Theme 4: Value adding activities of Care by Volvo
Respondent	Citations
CBV (1)	-One should be able to be flexible. For example if one wants to go to practice and another one needs to use the car for work, Sunfleet can be used. - For me, subscription is something that should be flexible. Based on your own conditions, you should be able to do whatever you want. Let's say that you have a car for two years but you have a need for extra services, such as a roof box when it is winter and you are going on ski vacation. Then you can rent a roof box through the app or "DinBil". Or if you need a cycle rack on the vacation. Or several other additional services, such as child car seat. I believe that flexibility will be very important for us.

CBV (2)	- I would say that flexibility is to be able to get rid of the car when you do not need it anymore. Or be able to upgrade or change the car based on the needs. Imaginge 2-3 years, a lot can happen during this time, therefore, it is a quite long time to commit. The customer might move or have children. -Today, I think that the customers value flexibility more. It is not impossible that both mobility and flexibility will grow, but I think that today we are more traditional, we want to have our own car and the focus is rather on how we can have a car in a more flexible way. I think this is more important today but there is a chans that mobility will take over. - In Care by Volvo you are not connected to a specific dealer, instead you can get service allround Sweden. Therefore you are not geographically locked to a specific place.
CBV (3)	- I think flexibility is about subscription, the time, on and off, lock-on, lock-up and so on. - Flexibility lies outside Care by volvo. The customer are aware of their monthly costs and therefor Care by Volvo enables another type of flexibility. - I think more flexibility is important. An idea is to have everything on demand which would enable an enormous flexibility. However the basic features of the concept, pre-negotiated and ready would disappear.
CBV (4)	-It can be flexibility in terms of the subscription period, to be able to add on and off services. To know that it is okey to drive a bit more than what is stated in the contract and know the price for this, eg price per kilometer in advanced and to know that the company will not charge very high for this, because that is not *care*. - We also have a refund if a customer drives less than what the contract says. That is *care*. - Flexibility is more important than mobility for the customer.

Table 64 Theme 4: Value adding activities of Care by Volvo

Mobility of Care by Volvo	Theme 4: Value adding activities of Care by Volvo
Respondent	Citations
CBV (1)	- Mobility in Care by Volvo means that you should be able to move freely, for example with Sunfleet.
CBV (2)	- Mobility is about the ability of movement, not specifically by car or another vehicle but with anything. To move from A to B in the best way possible. Maybe it is rather interconnected transportation systems. -I think flexibility is more important today but there is a chans that mobility will take over.
CBV (3)	- Mobility is about that the customer should have access to movement, in different ways and places, independent on what kind of vehicle is used. - Our customer have a mobility solution, however not all of them fully understands what it means. But if the customers start to use the mobility solutions they will understand the strong value of it.
CBV (4)	-It is about the possibility to complement with other mobility. It is a wide word, mobility. Another car can be mobility, such as the solution we have. It can also be seen even further, such as train, bus, Uber and so on.

Table 65 Theme 4: Value adding activities of Care by Volvo

Care	Theme 4: Value adding activities of Care by Volvo
Respondent	Citations
CBV (1)	- Care by Volvo differs from the traditional car-ownership. You should always be aware of the monthly cost, there should be no surprises and you should always feel *safe* with the costs. You should have a car with good functions and services and with that, a *safe* ownership. - You should be able to order the car in *simple* and *safe* ways online, which not many car manufacturers in the world offers today. - It is the customers that decides and therefore everything is from the customer perspective. It does not matter how much we twist and turn, if we do not meet the customer needs, eventually one will go under. - The Volvo brand is perceived as safe by the customer. - As I see it, *care* means that we *care*, it should be a product that takes *care* of you and everything connected to the car. You should get a car that you can trust, it should be *safe* to drive, and you should have a warranty on the car, you have road assistance if something should happen, you have services and insurance. I think that is the foundation of *care.* One can always add more services to the concept in order to *care* even more.
CBV (2)	- You pay a monthly fee where everything will be covered and included. - Like the subscription idea, where thing is on demand. - *"We should be careful so that the customer can be carefree"*
CBV (3)	- It means that it should be pre-negotiated, simple to understand and simple to buy. - *Care* is when you do the little extra, which is to extend the *carefree* car usage and get the little extra that you did not expect. That is *care* for me.

CBV (4)	-We take step by step to get there, continuously. However, there are multiple steps that could be taken in order to make it *easier, convenient, safe* and *care.* -Volvo has a strategy that by 2025, one week of quality time per customer per year should be saved and therefore *simplicity, convenience* and *care* is connected to this. It is about the buying process but also during the subscription time, for example that it should be easy to get in touch with Customer Care Center and that the service works well. - I like that word. It is to take *care* of our customers and try to understand them, try to adapt us to them and to show that we *care*.

