



Developing a car maintenance service
concept for business customers -
a case study of Veho Autotalot Oy



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**Developing a car maintenance service concept for business
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The purpose of this thesis was to develop a new car maintenance service concept and service path for the business customers of Veho Autotalot Oy Pitäjänmäki. Both the maintenance service concept and the service path were developed using empirical data collected from the business customers of Veho Autotalot Oy Pitäjänmäki.

The theoretical framework was built around service concepts. The issues dealt in the theoretical framework are service path, service concepts, service blueprint, goods and service-dominant logic.

The empirical data were collected using a sentence completion form. The respondents were chosen from among the decision makers of the customer companies of Veho Autotalot Oy Pitäjänmäki. The invitation to respond to the sentence completion form was sent by e-mail to 38 decision makers, of whom 17 returned the completed sentence completion form. The response rate was 45 %, which can be considered relatively high.

In the analysis, the completed sentence completion forms were read through to gain a general overview of the results. After reading the forms the answers were listed according to sentence beginnings and individual answers in an Excel worksheet. The results were written in exactly the same form as they were presented on the sentence completion forms. The purpose of the data collection was to find answers to the empirical research problems concerning Veho Autotalot Oy Pitäjänmäki repair services and their maintenance functions for business customers.

The main results of this research are a description of the improved service path, a maintenance service concept and the service concept worksheet template together with modular model of the maintenance service. There are procedures and actions that should be changed based on the negative feedback. The negative feedback received relates to parking spaces, spare part deliveries and to the efficiency of the maintenance service. There are also actions that should be promoted as they have received positive feedback. Positive feedback from the business customers focused on such areas as service attitude and contact channels.

Based on the service path and the service concept together with the modular model of the maintenance service, Veho Autotalot Oy Pitäjänmäki is able to improve its maintenance services and thereby improve customer satisfaction and the profitability of the maintenance services.

Keywords business customer, maintenance service, retail trade and repair of motor vehicles, sentence completion technique, service concept, service path

Juha Rusama

Palvelukonseptin kehittäminen autohuollon yritysasiakkaille - Esimerkkinä Veho Autotalot Oy

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Opinnäytetyön tutkimusongelmana on huollon palvelupolun parantaminen sekä huollon palvelukonseptin kehittäminen Veho Autotalot Oy:n Pitäjänmäen toimipisteen huoltopalveluiden yritysasiakkaita paremmin palveleviksi. Opinnäytetyössä kuvataan Veho Autotalot Oy:n Pitäjänmäen toimipisteen yritysasiakkaille tuottamat huoltopalvelut, huollon palvelupolku sekä huollon palvelukonsepti moduulimallilla.

Opinnäytetyön teoreettinen viitekehys rakentuu palvelupolun ja palvelukonseptin ympärille. Teoreettisessa viitekehyksessä käydään läpi palvelupolku ja sen kuvaaminen, palvelukonseptit, service blueprint, sekä tuote- ja palvelulähtöinen toimintatapa.

Opinnäytetyö on laadullinen tutkimus, jossa empiirinen aineisto kerättiin lauseentäydennyslomakkeen avulla. Vastajiksi valittiin yritysten autopäittäjiä Veho Autotalot Oy:n Pitäjänmäen toimipisteen yritysasiakkaista. Kutsu tutkimukseen vastaamiseen lähetettiin 38 autopäittäjälle, joista 17 palautti täytetyn lauseentäydennyslomakkeen. Kokonaisvastausprosentiksi muodostui 45 %, jota voidaan pitää kohtuullisen hyvänä vastausprosenttina.

Täytetyt lauseentäydennyslomakkeet käytiin ensin läpi yksitellen lukemalla kokonaiskuvan muodostamiseksi, jonka jälkeen vastaukset syötettiin kysymyksittäin ja aihealueittain jaoteltuna Excel-taulukkoon. Vastaukset taulukossa on kirjattuna juuri niin, kuin autopäittäjät ne ovat lauseentäydennyslomakkeisiin kirjoittaneet. Vastaukset teemoitettiin aihealueittain. Kerätyllä empiirisellä aineistolla pyrittiin löytämään ratkaisut empiirisen osan alaongelmiin. Kehityskohteina olivat Veho Autotalot Oy:n Pitäjänmäen toimipisteen huollon palvelupolku, autohuolto-konsepti sekä huoltopalvelun moduulimalli.

Opinnäytetyön tuloksena löydettiin palveluita ja fasiliteettejä, joita huoltotoiminnoissa tulee kehittää, sekä palvelupolun palvelupisteitä, joita tulisi muuttaa ja kehittää. Opinnäytetyön tuloksena syntyi uudistettu huollon palvelupolku, palvelukonsepti ja huoltopalvelun moduulimalli. Tulokset ja kehityskohteet on käsitelty omina ryhminään ja osa-alueista on annettu aihealuekohtaiset kehitysehdotukset.

Annettujen kehitysehdotusten pohjalta Veho Autotalot Oy:n Pitäjänmäen toimipisteen huoltotoiminnoilla on mahdollisuus kehittää toiminnassaan niitä osa-alueita, joista yritysten autopäittäjät eli asiakkaat ovat antaneet negatiivista palautetta, ja toisaalta korostaa niitä asioita, joista annettu palaute on ollut positiivista. Noudattamalla annettuja kehitysehdotuksia Veho Autotalot Oy:n Pitäjänmäen toimipisteen huoltotoiminnoilla on mahdollisuus parantaa asiakastyytyväisyyttään ja samalla omaa tuloksentelekkyään.

Avainsanat Autojen vähittäiskauppa ja korjaamotoiminta, huoltopalvelut, lauseentäydennys-tekniikka, palvelukonsepti, yritysasiakas

Table of Contents

1	Introduction.....	8
1.1	Background for the research.....	8
1.2	The purpose of the thesis, main research question and sub-questions.....	8
1.3	Limitations and outline for the study.....	9
1.4	Existing research on wholesale and retail trade; repair of motor vehicles and service concepts.....	9
2	Wholesale and retail trade, repair of motor vehicles.....	13
2.1	Retail trade and repair of motor vehicles as an industry.....	13
2.2	Retail trade of cars.....	13
2.3	After sales services.....	14
2.4	Service attributes that determine the choice of maintenance service.....	14
2.5	Modularity and customization of maintenance services.....	17
3	Veho Autotalot Oy, competitors and the offered services.....	21
3.1	Veho Group Oy.....	21
3.2	Veho Autotalot Oy.....	21
3.3	Veho Autotalot Oy Pitäjänmäki.....	24
3.4	Key terms of after sales services.....	27
3.5	Competitors of Veho Autotalot Ltd, Pitäjänmäki.....	30
3.6	Customers of Veho Autotalot Oy Pitäjänmäki.....	30
4	Theoretical framework: Service path, service concept, service blueprint, service dominant logic, service design.....	32
4.1	Service path.....	32
4.2	Service concept.....	35
4.2.1	7 P's the service marketing mix.....	35
4.2.2	Service concept worksheet template.....	36
4.2.3	The service package: core and peripherals.....	37
4.2.4	Conceptualizing the service product.....	38
4.2.5	The six dynamic service innovation capabilities.....	39
4.3	Service blueprint.....	42
4.4	Value creation: Goods dominant and service dominant logic.....	43
4.5	Service design, customer value and customer profitability.....	45
5	Collection and analysis of empirical data.....	49
5.1	Developing the sentence completion form and testing it.....	49
5.2	Collection of empirical data.....	51
5.3	Analysis of empirical data.....	51
6	Empirical results.....	52
6.1	Car maintenance services as a service path.....	53
6.1.1	Booking the maintenance service.....	58
6.1.2	Leaving the car to the maintenance service.....	61

6.1.3	Communication with the customer during the maintenance service..	65
6.1.4	Picking up the car from the maintenance service	67
6.1.5	Communication with the customer concerning invitational services..	71
6.1.6	Improved service path with development ideas.....	77
6.1.7	Service manager's views about the new service path.....	78
6.2	Developing a service concept worksheet template	80
6.2.1	Name and description of the concept.....	80
6.2.2	Concept features and justifications for the features	81
6.2.3	Visualisation of the service concept worksheet template.....	83
6.2.4	Service managers views about the service concept	84
6.3	Developing the maintenance service modules	85
7	Summary and conclusions	91
8	Further consideration	98
	References	99
	Figures and Tables	103
	Appendices	106

1 Introduction

The aim of this thesis is to develop a service path and a service concept for the maintenance and repair of motor vehicles offered to business customers in Veho Autotalot Oy Pitäjänmäki. A further objective is to develop new ways to serve the business customers better and to determine if there are some unmet needs that customers have that Veho Autotalot Oy Pitäjänmäki has not offered solutions for. The existing service path and the maintenance service concept can be developed further and in that way the business customers will be served better and competitive advantage will be gained.