Table 66 Theme 4: Value adding activities of Care by Volvo

8.3 Appendix 3: Survey

8.3.1 Descriptive Analysis

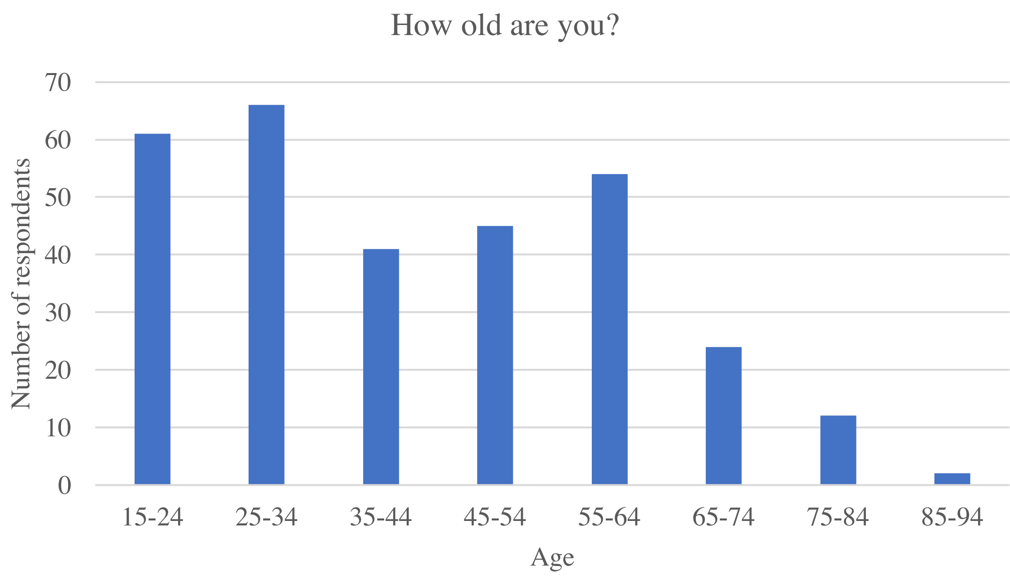

Diagram 21 Distribution of compiled age of the respondents

Age	
Mean	43
Median	41
Mode	24

Table 67 Mean, median and mode of the respondents age

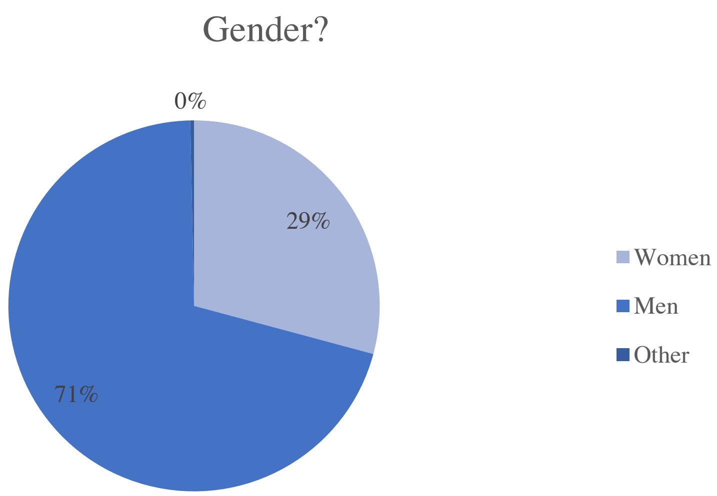

Diagram 22 Distribution of the respondent's gender

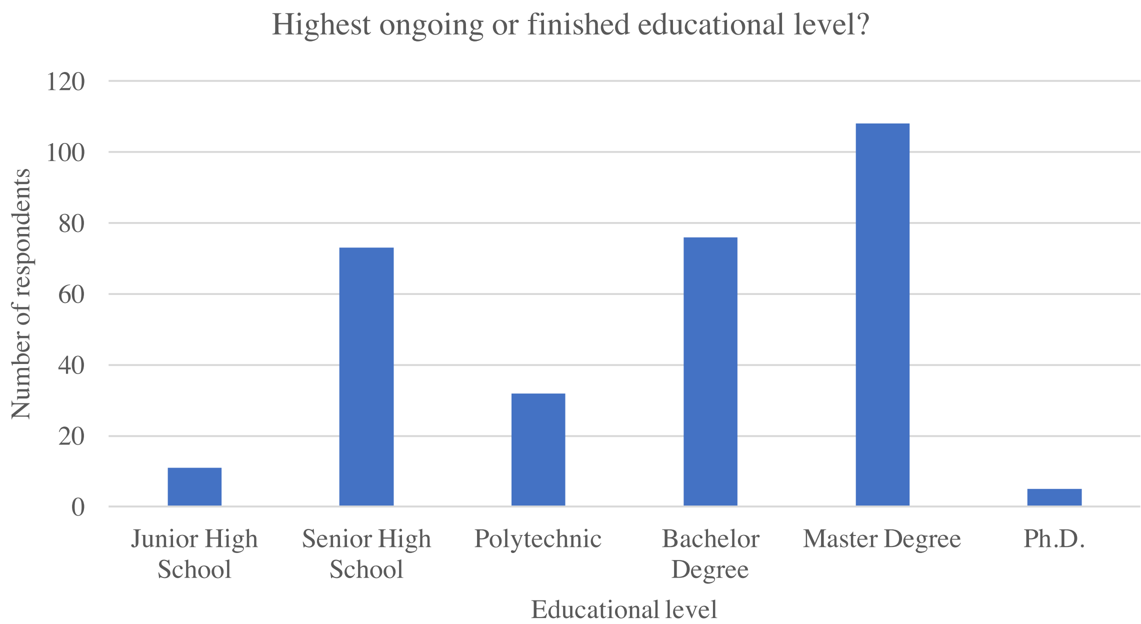

Diagram 23 Distribution of the respondents highest ongoing or finished educational level

Diagram 24 Distribution of the respondent's occupation

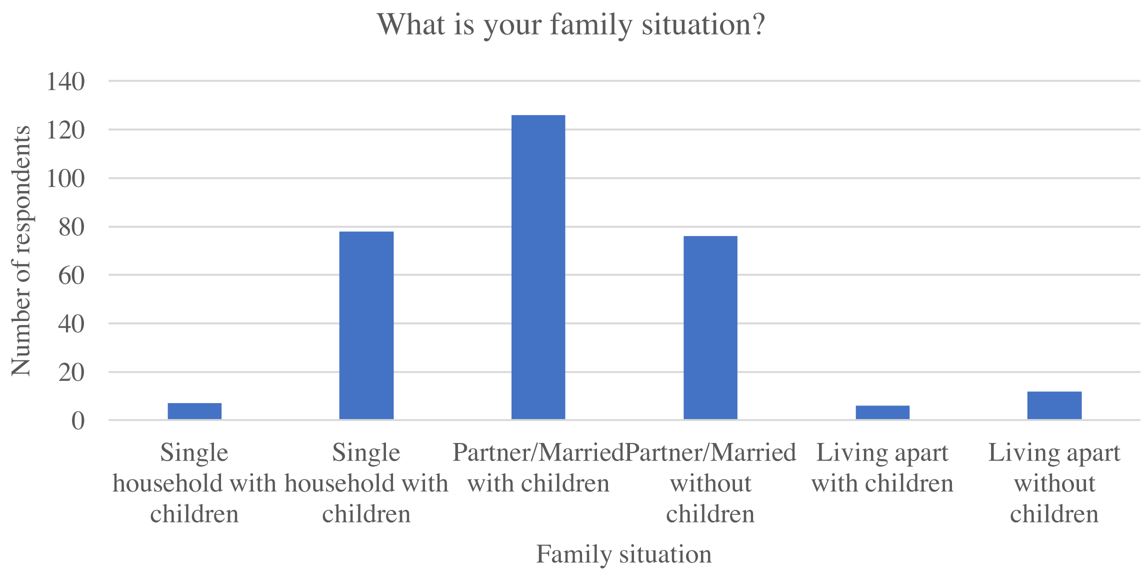

Diagram 25 Distribution of the respondent's family situation

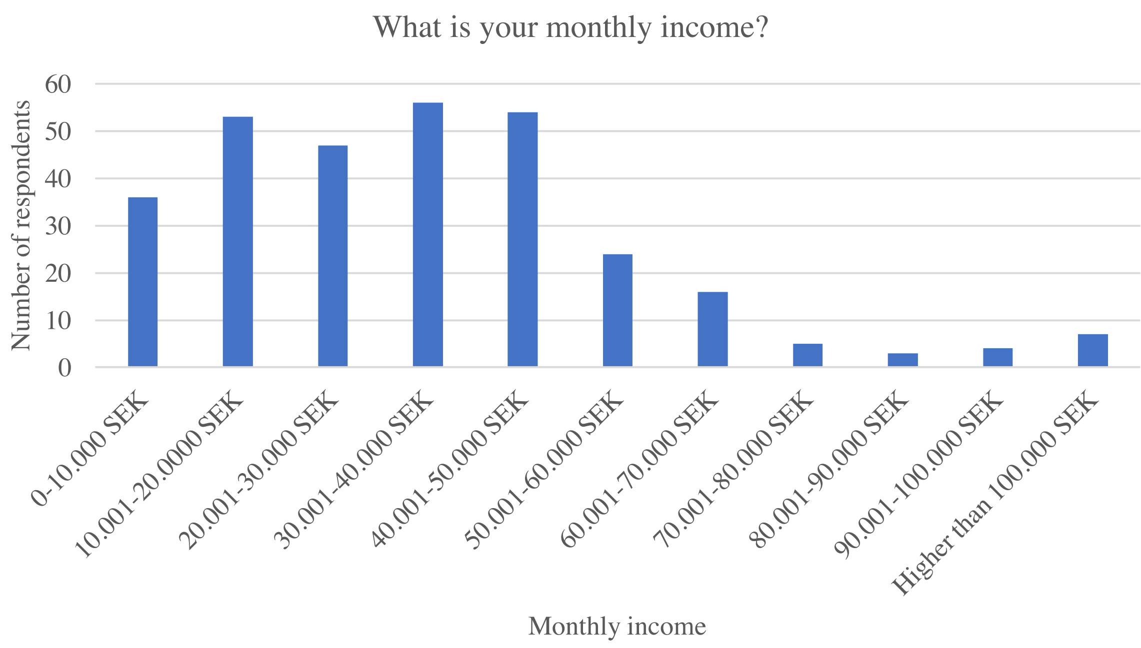

Diagram 26 Distribution of the respondent's income

Income	
Mean	30.001-40.000 SEK
Median	30.001-40.000 SEK
Mode	30.001-40.000 SEK

Table 68 Mean, median and mode of the respondent's income

How important is it for you to own you car?

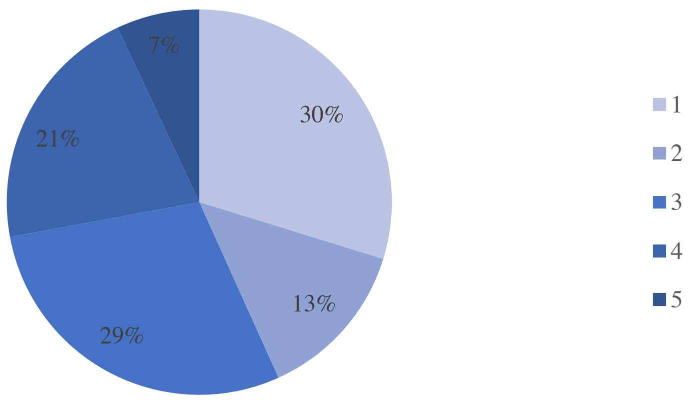

Diagram 27 Distribution of how important it is for the respondents with cars to own their car

Car-Ownership	
Mean	2,6
Median	3
Mode	1

Table 69 Mean, median and mode of how important it is for the respondents with cars to own their car

How important is it for you to own your car?

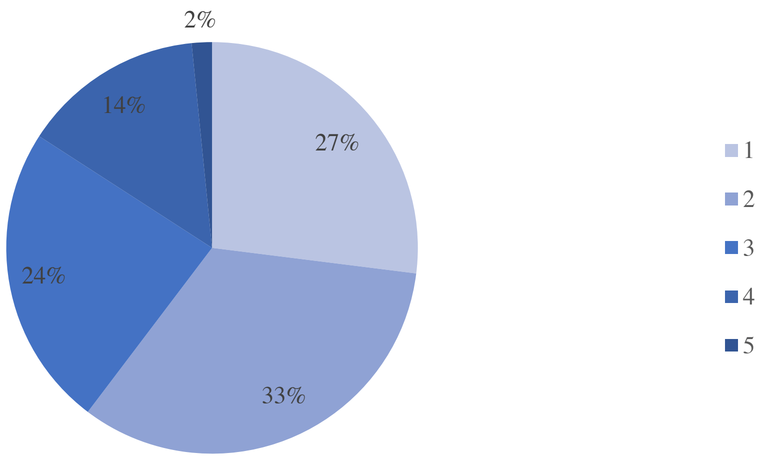

Diagram 28 Distribution of how important it is for the respondents who do not have a car, to own their potential future car

Car-Ownership	
Mean	2,3
Median	2
Mode	2

Table 70 Mean, median and mode of how important it is for the respondent without a car to own their potential future car

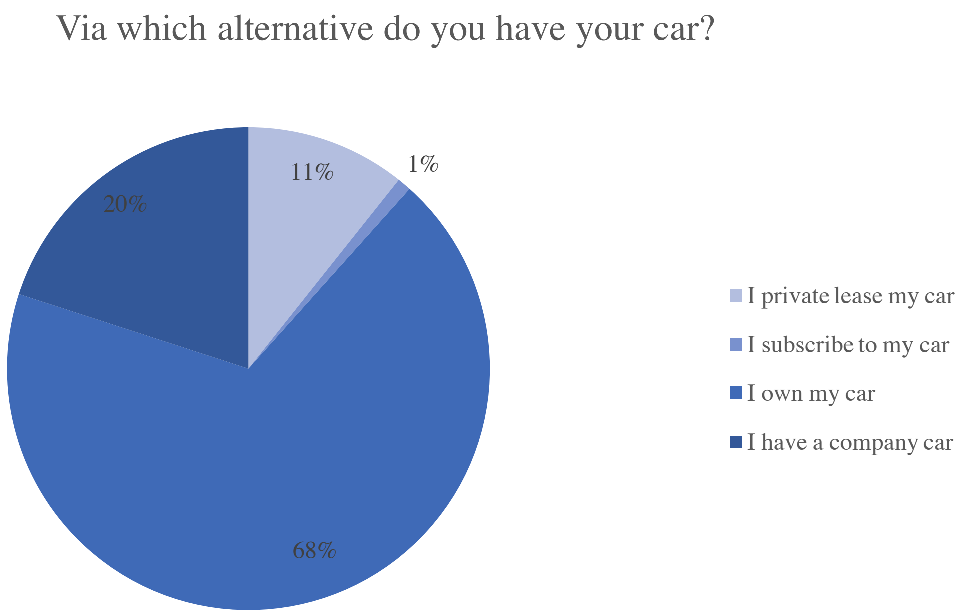

Diagram 29 Distribution of via what alternative the respondents who have a car have their car

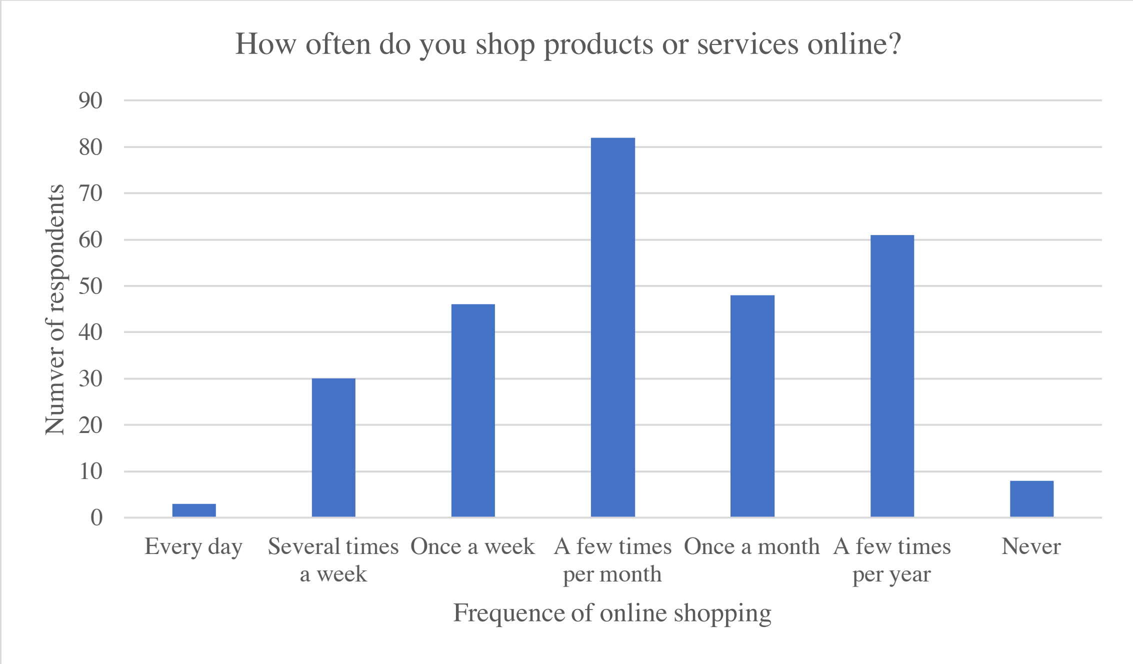

Diagram 30 Distribution of how often the respondent purchase products or service online

Rank the following alternatives based on why you would not feel safe ordering your car online							
Activity	**1**	**2**	**3**	**4**	**5**	**Total**	**Average**
I do not have much knowledge about car	**40**	**30**	**28**	**18**	**22**	**138**	**2,7**
	29%	22%	20%	13%	16%		
I find it difficult to understand what all packages and add-ons mean	**27**	**24**	**33**	**28**	**26**	**138**	**3,0**
	20%	17%	24%	20%	19%		
I want to discuss the car with a car dealer	**1**	**3**	**24**	**42**	**68**	**138**	**4,3**
	1%	2%	17%	31%	49%		
I do not think it is safe to order such an expensive product online	**3**	**9**	**19**	**32**	**75**	**138**	**4,2**
	2%	7%	14%	23%	54%		
Total	**71**	**66**	**104**	**120**	**191**		