1.1 Background for the research

The interest in researching the maintenance and repair services of motor vehicles rose from the author's personal need to develop his professional knowledge of the services in this area. Another important motivation was a request from the former service manager of Veho Pitäjänmäki to develop a new service product or further develop an existing service product. This was felt to be important among other staff members, and the management of Veho Pitäjänmäki considered that this would be a worthwhile research problem considering the company's benefits.

From the author's point of view, it is important to understand the whole business of retail trade and the repair of motor vehicles. As the author himself works in sales, he has a lot of experience of the retail trade but less of the maintenance and repair services of motor vehicles. To become a real professional in retail trade and repair of motor vehicles and a sales director in a large car dealer, it is crucial to understand both the retail trade and the maintenance and repair of motor vehicles.

For Veho Autotalot Oy the maintenance and repair service represents a significant proposal of turnover and in many cases it collects the overall profits of the business. In consequence of the Block Exemption Regulation (BER), the competition in maintenance and repair services of motor vehicles has increased dramatically and many strong competitors have entered the maintenance and repair service of motor vehicles business in Finland. In order to hold the competitive advantage in the changing market, it is important to develop new service products to ensure profits in the future as well.

The outcome of the research is a newly defined service path and maintenance service concept for the business customers of maintenance and repair services of motor vehicles. The value for Veho Autotalot Oy Pitäjänmäki is a profitable maintenance service product and better competitive advantage against competitors.

1.2 The purpose of the thesis, main research question and sub-questions

The purpose of this thesis is to develop a new service concept for the maintenance and repair of motor vehicles for Veho Autotalot Oy Pitäjänmäki, to strengthen its competitive advantage, and to serve better the needs of Veho's business customers. On a larger scale, the aim is that if the developed service concept turns out to be profitable, it could be launched through other shops of Veho Autotalot Oy. This thesis is also one way to indicate to the business customers that Veho Autotalot Oy really cares about them and is committed to serve them within the limits of profitability.

The main research question in this thesis is how to develop a car maintenance service concept for business customers. Veho Autotalot Oy Pitäjänmäki is used as a case organization.

Sub-questions for the theoretical chapters include the following:

- What are the characteristics of the retail trade and repair of motor vehicles industry? (Chapter 2)
- What are the most important service attributes that determine the choice of maintenance services? (Section 2.4)
- What is modularity and customization in maintenance services? (Section 2.5)
- What is a service path? (Section 4.1)
- What kinds of different service concept models exist in the literature? (Section 4.2)
- How can new service concepts be developed? (Section 4.2)
- What is the service concept worksheet template? (Section 4.2.2)
- What is a service blueprint? (Section 4.3)
- What is service dominant logic? (Section 4.4)

Sub-questions addressed in the empirical chapters include the following:

- What are the key elements of the retail trade and repair of motor vehicles for Veho Autotalot Oy Pitäjänmäki? (Section 3.3)
- What kind of a service path exists in Veho Autotalot Oy Pitäjänmäki maintenance services? (Section 6.1)

- How can new service concepts be developed in Veho Autotalot Oy Pitäjänmäki? (Section 6.2)
- What kind of a service concept model based on modules exists in Veho Autotalot Oy Pitäjänmäki? (Section 6.3)

The author has gained wide experience from car sales in the past six years, and based on that experience, the author has basic knowledge about the maintenance and repair of motor vehicles services as well as understanding about business customer's basic needs and interests.

1.3 Limitations and outline for the study

The study is limited to involve only Veho Autotalot Oy Pitäjänmäki and it is illustrated as a pilot shop in this research. Based on the results in Pitäjänmäki, the results might be multiplied to other shops. The business customers are the target group as they are the largest customer group for Veho Autotalot Oy Pitäjänmäki and they bring the largest turnover for the maintenance and repair services of motor vehicles.

Only the services of repair and maintenance department of Veho Autotalot Oy Pitäjänmäki are explored in this study.

1.4 Existing research on wholesale and retail trade; repair of motor vehicles and service concepts

There are many existing studies concerning retail trade and repair of motor vehicles, though most of them are conducted for the Car and Transportation technic study programme in Tampere University of Applied Sciences (Table 1). Only ten studies relate to customer satisfaction or to the selling of maintenance services. None of the found studies were Master's theses neither written in English.

Most of the studies related to service concepts were Bachelor's theses as were the ones related to wholesale and retail trade; repair of motor vehicles. Only two of the studies related to service concepts were Master's theses and one study was conducted for Business Information Systems in Jyväskylä University of Applied Sciences. In the theses, there are topics like new service development, Service Blueprint, Service Design (process and methods) and some others related to service concepts. This thesis links the core items of service concept and retail trade and repair of motor vehicles to each other and presents the new ways to offer the car maintenance and repair of motor vehicles service business for business customers. In Table 1 the studies are listed that are related to the above mentioned topics.

Author, Year	Thesis name
Automotive sector	
Peräjoki Jerno, 2009	Henkilöautokorjaamon uusintakäynnit
Lehtiniemi Janne, 2007	Autokorjaamon työskentelyn kehittäminen
Mäkitalo Markus, 2005	Korjaamon asiakastyytyväisyyden tutkiminen
Mattila Pekka, 2007	Toyota Tammer-Auton huoltokorjaamon ydinprosessi
Nummi Petros, 2010	Korikorjaamon toiminta
Erkkilä Sami, 2011	Pientoimittajan mahdollisuudet autonhuoltotuotemarkkinoilla
Vähä-Kungas Jan-Mikael, 2009	Jälkimarkkinointi autokaupassa
Palmu Tiina, 2009	Korjaamon asiakastyytyväisyyden mittaaminen - Case: Länsiauto Oy Magneetti
Service concept theories	
Peltonen Aki, 2010	Ravintolan palvelukonseptin kehittäminen päivittäisjohtamisen avulla. Esimerkkinä ravintola Johannes
Partanen Jenna and Haarala Arno, 2010	Palvelukonseptin kehittäminen - Metsäterapia
Pietilä Minna, 2010	Palveluiden tuotteistaminen BarLaurean Living Lab-ympäristössä
Berg Jaana, 2011	Palveluinnovaation tuotteistus ja omaksuminen
Lahti-Nuuttila Kaisa, 2009	Palvelun tuotteistaminen
Ylitalo Janne, 2011	Productization process of services in telecommunication industry
Kärpänen Terhi, 2011	Understanding Customer Experience trough Methodological Triangulation - Case: Repair Services in Finland
Keränen Reetta, 2011	Palvelukonseptin suunnittelu Kolmannelle Persoonalle : Asiakasymmärryksen hyödyntäminen palvelukonseptin suunnittelussa

Table 1: Previous studies discussing retail trade and repair of motor vehicles and service concepts

Peräjoki's (2009) thesis focused on Autotalot Laakkonen Oy about revisits to the car service. This is a crucial factor in customer satisfaction, and based on the experience of the author, a real subject that car services struggle with. Peräjoki (2009) wrote that revisits are a large cost for car services and as the author mentioned they have an impact on customer satisfaction. The aim of Peräjoki's (2009) thesis was to find out the most common reasons for revisits and to find solutions how to reduce them. Peräjoki (2009) found that with personnel's actions and with their co-operation the revisits can be reduced significantly.