Table 71 Ranking of why the respondents do not feel safe ordering a car online

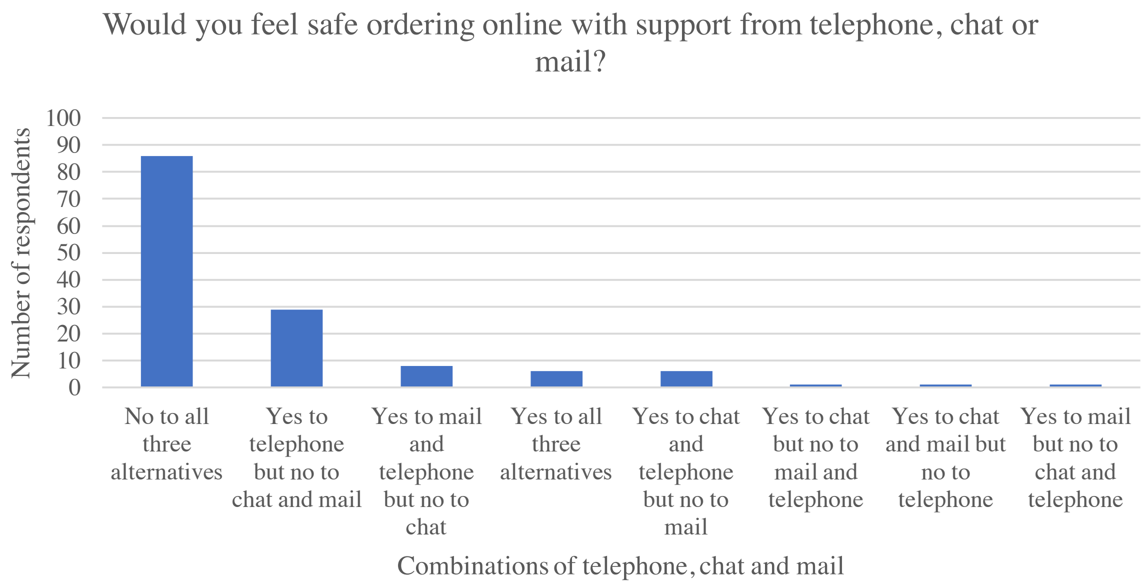

Diagram 31 Distribution of if the respondents who do not feel safe ordering online would feel safer if they got support from either telephone, chat or mail

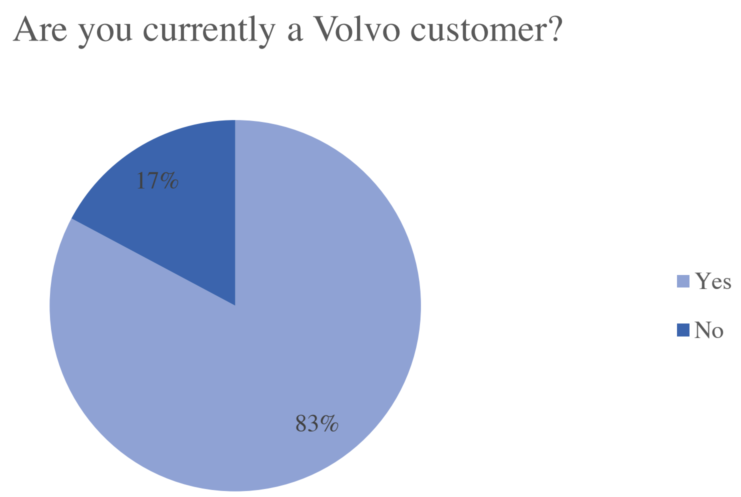

Diagram 32 Distribution of if the respondents are Volvo customers or not

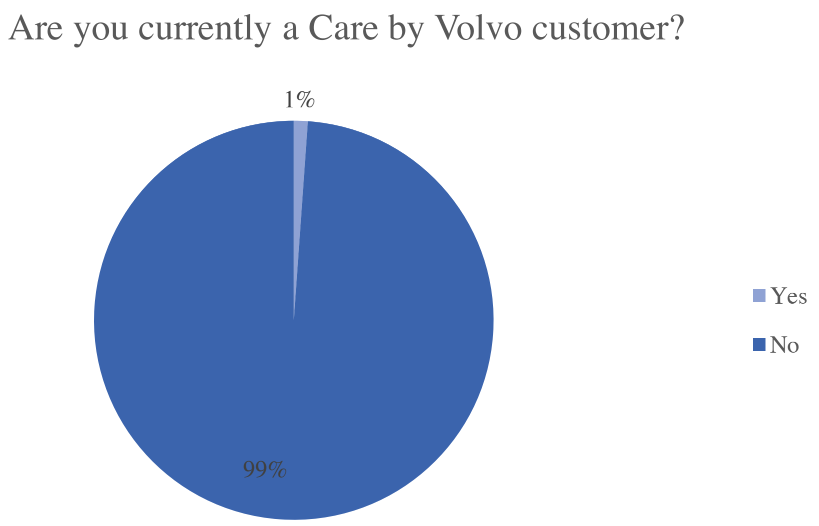

Diagram 33 Distribution of if any of the current Volvo customers are a Care by Volvo customer

Example of other places the respondent have heard about Care by Volvo
In research work
School of business, economics and law at Gothenburg University
Volvo home
Via an app
Car-dealer
Volvo newsletter
E-mail
Flyers from Volvo
Guest Lecture
Work at VCC

Table 72 Example of other places where the respondents have heard about Care by Volvo

Would you like to add another service?

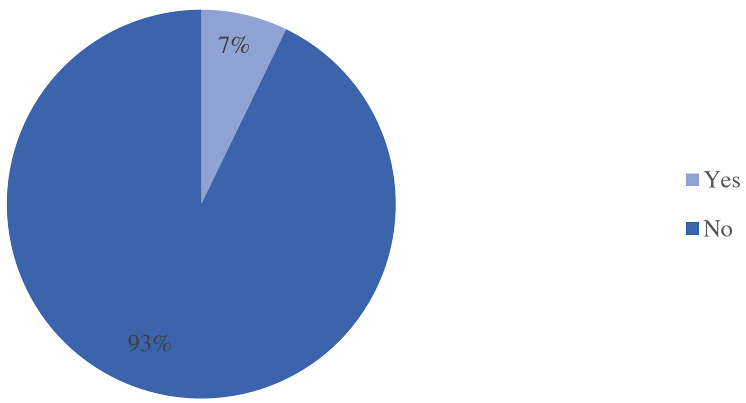

Diagram 34 Distribution of if the respondents would like to add another service then the examples mentioned in question 32

Examples of other services that could be added to a subscrition car or private leasing
Refill of windsheild washer fluid, wiper blades etc
The possibility to borrow a car during a shorter time, for example during the vacation
Family Package - Share subscriptions with family members or partners.
Someone who drives the car home from the airport when traveling and then drives it back to the airport when coming home
New rear mirrors every 6th month
Statistics on driving data, the possibilities to borrow lorries, service on demand (change of wiper blades and liquid filling)
Every quarter, the car is inspected by Volvo technicians, then you know if everything with the car is ok and you do not get any unforeseen expenses when you return your car after 36 months.
Possibility to have a dog in the car. Even in a new car, as it prevents me from using Care City Volvo today
Cooked food delivered to the car

Table 73 Examples of services that the respondents wants to add to Care by Volvo

Rank the following alternatives based on what "*Care*" means for you							
Activity	**1**	**2**	**3**	**4**	**5**	**Total**	**Average**
Care means simplicity	**21**	**24**	**87**	**85**	**61**	**278**	**3,5**
	8%	9%	31%	30%	22%		
Care means flexibility	**22**	**26**	**88**	**77**	**65**	**278**	**3,5**
	8%	9%	32%	28%	23%		
Care means carefree	**18**	**16**	**66**	**87**	**91**	**278**	**3,8**
	6%	6%	24%	31%	33%		
Care means safety	**19**	**13**	**73**	**76**	**97**	**278**	**3,8**
	7%	5%	26%	27%	35%		
Total	**80**	**79**	**314**	**325**	**314**		

Table 74 Ranking of what care means for the respondents

Rank the following alternatives based on why you would choose Care by Volvo							
Activity	**1**	**2**	**3**	**4**	**5**	**Total**	**Average**
I choose Care by Volvo because of Volvo's brand	**23**	**17**	**56**	**116**	**66**	**278**	**3,7**
	8%	6%	20%	42%	24%		
I choose Care by Volvo since you can build and order the car online	**70**	**55**	**86**	**47**	**20**	**278**	**2,6**
	25%	20%	31%	17%	7%		
I choose Care by Volvo because it is pre-negotiated and ready	**39**	**35**	**89**	**68**	**47**	**278**	**3,2**
	14%	13%	32%	24%	17%		
Total	**132**	**107**	**231**	**231**	**133**		

Table 75 Distribution of why the respondent would subscribe to Care by Volvo

8.3.2 Correlations and Statistical Significance

Variables	Correlation	p-value
How old are you? vs Do you have a car?	0,64	2,136391E-36
Gender? vs Do you have a car?	0,36	9,47329E-11
How old are you? vs How important is it for you to own your car?	0,08	0,218119357
How old are you? vs How much do you spend on your car each month?	0,02	0,715639299
Gender? vs How much do you spend on your car each month?	0,1	0,150333723
What is your family situation? vs How much do you spend on your car each month?	0,06	0,348098315
What is your family situation? Vs Rank the following alternatives based on why you have a car	0,15	0,293520684
What is your monthly income? vs Willingness to subscribe to a second-hand car	0,05	0,445476941
How often do your purchase products or services online? vs Willingness to add out-car delivery	0,15	0,013659884
Gender? vs Willingness to change car during the subscription period	0,1	0,092997218
Gender? Vs Willingness to subscribe to entertainment	0,07	0,223202149
Gender? Vs Willingness to receive travel and hotel checks when using Care by Volvo services	0,19	0,001276543

Table 76 Correlation and statistical significance (p-value) for different variables

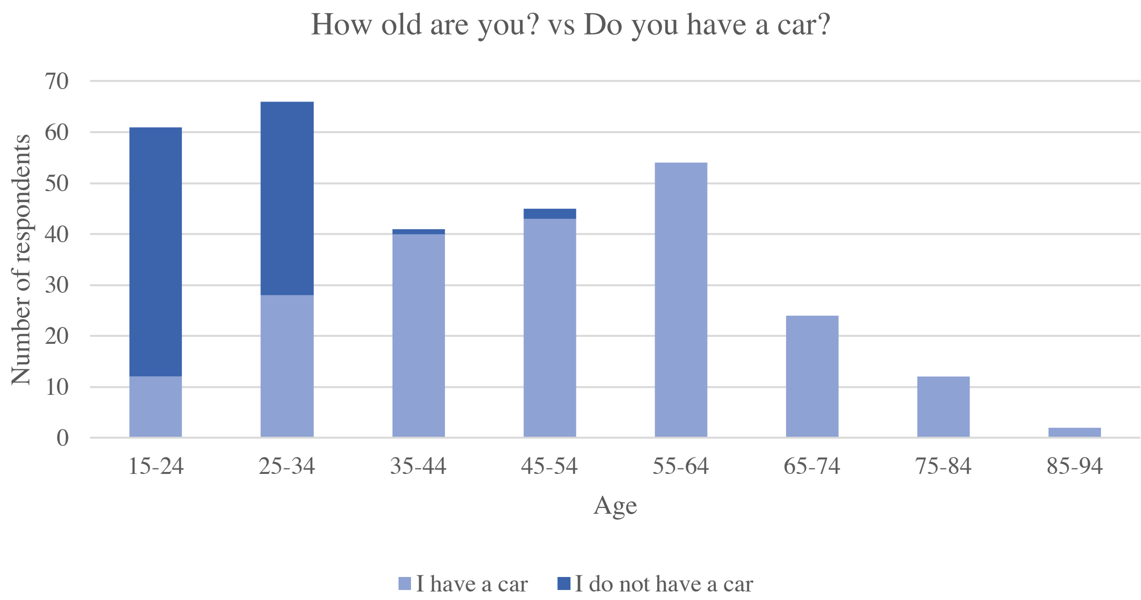

Diagram 35 Distribution of the respondents age and if they have a car or not

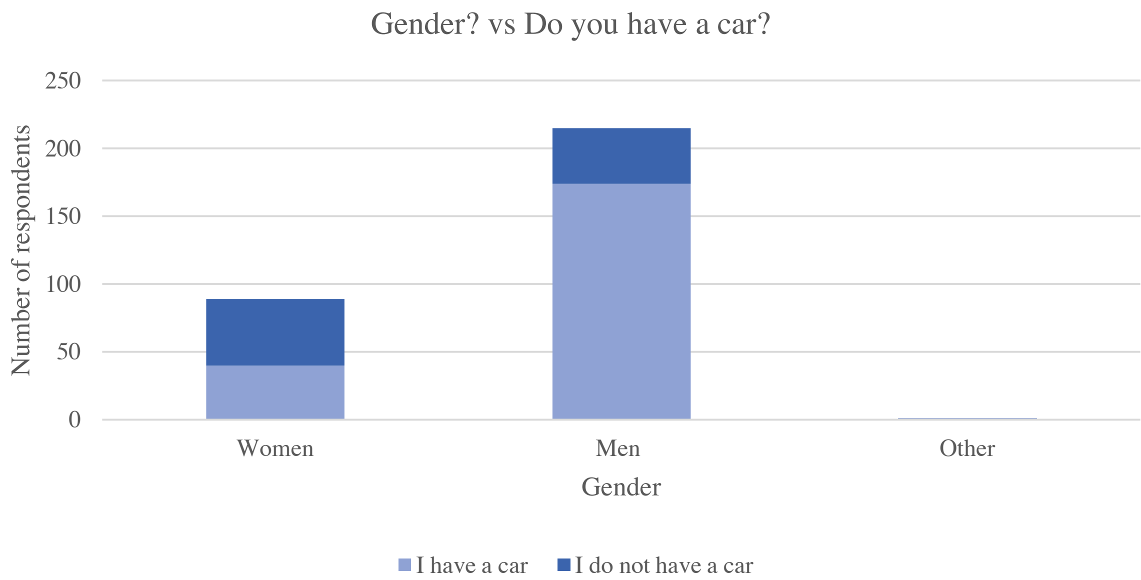

Diagram 36 Distribution of the respondent's gender and if they have a car or not

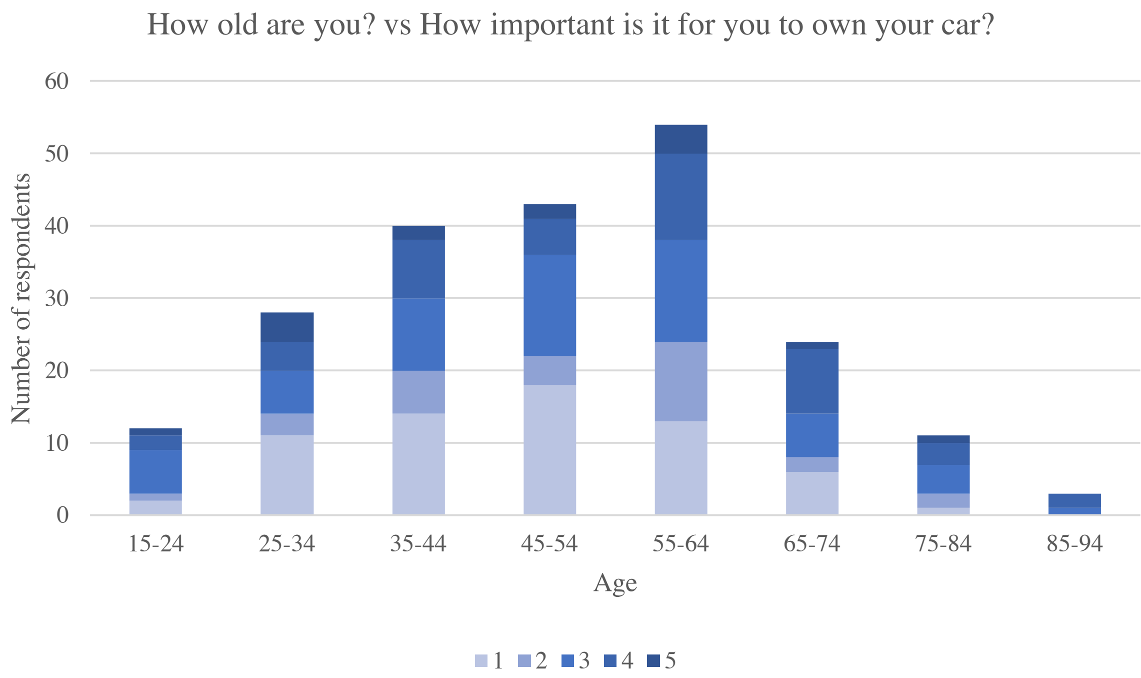

Diagram 37 Distribution of the respondents age and their ranking 1-5 of how important it is to own your car