Lehtiniemi (2007) conducted his thesis for the car and transportation study programme in Tampere University of Applied Sciences as well as Peräjoki (2009). The aim of Lehtiniemi's (2007) thesis was to find the development points and solutions to them in Veho Tampere's service. Lehtiniemi (2007) interviewed foremen and mechanics and based on their views and his own experience from the foreman's job he made the development plans for Veho Tampere. The main development points and plans were an express service and work order functions. Mäkitalo (2005) explored customer satisfaction in his thesis. Mäkitalo (2005) did his thesis for car and transportation study programme in co-operation with Levorannan Autoliike, Vammala. In Mäkitalo's (2005) thesis the focus was in private customers and in the development of customer satisfaction programme. There did not come up any new innovations but together with the Levorannan Autoliike, Mäkitalo developed a customer satisfaction surveillance program.

Mattila (2007) focused on the total car service process in his research. Mattila (2007) worked self as a service advisor, and based on that and his research, he compiled a thesis that can be used as a training instruction as well. Mattila's (2007) thesis was done for Toyota Tammer-Auto Oy where he worked.

Nummi (2010) focused on the car bodyshop's functions in Rinta-Jouppi's Pori shop. The main points were repair times, efficiency of the bodyshop and customer satisfaction. Areas that Nummi (2010) improved were communication between the foremen and the mechanics, spare parts functions and timetable bookings.

Erkkilä (2011) made his research for the business degree programme about the opportunities that a small supplier has on Finnish wholesale and retail trade of motor vehicles markets of care products. Research was made for a small company called Jasper Oy and it was conducted with quantitative methods. The result of the research was that the small operators must have better supply credibility, broader range of products and better prices to be able to compete with the big operators of the branch.

Also Vähä-Kungas (2009) made his research for the business degree programme but he had a broader view on the research as he used four different car shops for the research. Two of the shops were shops that sold premium cars and two shops that sold other than premium cars. According to the research, which was made by utilizing quantitative methods, there was not any relevant difference in actions between premium shops and the others. The biggest issue for customers in all cases was a lack of customer relationship management. The research did not propose any concrete development ideas.

Palmu (2009) studied customer satisfaction of service customers in Länsiauto Magneetti Oy Vantaa. The aim was to develop tools for measuring the customer satisfaction and perform a survey among customers. Magneetti has two customer promises which are "Customer will be taken in account within two minutes after entering the shop" and that "maintenance service will be done within two days from the booking of the maintenance service". According to Palmu (2009), Magneetti was able to meet the second promise about the service times but taking into account the customers within two minutes they failed. As a result, Magneetti has continued customer satisfaction surveys and they have realized the true importance of customer trust and satisfaction.

According to the author's opinion, it is necessary to conduct the thesis about services and how to develop those in the car maintenance service. The input to do the thesis about maintenance services came from the superior of the author. Superiors' idea was to gain

authors knowledge about the maintenance services and by that way broaden the author's overall knowledge about the retail and repair business of motor vehicles. Repair services have not been widely researched from the service point of view. Major share of the GDP nowadays consists of services so it is a rather natural decision for the author to study the service design in the context of the repair and maintenance business.

The author believes that this research opens up the service concept of the maintenance services for the readers and may help the other researchers to study the subject further. This thesis offers a new view to repair of motor vehicles and may help the reader to understand deeper the maintenance services.

2 Wholesale and retail trade, repair of motor vehicles

This chapter includes a description on retail trade and repair of motor vehicles. The retail trade consists of new and used cars and the repair includes the key elements of the maintenance and repair services.

2.1 Retail trade and repair of motor vehicles as an industry

The retail trade and repair of motor vehicles in Finland employs about 27 300 persons (2010). The employment on the sector has improved since 1995 except the years 2008 and 2009. The majority of employees are mechanics (45 %), other officers (38 %), technical officers (under 10 %) and senior staff members (7.5 %). As the large age groups are starting to retire to pension, there is a need for over 2000 new employees in the industry every year. Nowadays only about 1100 new employees enter into the industry every year, even though there are 2150 new study positions every year. This sets a huge challenge for the retail trade and repair of motor vehicles. The Finnish information centre of retail trade and repair of motor vehicles has web pages www.autoala.fi for people who are interested in car business. On those pages there are information about the different job opportunities on the industry and information about the companies working in the industry as well as FAQ-section. (Autoalan tiedotuskeskus 2011a.)

2.2 Retail trade of cars

This section consists of general description about retail trade of cars and about annual car sales in Finland. The sales are distributed to own product and customer groups.

In 2010 there were 126 396 car first registrations in Finland. New passenger cars were registered 111 968 pcs., delivery vans 11 045 pcs., trucks 2870 pcs. and 513 buses. Growth in 2010 compared to 2009 was 23.6 %. The estimate for 2011 is 122 000 new passenger cars. (Autoalan tiedotuskeskus 2011b.)

There are about 550 000 - 600 000 used cars sold every year in Finland. Half of this amount is sold by brand retailers, about 25 % by unorganized car dealers and 25 % by consumers to consumers. (Autoalan tiedotuskeskus 2011b.)

Since the car taxation was reduced significantly in 2003 the importing of used cars to Finland has increased enormously. In 2010 over 30 000 used cars were imported in Finland. (Autoalan tiedotuskeskus 2011b.)

2.3 After sales services

After sales services is an important department in a car dealer company as two thirds from car shops profits comes from after sales services. After sales services include all the services that take place after the car has been purchased. After sales services are repair activities that include maintenance service and other repairing; damage repair including paint works, rust prevention, spare part functions, courtesy and rental cars as well as all other possible after sales services. (Autoalan tiedotuskeskus 2011c.)

45 % of people that work for retail trade and repair of motor vehicles work as mechanics. There are many different types of mechanics: car mechanic, car painter, car electrician, express mechanic, a body repair mechanic, a diesel mechanic and heavy trucks mechanic. In addition to mechanics in after sales, there works spare parts salespersons, warehouse keepers, service foremen, service advisors and warranty handlers. The titles of managers in after sales services are a after sales manager, a service manager, a bodyshop manager and a spare parts manager. Pensioning of the large age groups threatens especially the after sales services as there are not that many young people interested in car after sales services. (Autoalan tiedotuskeskus 2011c.)

Old car fleet that Finland has offers multiple challenges to the car service companies. Technology that new cars have insists good computing skills from the mechanics and, on the other hand, the old cars need a lot of know how. The middle-age of passenger car fleet in Finland is 11.9 years which is one of the highest in Europe. 60 % of 2-6 year old cars are taken to brand shops for maintenance but only 37 % of 7-10 year old cars and further from that only 18 %. The growing imports of used cars have increased the customer flow in “no-name” repair shops and services. The competition in service business has increased and it is expected that there will be a few foreign service shops or chains also in Finland. The increase of competition improves customer service as well as the quality of conducted maintenance services. (Autoalan tiedotuskeskus 2011c.)

2.4 Service attributes that determine the choice of maintenance service

Brito and Aguilar (2007) made a research in Brazil about the owners of used cars, and their choice between branded car dealers and independent garages when using maintenance services. Brito and Aguilar (2007) interviewed 400 car owners that had over 1000cc engine in their cars and the warranty of the car had ended. Based on earlier researches and their own studies, they came up with 30 service attributes. (Brito & Aguilar 2007, 464-471.)

1	Ability to absorb non-estimated costs generated by internal problems or failures
2	Ability to anticipate problems
3	Accuracy and correctness of invoice and receipt
4	Adequate opening hours
5	Attendants' cooperation and quick response
6	Attendants' trustworthiness
7	Attention to modifications demanded by the customer
8	Attention to service details
9	Employees' discretion
10	Employees' willingness to get to know customers
11	Employees' appearance
12	Employees' courtesy and politeness
13	Employees' knowledge and experience
14	General equipment condition
15	General site condition
16	Getting it right first time
17	Giving the customer individual and personal attention
18	Image of being reliable
19	Keeping promises
20	Keeping to agreed schedule
21	Keeping to original forecasted price
22	Mechanics' trustworthiness
23	Organization's climate and environment
24	Prompt price change communication
25	Value for money service
26	Willingness to adapt to customer schedule
27	Willingness to adopt specific solutions
28	Willingness to explain service development
29	Willingness to negotiate
30	Willingness to solve the customer's problems

Table 2: Car maintenance service attributes (Brito & Aquilar 2007, 472)

Most of the service attributes in the Table 2 are similar with the attributes covered in this study. Brito and Aguilar (2007) tried to find the reasons for customers to choose between brand car dealers and the independent garages when using maintenance services. They discovered that as the car ages, the percentage of customer who use brand dealers drop dramatically. According to Brito's and Aguilar (2007), when the car is two years old about 80 % of customers take the car to brand dealer for maintenance service but after four years of age the percentage is under 30 %. From four years to nine years it drops only about 10 %, from 30 % to 20 %. (Brito & Aquilar 2007, 464-471.)