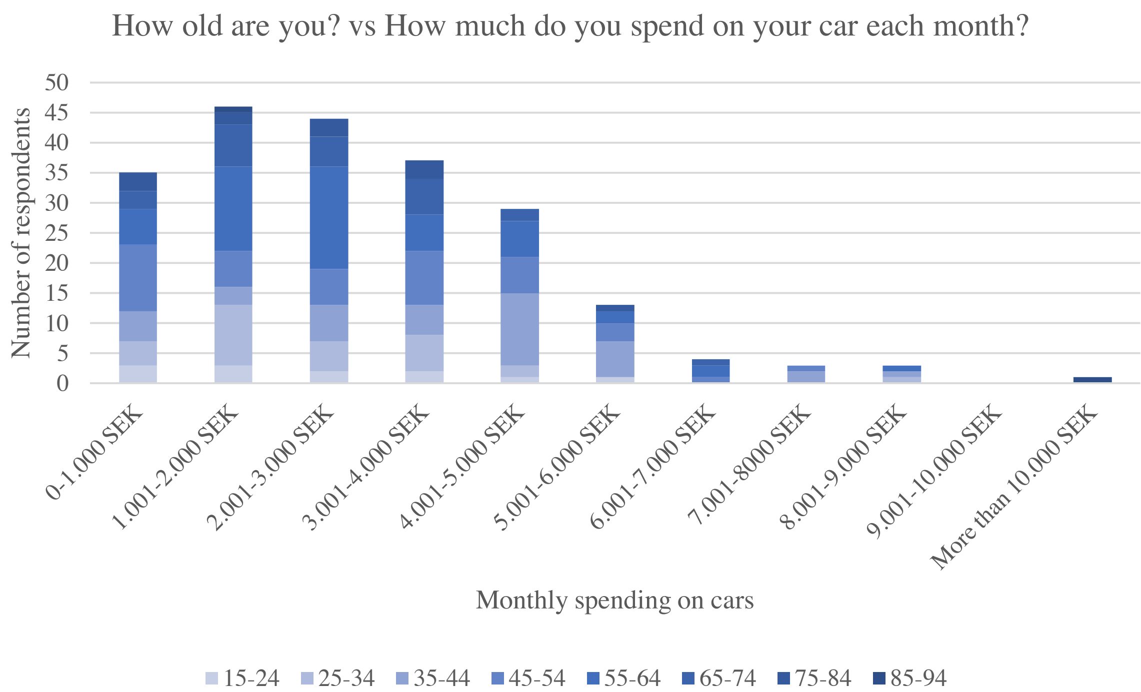

Diagram 38 Distribution of the respondents age and what the respondents with a car spend each month on their car each month

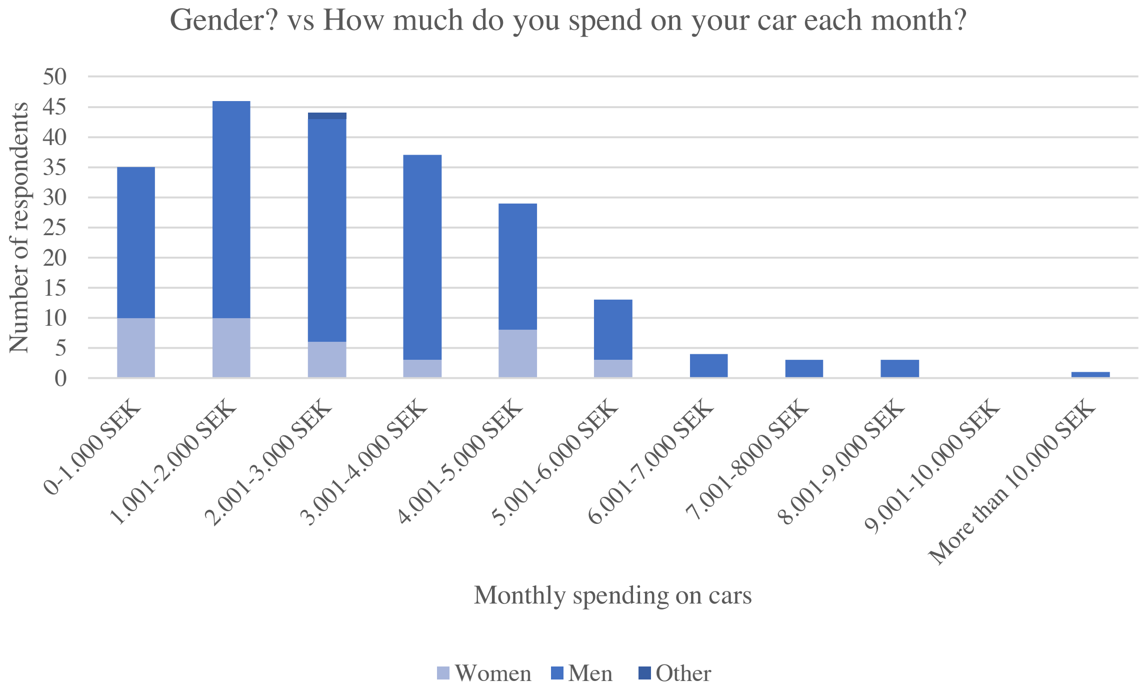

Diagram 39 Distribution of the respondent's gender and what they spend on their car each month

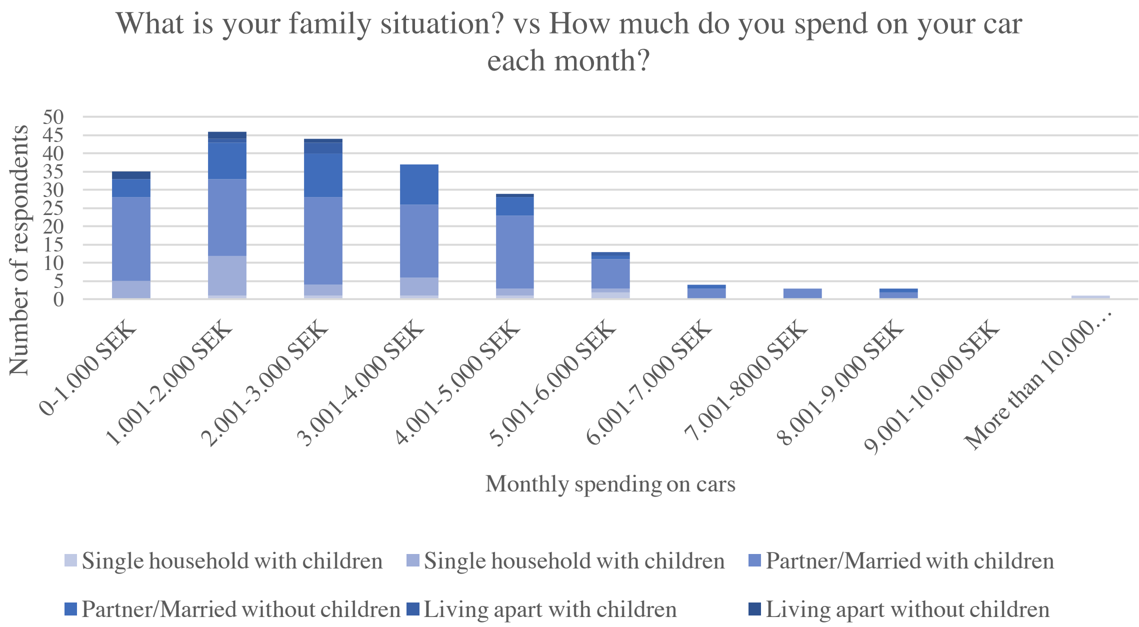

Diagram 40 Distribution of the respondent's family situation and how much they spend on their car each month

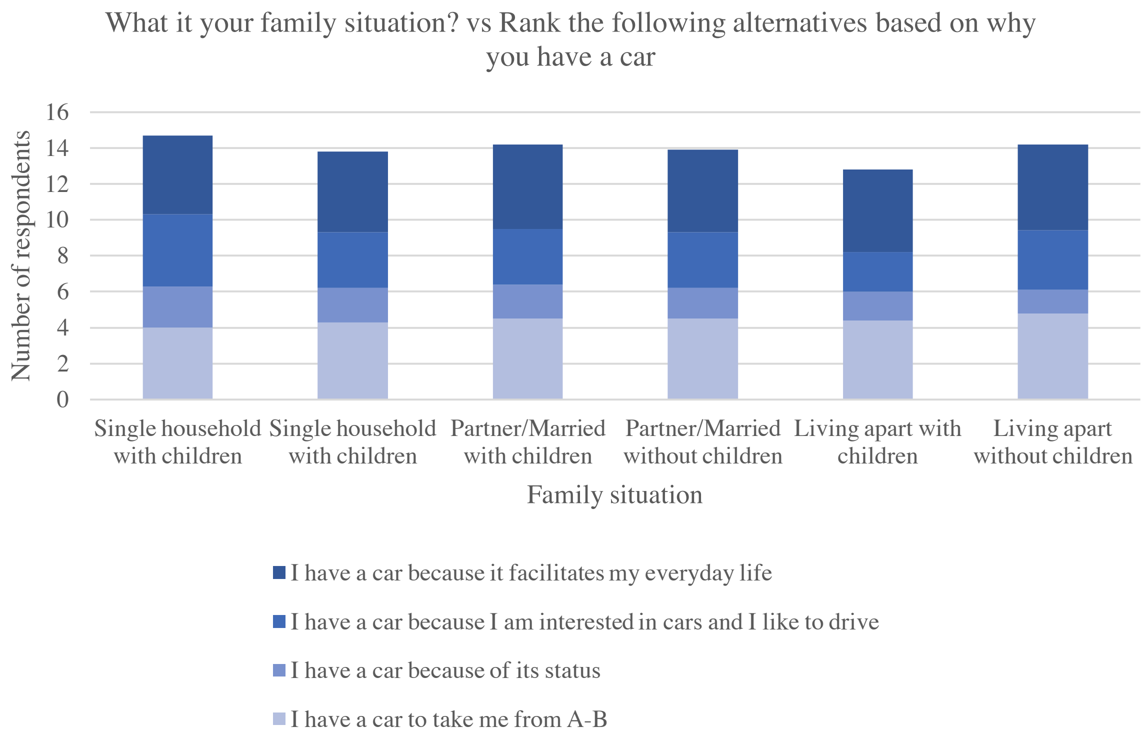

Diagram 41 Distribution of the respondent's family situation and why they have a car

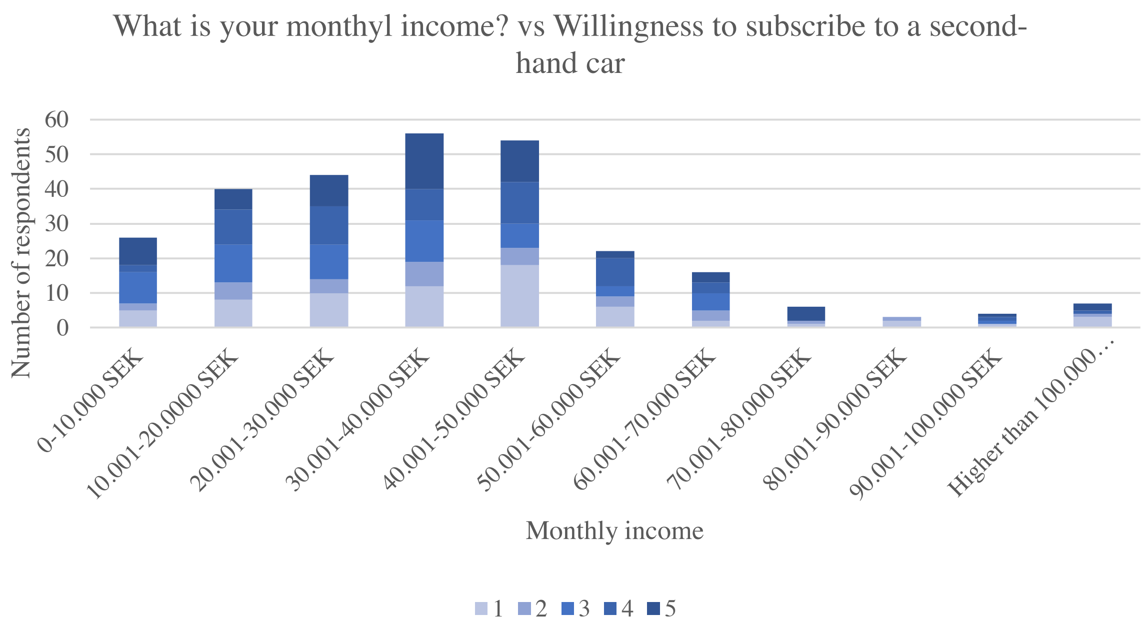

Diagram 42 Distribution of the respondents income and their ranking 1-5 to subscribe to a second hand car

Diagram 43 Distribution of how often the respondents purchase products online and their ranking 1-5 to add Out-car Delivery to private leasing or subscription

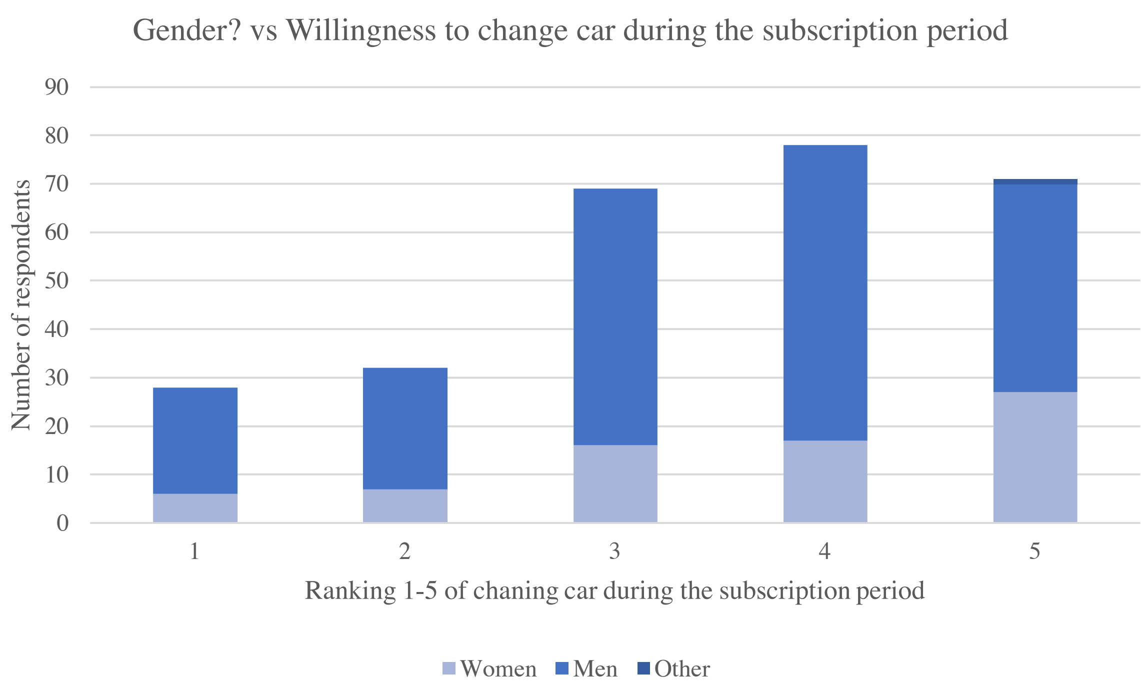

Diagram 44 Distribution of the respondent's gender and their ranking 1-5 to change car during the subscription period