Virtanen (2011) examined the same subject as Brito and Aquilar (2007) in Veho Autotalot Oy and noticed similar indications. Virtanen (2011) noticed that there are rather large differences between different car brands and in their owner's behaviour of choosing between brand car dealers and independent garages maintenance services. There are also big areal differences that have not been able to clarify and trace the reasons for the differences.

Table 3 opens the most important service attributes of consumers in independent garages as well as on branded dealers. The importance of different attributes varies a lot between the two alternatives.

Customers of independent repair garages	Customers of branded dealers
Keeping to original forecasted price	Getting it right first time
Value for money service	Value for money service
Getting it right first time	Mechanics' trustworthiness
Mechanics' trustworthiness	Keeping to original forecasted price
Keeping promises	Employees' knowledge and experience
Willingness to solve customers' problems	Keeping to agreed schedule
Keeping to agreed schedule	Keeping promises
Employees' knowledge and experience	Attention to modifications demanded by the customer
Attention to modifications demanded by the customer	Willingness to solve customers' problems
General equipment condition	General equipment condition

Table 3: Most important service attributes with independent repair garages and branded dealers (Brito & Aquilar 2007, 474)

The results and conclusions of Brito's and Aguilar's (2007) research are shocking from the point of view of branded car dealers and their maintenance functions. The research revealed that brand dealers have only 25 % market share of the maintenance markets and that the only attribute that was considered to be better in brand dealers was better equipment condition. Brito and Aguilar (2007) stated that this attribute is rather easy to copy. Independent garages were considered to be better e.g. in value for money, adherence to forecast prices and mechanical reliability. (Brito & Aquilar 2007, 477-479.)

Though the results of Brito's and Aguilar's (2007) research cannot be directly transferred into the Finnish market, however, the same indications can be seen. Brito and Aguilar (2007) suggested that the brand dealers could try to gain competitive advantage by including guaranteed prices, promoting direct contact between the customer and the mechanic instead of keeping the service foreman on the middle who might lack the technical knowledge. Brand dealers should also promote the relationship they have with the car manufacturers and to give image of more updated technology and reliability. (Brito & Aquilar 2007, 478-479.)

It is surely on every service manager's knowledge in the Finnish repair and maintenance markets that the market share of independent garages has been raising at least for the past 10 years and many capable mechanics and foreman have changed jobs to work for independent garages. The branded repair and maintenance shops have all the tools needed to conquer back the markets from the independent garages; the question is about will and professionalism

2.5 Modularity and customization of maintenance services

Bask, Lipponen, Rajahonka and Tinnilä (2011) studied the modularity and customization. Modularity is considered as a most important method for mass customization. Bask et al. (2011) focused in the subject thru products as they claimed that it is commonly recognized that products and services does not differ that much from each other what becomes to building modules and customization. The degree of modularity and customization of the product or service is strongly dependable of the customer segmentation and the customer types. Great variety is not the same thing as customization. The difference between variety and customization is that variety offers large amount of different options when customization tries to offer exactly the service or product the customer wants and needs. Modularity does not offer the same possibilities as customization but it gives the possibility to differ from the basic product as much as different modules allow doing it. (Bask, Lipponen, Rajahonka & Tinnilä 2011, 306-307.)

One example for services could be the difference between usual gas station car wash and professional car wash. When customer goes to, for example to Shell, he/she can decide between about ten different car washes that are all modules of some independent parts of the car wash. For example "Top wash" can include brushless wash, wheel wash, chassis wash, wax to the car and drying. Then "Medium wash" may contain all the same elements except chassis wash and wax. When customer takes the car to professional car wash, there might be the same kinds of modules that customer can choose from but there is the possibility for customization. Customer can choose that the car is hand washed, waxed with some certain special wax, vacuum cleaned from inside and the leather seats are treated with some leather treatment and so on. These are the examples of modularity and customization in services.

Bask et al. (2011) presented their four categories about the degree of modularity and customization. The categories (Figure 1) are "non-modular regular", "modular regular", "modular customized" and "non-modular customized". Figure 1 demonstrates the four different categories (Bask et al. 2011, 310).

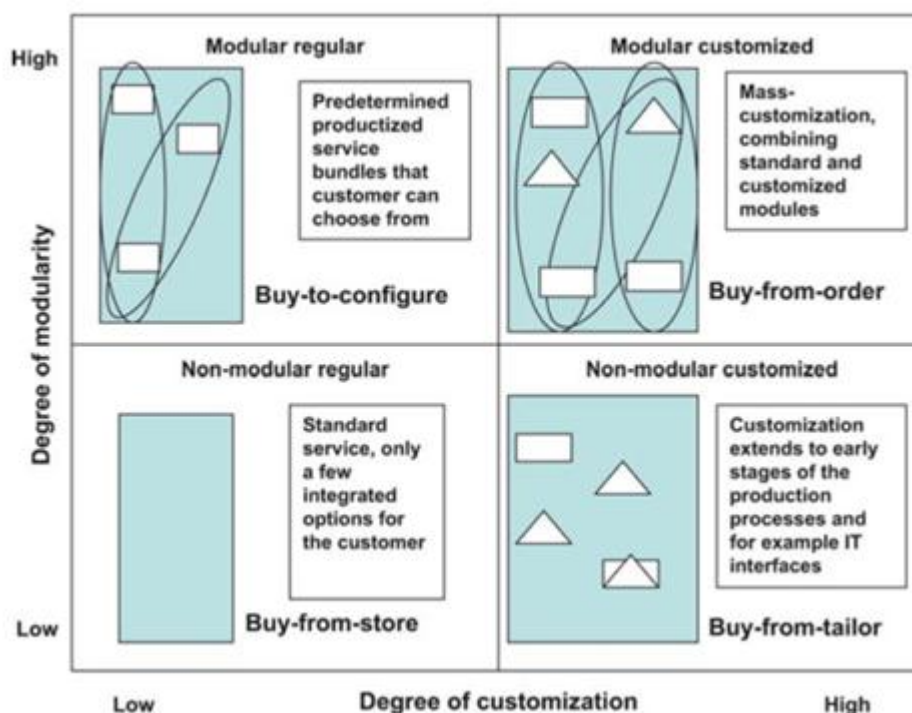


Figure 1: Combining modularity and customization in service offerings (Bask et al. 2011, 310)

Modularity and customization naturally affect the delivery time of the service or product. The more customized the product or service, the longer it takes to deliver it. In many cases modularization is easier and faster as some elements of the service can be prepared for forehand. Bask et al. (2011) took their examples of modularity and customization from automotive industry. Their example from “modular regular” is Smart, a small city car by Mercedes-Benz. There are numerous different options when buying Smart but all of them are more or less bundled to modules. An example of this might be that you can choose a black roof to a red car but the bumpers will also be black, or if you want a parking sensor you have to take the better CD-player also. Bask et al’s (2011) example from “modular customized” is Volvo with over one million car variants. The direction in car industry especially in family and premium cars has been towards “modular customized”. There are packages that customer can choose for their car and then there are numerous individual elements and accessories that can be picked from the list. Due to these possibilities and the amount of sub-contractors the waiting times of new cars have extended and customer might have to wait for a new car for almost a year. (Bask et al. 2011, 313.)

In “non-modular regular” group Bask et al. (2011) named two examples: the first real production car Ford Model T and the “world’s cheapest car” Tata Nano (Figure 2). Both of them belong to the same group though from different reasons but the modularity and customization possibilities are the same as there are none.