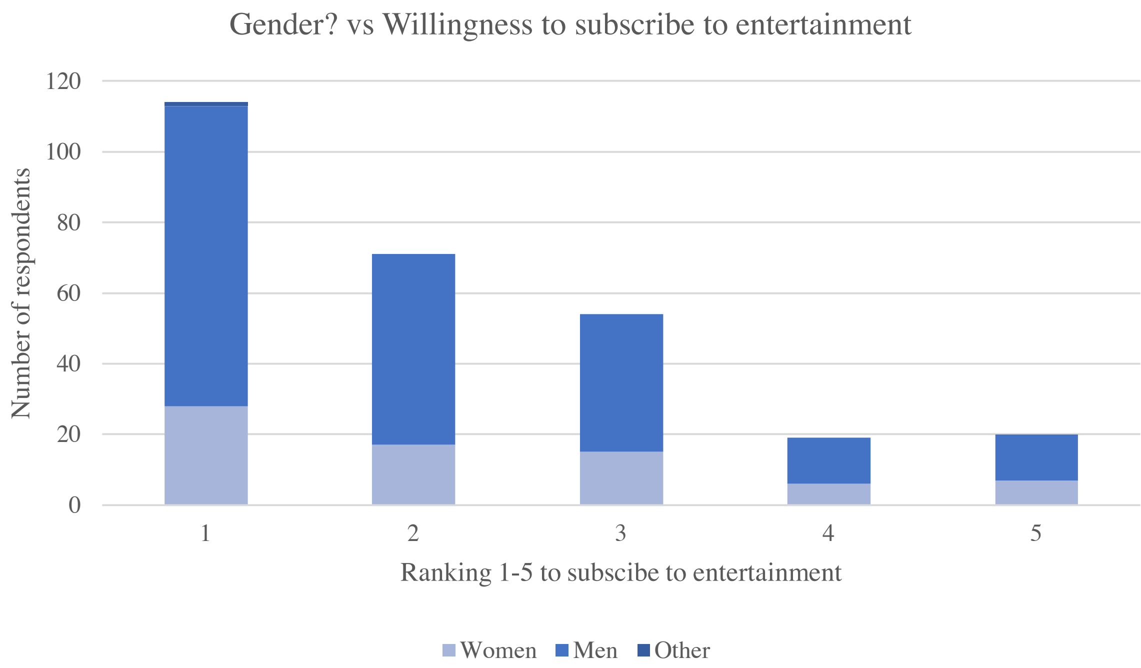

Diagram 45 Distribution of the respondent's gender and their willingness to add subscription of entertainment when private leasing or subscribing to a car

Diagram 46 Distribution of the respondent's gender and their ranking 1-5 to receive hotel and travel checks when using Care by Volvo services

8.3.3 Internal Reliability: Cronbach's Alpha

Rank the following alternatives based on how time consuming they are						
ANOVA						
Source of variance	*SS*	*df*	*MS*	*F*	*p-value*	*F crit*
Rows	934,7776744	214	4,368119974	5,172599101	4,55298E-67	1,188379961
Columns	74,73116279	4	18,6827907	22,12361083	2,12463E-17	2,382331631
Error	722,8688372	856	0,844472941			
Total	1732,377674	1074	**Cronbach's Alpha 0,81**			

Table 77 Reliability Statistics of question 13: Rank the following alternatives based on how time consuming you think they are.

In *Table 77* it can be seen that Cronbach's Alpha is 0,81 which indicates an acceptable level of internal reliability.

Rank the following reasons to why you have a car						
ANOVA						
Source of variance	*SS*	*df*	*MS*	*F*	*p-value*	*F crit*
Rows	373,7457364	214	1,746475404	1,731223877	9,59659E-07	1,210979956
Columns	844,896124	2	422,448062	418,7589302	1,7521E-101	3,016798712
Error	431,7705426	428	1,008809679			
Total	1650,412403	644	**Cronbach's Alpha 0,42**			

Table 78 Reliability Statistics of question 16: Rank the following alternatives based on why you have a car

In *Table 78*, it can be seen that Cronbach's Alpha is 0,42 which indicates a relatively low level of internal reliability. Hence, it does not reach up to the acceptable level of internal reliability.

Rank the following reasons to why you have a car						
ANOVA						
Source of variance	*SS*	*df*	*MS*	*F*	*p-value*	*F crit*
Rows	511,4046512	214	2,389741361	2,94540584	6,18809E-15	1,252798906
Columns	175,872093	1	175,872093	216,7660059	2,36499E-34	3,88527959
Error	173,627907	214	0,81134536			
Total	860,9046512	429	**Cronbach's Alpha 0,66**			

Table 79 Reliability Statistics of adjusted question 16: Rank the following alternatives based on why you have a car

In *Table 79,* it can be seen that Cronbach's Alpha for the same question as *Table 78* has been calculated. The reason for this is because the authors wanted to test the internal reliability and see if it was possible to increase it. Therefore, the authors have deleted one of the alternatives in question 16, more specifically the fourth option, "*I have a car because it facilitates my everyday life". *By doing this the internal reliability increased from 0,42 to 0,66. Hence, the internal reliability can now be accepted.

Rank the following alternatives based on what flexibility is for you						
ANOVA						
Source of variance	*SS*	*df*	*MS*	*F*	*p-value*	*F crit*
Rows	1054,360432	277	3,806355349	3,862523094	2,87154E-57	1,164421911
Columns	165,3122302	4	41,32805755	41,93790702	8,89042E-33	2,379961976
Error	1091,88777	1108	0,985458276			
Total	2311,560432	1389	**Cronbach's Alpha 0,74**			

Table 80 Reliability Statistics of Question 31: Rank the following alternatives based on what flexibility is for you

In *Table 80*, it can be seen that Cronbach's Alpha is 0,74 which indicates an acceptable level of internal reliability.

Rank the following alternatives based on what flexibility is for you						
ANOVA						
Source of variance	*SS*	*df*	*MS*	*F*	*p-value*	*F crit*
Rows	1001,083633	277	3,614020336	4,116237966	7,07902E-56	1,170964135
Columns	165,1393885	3	55,04646283	62,69592285	1,51287E-36	2,615616918
Error	729,6106115	831	0,877991109			
Total	1895,833633	1111	**Cronbach's Alpha 0,76**			

Table 81 Reliability Statistics of adjusted question 31: Rank the following alternatives based on what flexibility is for you

In *Table 81*, it can be seen that Cronbach's Alpha for the same question as *Table 80* has been calculated. The reason for this is that the authors wanted to test the internal reliability and see it if was possible to increase it. Therefore, the authors have deleted one of the alternatives in question 31, more specifically the fourth option, "*Flexibility is to facilitate your everyday life* *since you know you monthly cost".* By doing this the internal reliability slightly increased from 0,74 to 0,76. Hence, the internal reliability is accepted in this case as well.

Rank the following alternatives based on what you would like to add to a subscription car or private leasing car						
ANOVA						
Source of variance	*SS*	*df*	*MS*	*F*	*p-value*	*F crit*
Rows	1438,117677	277	5,191760568	4,276935342	8,82848E-77	1,157718132
Columns	505,3597122	6	84,22661871	69,38528801	2,97932E-77	2,104028744
Error	2017,497431	1662	1,213897371			
Total	3960,97482	1945	**Cronbach's Alpha 0,77**			

Table 82 Reliability Statistics of question 32: Rank the following alternatives based on what extra service you would like to add when private leasing or subscribing to a car

In *Table 82*, it can be seen that Cronbach's Alpha is 0,77, which is an acceptable level of internal reliability. Further, the authors have tested to exclude one or several alternatives in order to increase the internal reliability, however the Cronbach's Alpha did not improve when doing this.

Rank the following alternatives based on what "*care*" means for you						
ANOVA						
Source of variance	*SS*	*df*	*MS*	*F*	*p-value*	*F crit*
Rows	866,6534772	277	3,128712914	6,493594351	1,16034E-77	1,183623563
Columns	15,74100719	2	7,870503597	16,33510619	1,27955E-07	3,011990129
Error	266,9256595	554	0,48181527			
Total	1149,320144	833	**Cronbach's Alpha 0,85**			

Table 83 Reliability Statistics of question 34: Rank the following alternatives based on what care means for you

In *Table 83,* it can be seen that Cronbach's Alpha is 0,85 which is an accepted level of internal reliability.