In Tata Nano customer can choose from a few colour possibilities but Ford Model T was available “in any colour as long as it is Black”. As the delivery time increases when the modularity and the level of customization increases it is also obvious that the price of the product or service will also increase. Tata Nano is the world’s cheapest car, Smart is reasonably prized but not cheap, Volvo is not expensive but already on the premium end which means that there are many significantly cheaper cars. Formula cars are the most expensive ones that customer may buy if even possible to buy one without right kind of connections. As formula cars are in the non-modular customized group those are “bought from tailor”. This means that there is not basically anything ready before the customer makes the buying decision. Everything is designed according to the customer’s wishes and demands. This leads to very expensive customized service where everything is done based on the customers wishes and demands. It can be said that even product turn into services when there is enough customization. Customer ends up to paying about the service related to the product rather than the service itself. The more the product or service moulds in to the customers standards the less the price matters at the end. (Bask et al. 2011, 313-316.)

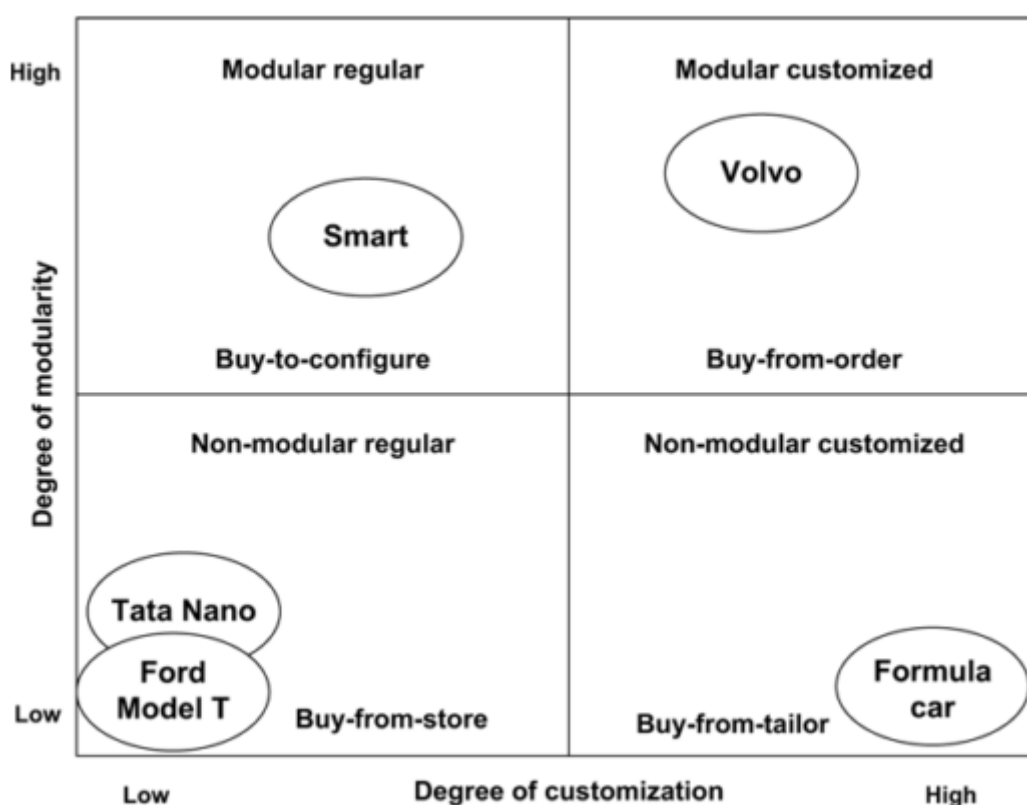


Figure 2: Modularity and customization in the automotive industry from the service offerings perspective (Bask et al. 2011, 313)

There are now presented the advantages and the options for the customer in the modularization and customization process but the actual idea of modularity and customizations is in the service provider functions. As in the modern business life, the demands of customers increase almost all the time and so does the competition which puts the pressure for the prices. To maintain the competitive advantage companies are forced to develop new ways to meet the customer demands but still to maintain their profitability. In car industry as well as in many other businesses the competitors are forced to unite their forces. World's largest car manufacturer Volkswagen belongs to the same company with Audi, Skoda and Seat. Citroen works together with Peugeot, Volvo with Ford and so on. The reason for uniting and co-operation is to cut the development and manufacturing costs and by that way to remain the ability to compete in the market. Bask et al. (2011) stated that the model they present is just an example on how the modularity and customization can be considered and by making an example from car industry they wish it will increase the discussion on the service field. (Bask et al. 2011, 315-316.)

The modularity is widely in use in many industries as well as in car manufacturing. The simplest modularity clarifies things and makes the production cheaper. For the maintenance services modularity can bring a clearer view to the customer about the service, clarity to the maintenance service process and economic benefits for both the service provider and the customer.

3 Veho Autotalot Oy, competitors and the offered services

This chapter includes a description about the largest competitors of Veho Autotalot Oy, Pitäjänmäki, a company description about Veho Autotalot Oy and Veho Group Oy as well as about Veho Autotalot Oy Pitäjänmäki. There is also a description about offered services by Veho Autotalot Oy Pitäjänmäki.

3.1 Veho Group Oy

Veho Group Oy is the leading company in wholesale and retail trade; repair of motor vehicles in Finland and it has operations also in Sweden and in Baltic countries. Veho was established in 1939 to be the importer for Mercedes-Benz cars. Today Veho has multiple heads and its business consists of importing passenger and commercial vehicles as well as retail trade, maintenance and repair of motor vehicles. In 2010 the concern's turnover was 910 million euros and the amount of personnel was 2102. The following companies belong to Veho concern: Veho Group Oy (parent company), Assistor Oy, Auto-Bon Oy, Maan Auto Oy, Vaihtoplus Oy, Veho Autotalot Oy, Veho Rent Oy and Veho Trucks Service Oy Concern's companies located in Sweden and Baltic countries are Philipson Västra Svealand Bil Ab, Veho Bil Ab, Assistor Oü (Estonia), Veho Eesti Oü, Veho SIA (Latvia) and Veho UAB (Lithuania). (Veho Group Oy 2010. Annual Report 2010, 3.)

The role of the companies in Veho concern located in Finland that is related to wholesale and retail trade; repair of motor vehicles are the following:

Auto-Bon Oy: importing of Citroen passenger cars and vans

Maan Auto Oy: importing of Peugeot passenger cars and vans

Vaihtoplus Oy: selling only used cars in Tuusula and Oulu

(Huoltoplus Oy: maintenance and repair services of motor vehicles in premises of Vaihtoplus)

Veho Autotalot Oy: selling own imported brands together with Ford, Honda and Skoda

Veho Rent Oy: car rental business under commercial name Sixt

Veho Group Oy: importing of Mercedes-Benz passenger cars and vans

3.2 Veho Autotalot Oy

Veho Group Oy's subsidiary Veho Autotalot Oy is the largest retailer of Mercedes-Benz and Citroen passenger cars and vans in Finland. In addition, Veho Autotalot operates as a retailer for Honda, Ford and Skoda. There are eight Veho Autotalot shops of which four are located in Metropolitan area and the others in Tampere, Turku and Oulu. Veho Autotalot shops are full-service car showrooms. In Metropolitan area those are complemented by two damage repair

specialized workshops. For business customer's interests Veho Autotalot Oy tailors individual service concepts. (Veho Group Oy Annual Report 2010, 5.)

In 2010 Veho Autotalot Oy sold 23 459 passenger cars, out of which 9 953 were new cars and the rest used cars. The four most sold brands were Mercedes Benz (2 645 pcs.), Citroen (2 359 pcs.), Skoda (1 679 pcs.) and Ford (1 463 pcs.). (Automaster Analyzer 2011.)

In 2010 Veho Autotalot Oy maintenance and repair services collected turnover about 93 million euros (2009: 89 million euros). The largest service unit measured by turnover was Veho Tampere with 14.5 million euros, second was Veho Pitäjänmäki with 13.2 million euros and third largest was Veho Koivuhaka with 13,1 million euros turnover. Altogether, Veho Autotalot services did about 8.6 million euros profit which was over 5 million euros better than in 2009. (3.1 M €). (Automaster Analyzer 2011.)

Values and principles of Veho Autotalot Oy

Values and principles of Veho Autotalot Oy are gathered to "VTT-Vehon Tapa Toimia" (VTT) freely translated "Veho's way to work" and into Veho Autotalot Oy's road map. In VTT there is an introduction which is general and then there is a section for car sales, secretaries and for service personnel. The three values of Veho Autotalot Oy are customer centricity, professionalism and results orientation. (VTT-Vehon Tapa Toimia 2011.)

Veho Road Map (Figure 3) is a strategic plan for the next four years made by the management of Veho Autotalot. The aims and goals of Veho Autotalot are communicated to the employees via the Road Map. The Road Map can be seen in various places in each Veho Autotalot shops, for example, in every conference room there should be one framed on the wall.

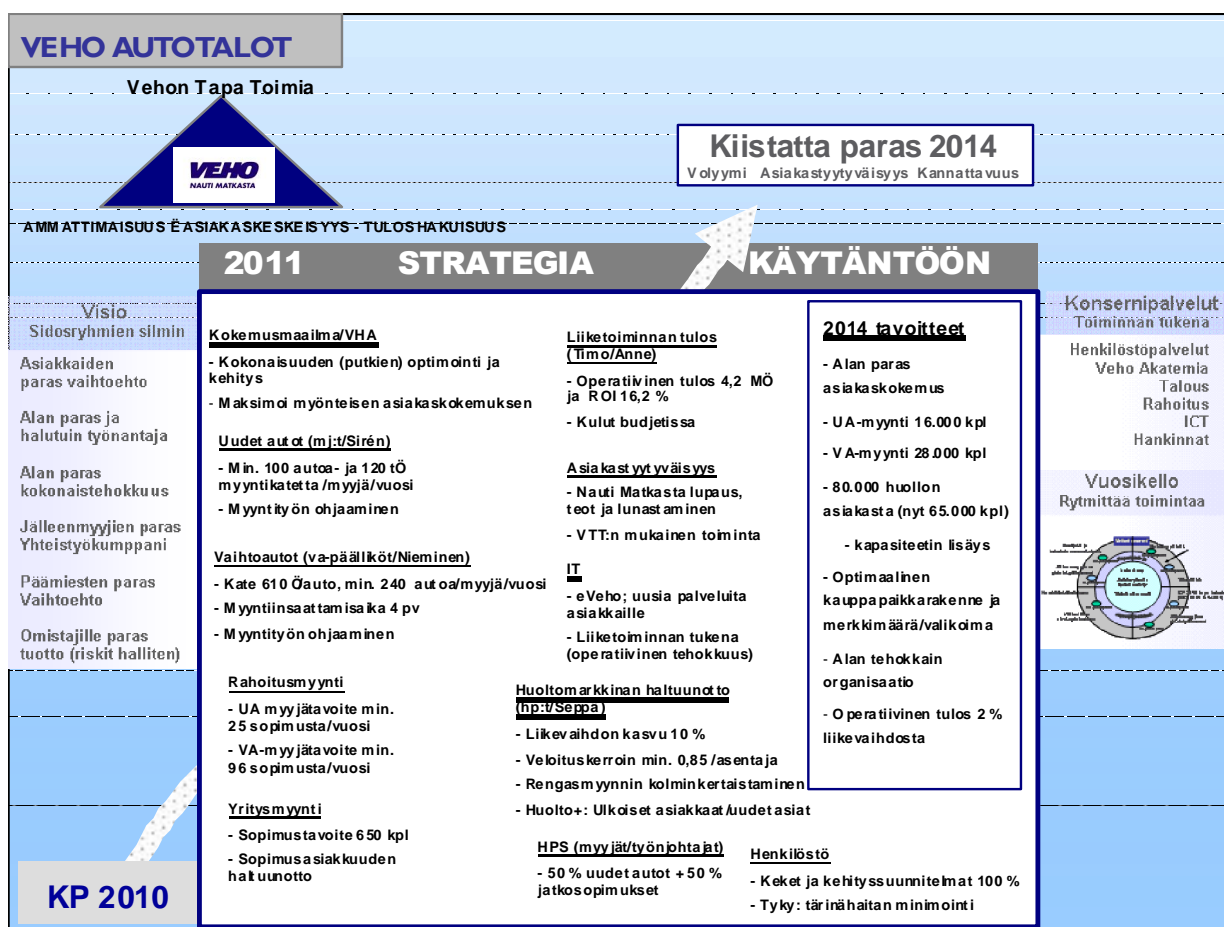


Figure 3: Veho Autotalot Oy Road Map (VTT-Vehon Tapa Toimia 2011)

According to VTT (Vehon Tapa Toimia), all functions are controlled by absolute customer and market centricity. As to customer satisfaction, Veho Autotalot Oy wants to be the best in Finland and every employee should be committed to do their own best in order to achieve the assigned goals.

In everyday work Veho Autotalot obeys good management and continuous development principles. To support this all communication is up front and all actions are fair. (Vehon Tapa Toimia 2011.)

3.3 Veho Autotalot Oy Pitäjänmäki

Veho Autotalot Oy Pitäjänmäki shop is located in Kutomotie 1 A, in Helsinki. There has been a car shop since 1955 in the same place but under name Veho Autotalot it has worked since 1.3.2006. From 1955 till 2006 the shop worked under the name Stockmann Auto. (Arola 2005.) In 2005 Stockmann Oy decided to divest from car business and sold most of its car business functions to Veho Autotalot. Kesko (VW-autotalot and Audi-Center) bought functions concerning Volkswagen and Audi brands and Maan Auto concern bought Ford functions in Espoo and in Turku. As a part of the deal Stockmann started extensive loyal customer co-operation with Veho Autotalot. (Kilpailuvirasto 2006.)

There are four different car brands that are sold in Veho Autotalot Oy Pitäjänmäki. Those brands are Citroen, Ford, Honda and Skoda. In addition to the above mentioned, there is also service and repair for Mercedes-Benz, Smart and Volkswagen passenger cars. Damage repairs are outsourced to another Veho service shops located in Muurla, Espoo and Suutarila, Helsinki.

In Veho Autotalot Oy Pitäjänmäki there works 134 employees of whom 110 with permanent agreement. 20 employees work in car sales and 47 on the maintenance service. The remaining 43 employees work in management and in back-office functions. (Elbit Skills 2011.)

The turnover for Veho Autotalot Oy Pitäjänmäki in 2010 was just under 64 million euros of which 50.6 million euros from car sales and the rest 13.2 million euros from after sales services. The operating profit after expenses was - 1.362 million euros for the car sales and +405 thousand euros for the after sales services. All together Veho Pitäjänmäki resulted -966 thousand euros operating profit in 2010. (VAT tulokuvat 2010.)

Veho Autotalot Oy Pitäjänmäki sells about 3300 cars every year. In 2010 Veho Autotalot Oy Pitäjänmäki sold 176 Citroen passenger cars and 25 Citroen commercial vehicles, 765 Ford passenger cars and 245 Ford commercial vehicles, 301 Honda passenger cars, 598 Skoda passenger cars and 1062 used passenger cars. (Automaster Analyzer 2011.)

The sales in Veho Autotalot Oy Pitäjänmäki is distributed as follows into different customer groups (Automaster Analyzer 2011):

1. Companies and leasing companies 49.2 %
2. Private customers 37.4 %
3. Government, communities & others 13.3 %

Most of the sales in new cars come from the business customers and in consequence to that they are also the biggest customer group in maintenance service. The maintenance service sales are divided into different customer groups as follows (Automaster Analyzer 2011).

1. Companies and leasing companies 40.2 %
2. Private customers 36.4 %
3. Government and communities 23.4 %

Retail trade, maintenance and repair services offered by Veho Autotalot Oy Pitäjänmäki

Veho Autotalot Oy Pitäjänmäki is a full-service car dealer selling Citroen, Ford, Honda and Skoda. In addition to above mentioned maintenance and repair service takes care of Mercedes-Benz, Smart and Volkswagen passenger cars. There is Taxi-service and express service together with window changing supporting all the other service functions. Veho Autotalot Oy Pitäjänmäki as Veho in general offers also insurances, financing, care contracts, storage of winter/summer tyres, flight maintenance service, pick-up service and damage repairing service. All the main services for different customer groups can be seen in Table 4.

Service provided	Service provider	Customer group
<i>new cars sales</i>		
B to B sales	new cars sales teams	all companies despite the size of the company
B to C sales	new cars sales teams	all private customers
needs analyzis and car policy designing	company sales services	companies with 10 cars or more
offer counting for Fleet companies	new cars sales teams together with company sales services	companies with 10 cars or more
insurances	new cars sales teams (IF)	all car sales customers
financing	new cars sales team (banks and financing companies)	all car sales customers
care contracts	new cars sales teams	all car sales customers
<i>used cars sales</i>		
B to C/B sales	used cars sales team	all customers buying used cars
B to B sales	used cars sales manager	only professional used cars sales companies
valuing of used cars	evaluation person	all car sales customers
insurances	used cars sales team (IF)	all car sales customers
financing	used cars sales team (banks and financing companies)	all car sales customers
<i>AFTER SALES SERVICE</i>		
<i>maintenance service</i>		
Airport service	service personnel	all service customers
Evening service	service personnel	few largest company customers
Pickup service	service personnel	few largest company customers
Invitation service	service personnel	few largest company customers
Repair service	service personnel	all service customers
Express service	service personnel	all service customers
Tyre sales and change service	service personnel	all service customers
Windscreen sales and change service	service personnel	all service customers
Spareparts sales	spareparts sales	all service customers
Car wash service	Trodos Cyp Ltd.	Veho Autotalot Ltd. Pitäjänmäki and customers of service
Pre Delivery inspection (PDI)	service personnel	new cars sales

Table 4: Services offered by Veho Autotalot Oy Pitäjänmäki

Account Manager is taking care of business customers. Her job is to consult companies' decision makers and to offer services that Veho Autotalot Oy provides to the business customers. Together with the Sales Director and Sales Managers the Account Manager shares the information about Veho Autotalot Oy and the services provided to business customers.

Veho Autotalot Oy Pitäjänmäki's after sales services offer five different kinds of maintenance services which all are based on the basic maintenance service. In addition to the basic maintenance service, there is an airport service, an evening service, a pickup service and an invitation service. This study focuses only on a basic maintenance service as it represents over 90 % of all maintenance services and all of the other maintenance service products are based on that. In chapter 6 there is a description on the basic maintenance service path. Figure 12 demonstrates the differences between different maintenance services and describes the content of the four other maintenance services.

As Table 4 demonstrates there are also other service products offered by Veho Autotalot Oy after sales services, but those have a minor role compared to the basic maintenance service product. Many of the additional services (car wash, tyre change etc.) are offered with the maintenance services or after those.

3.4 Key terms of after sales services

There are many areas in the after sales services that need to be monitored. All the measures are associated to the efficiency of the after sales services. There are several indicators that can be used to evaluate the efficiency of the after sales services. Here are the main terms and indicators.

- Charge factor: Sold service time divided into attendance hours. The count from this one should be 1 or over for the efficiency to be good.
- Uninvoiced work: Measured both in pieces of open work orders as well as in euros. Amount on uninvoiced work orders depends of course about the size of the maintenance service but in Veho Pitäjänmäki the amount varies between 150-300 thousand euros. It should never go over 300 thousand euros but neither it will ever go under 150 thousand euros. (Hacklin 2011.)
- Reservation rate: Reservation rate is measured by the length of the queue in a number of days (Table 5). Roughly a queue of less than seven days is poor, 7-12 days is good and over 12 days is too long. Reservation rates are measured weekly and separately about every brand and service point. (Lindström 2011.)

Korjaamon jonotilanne										
	VAT									
	Herttoniemi	Koivuhaka	Muurala	Olari	Oulu	Pitäjänmäki	Suutarila	Tampere	Turku	Hatanpää
smart		10		14	4			3	8	
Ci Pa	2	13		11	3			0	5	
Vauriokorjaamo			18		0		8	5	8	
Taksi		7				6				
MB Pa	2	13			3			0	5	
Honda	2	6		14	0	6		5	6	
MB Ha	6	7		12	5	5		3	5	
Ci Ha	6	8		17	4	12		6	4	
Ford Ha						4		1	5	
Ford Hya						3		1	5	
Skoda		6		13		3				3
Volkswagen Ha						3				
Monimerkkikorjaamo										
	4	9	18	14	3	5	8	3	6	3

Table 5: Queue situation on week 36/2011 (Veho Autotalot Oy Pitäjänmäen johtoryhmän pöytäkirja vko 36. 2011)

- Turnover: The turnover of work sales and parts is monitored separately. The differences between car brands are also monitored and marketing actions done based on the service sales. (Lindström 2011.)
- Answering-% on phone calls: This rates the percentage of the received phone calls that are answered (Table 6). If the percentage is too low, there is too much work for the foremen and the calling customers will remain unserved. Answering percentage should be 60 - 70 % (Table 7). (Lindström 2011.)

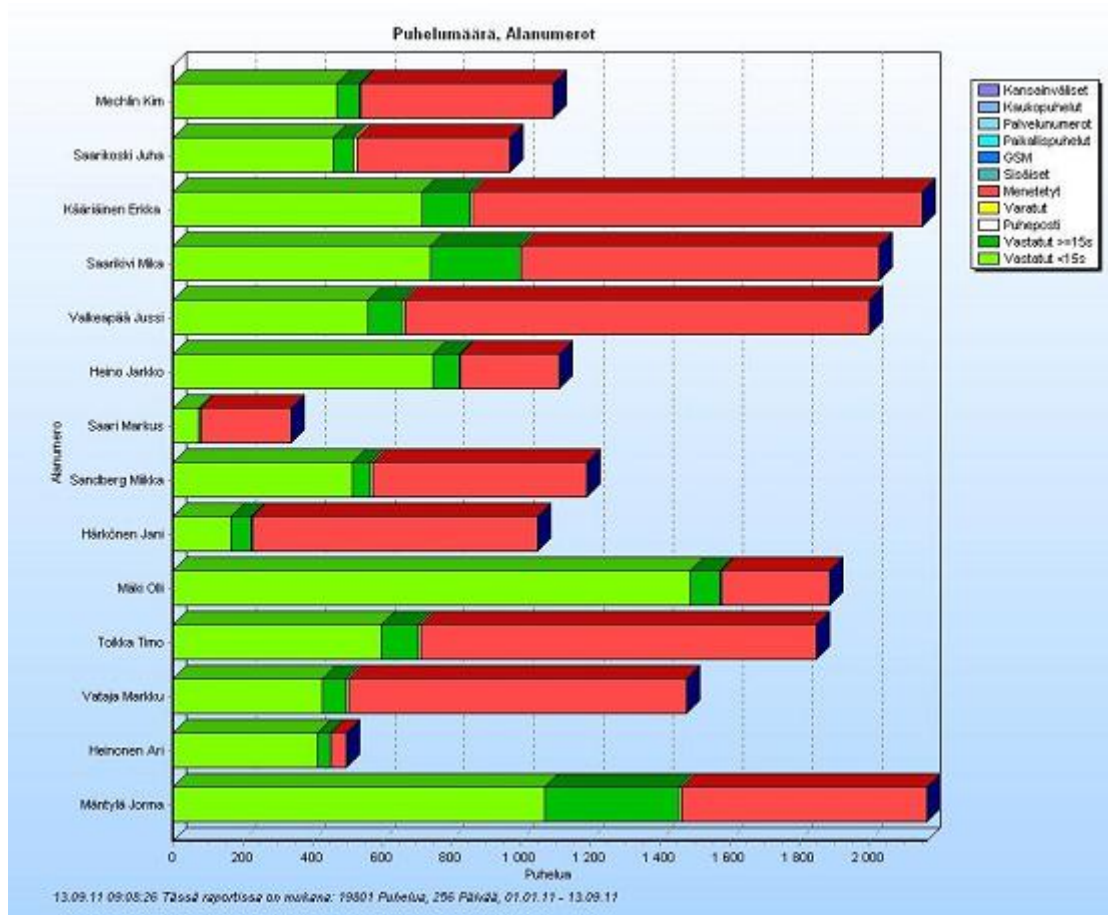


Table 6: Foremen's answering percentages in Veho Autotalot Oy Pitäjämäki

Alanimero	Tulevat	Tulevat	Tulevat	Tulevat	Tulevat	Tulevat	Tulevat	Tulevat	Tulevat	Tulevat	Tulevat	Tulevat
Alanimero	Puhelu	Ka.sointi	Minimi soittoaika	Maksimi soittoaika	Kesto	Ka.kesto	Menetetty Ka.sointi	Vastatut %	Vastatut <15s %	Menetetty %	Varatut %	Tulevat
Mechlin Kim	1091	00:09	00:01	01:19	19:48:40	00:02:14	00:26	48,95%	43,17%	50,60%	0,46%	
Saarikoski Juha	966	00:08	00:01	01:35	17:40:52	00:02:03	00:13	53,73%	47,72%	45,24%	1,04%	
Kääräinen Erikka	2152	00:10	00:01	01:40	30:37:53	00:02:09	00:26	39,68%	33,22%	59,94%	0,37%	
Saarikivi Miika	2028	00:11	00:01	01:33	45:15:51	00:02:44	00:20	49,11%	36,49%	50,49%	0,39%	
Valkesepää Jussi	2002	00:09	00:01	01:40	27:48:21	00:02:31	00:26	33,02%	27,97%	66,68%	0,30%	
Heino Jarkko	1110	00:08	00:01	01:39	30:59:32	00:02:15	00:29	74,23%	67,12%	25,50%	0,27%	
Saari Markus	338	00:08	00:01	01:05	04:03:28	00:03:05	00:28	23,37%	21,01%	76,04%	0,59%	
Sandberg Miikka	1189	00:09	00:01	00:45	15:12:19	00:01:37	00:25	47,69%	43,23%	51,72%	0,59%	
Härkönen Jani	1048	00:11	00:02	00:39	11:30:27	00:03:06	00:24	21,28%	15,94%	78,15%	0,57%	
Mäki Olli	1886	00:07	00:01	01:39	50:05:28	00:01:55	00:23	83,30%	78,74%	16,49%	0,21%	
Toikka Timo	1850	00:09	00:01	01:12	19:36:13	00:01:40	00:27	38,11%	32,32%	61,57%	0,32%	
Vataja Markku	1477	00:10	00:01	01:28	18:16:56	00:02:12	00:28	33,78%	29,11%	85,88%	0,34%	
Heinonen Ari	497	00:08	00:01	00:55	13:55:57	00:01:51	00:40	91,15%	83,30%	8,65%	0,20%	
Mäntylä Jorma	2167	00:11	00:01	00:46	50:13:26	00:02:04	00:18	67,10%	49,24%	32,58%	0,32%	
Total	19801	00:09	00:01	01:40	355:05:23	00:02:09	00:24	50,19%	42,61%	49,41%	0,39%	

Table 7: Distribution of foremen's answering rates in Veho Autotalot Oy Pitäjämäki

- Goodwill expenses: All the mistakes that happen during the service process as well as the actual goodwill go into the goodwill costs. Goodwill costs vary a lot depending on the brands that are served in the bodyshop and on the interests of the company. For Veho Pitäjämäki there are budgeted 22.7 thousand euros for each month for the goodwill costs. The actual costs go continuously to the budgeted. (Hacklin 2011.)

The definition “goodwill costs” means the costs that neither the car manufacturer nor the importer is willing to pay. In order to show “good will” to the customer the shop takes care of the costs and pays those from their goodwill account. Usually these are the kind of costs that customers are not willing to pay without a conflict and in order to avoid the conflict and the loss of the customer Veho Autotalot Oy pays the costs as good will costs.

3.5 Competitors of Veho Autotalot Ltd, Pitäjänmäki

There is a significant amount of competitors in the retail trade and repair of motor vehicles especially on the Metropolitan area. Many of the competitors are large car dealers and importers just like Veho, but as to the car maintenance and repair service, there are even more competitors. The largest competitors are Audi-Center, Automaa, Autokeskus, Bilia, Delta-Auto, Laakkonen, Lohjanportin auto, Länsiauto, Metro-Auto, Rinta-Jouppi, Toyota Tsuho Nordic and VW-Center.

As to the maintenance and repair services, there are even more competitors in addition to the above mentioned. Some of the competitors are specialized in serving and repairing the cars. In that group the biggest competitors for Veho Autotalot Oy are AD Autokorjaamo, Autoasi, Atoy Autohuolto, Bosch Car Service, Evacar, Fixus and a few others large chains.

As to the single car repair and service shops, the biggest influence on markets has Alppilan Autohuolto and Pohjois-Helsingin Auto.

3.6 Customers of Veho Autotalot Oy Pitäjänmäki

As Veho Autotalot Oy Pitäjänmäki is one of the largest retail trade and repair of motor vehicles shops in Finland measured with sales, its number of customer is high. There were over 2000 new cars sold from Veho Autotalot Oy Pitäjänmäki in 2010 of which about 60 % to companies, 35 % to private customers and the rest 5 % to government and other customer groups. From the 1 060 used cars sold in 2010 majority (55 %) went to private customers and almost all of the rest to used car to retailer companies. The companies together with government form the majority of Veho Autotalot Oy Pitäjänmäki’s customers both in sales as in the maintenance and repair of motor vehicles measured with euros.

All the procurements that government does are organized thru company called Hansel Oy Hansel Oy organizes competitive biddings with respect to every larger procurement that some department of the government is doing. Few examples about Hansel biddings are buying and serving of police cars, military cars and post vans. The biddings cover a few cars all the way up to hundreds.

The Hansel delivery agreements are usually made for 2-3 years' time periods. Common to these biddings are that the margins are based on the economies of scale, not on single purchases' profitability.

The most important customer group for many years for Veho Autotalot Oy Pitäjänmäki has been the business customers and that is supposed to continue also in the future. Naturally the retail and repair business does not lie only on business customers but their influence for the retail and repair business is significant. Business customer's car issues are usually controlled by leasing companies such as ALD Automotive Oy, Lease Plan Oy, Easy KM Oy, Santander Oy, Fleet Innovation Oy and Secto Leasing Oy. In most cases, business customers tell to both leasing companies and to car dealers what they want and then both participants try to achieve the goals set by the customers.

Based on the general experience from the retail trade and repair of motor vehicles, the goal for business customers is that everything related to retail trade, maintenance and repair services of motor vehicles would go as smoothly as possible and that everything else but the gasoline would be delivered from one place. Naturally, the expenses generated from the car usage are important nevertheless not as crucial as good service. It is rather simple to sell the a car for a 100 € cheaper price or perform the maintenance service for 20 € cheaper than competitors, but how to assure that everything goes smoothly when delivering the new car or how to ensure that everything is done properly when the customer comes to pick his/her car from the maintenance service.

The business customers of Veho Autotalot Oy Pitäjänmäki are not categorized in any way. There are business customers that have many car brands in their fleet and then there are customers that have only one brand in their fleet. Veho Autotalot Oy Pitäjänmäki does not make any difference between the customers depending on what car brand they buy. The only differentiating factor between the customers is the amount of purchases. Companies that buy more cars and use more the maintenance services get better prices and specialized maintenance services, eg. evening service. There are no set limits for certain services or certain prices; everything is more or less based on the consideration of the management.

Veho Autotalot Oy Pitäjänmäki makes Veho-agreements with business customers but those are more or less for the general information to the car users of the customer company as well as for the sales and service personnel of Veho Autotalot Oy Pitäjänmäki. Those agreements may also include the agreed special conditions about prices or service response times etc.

4 Theoretical framework: Service path, service concept, service blueprint, service dominant logic, service design

This chapter discusses about theories related to service path, service concept development and conceptualizing of service products. There are main theories about developing new customer centric services and how to manage the services in future. The theories are service concept worksheet template, the service package, conceptualizing of the service product and the six dynamic service innovation capabilities.

4.1 Service path

Service is a process and due to that consuming a service means consuming an experience that is tied to time axis. Service path describes how customer experiences the service on the time axis and what happens on the path when the customer goes thru the service. Service path is divided into practical parts that may vary from their length. These parts are called as service encounters and service contact points. Service path consists of many service encounters (Figure 4) and in each encounter there may be various contact points. When service path is designed it is usually divided into smaller sections like service encounters so that it would be easier to reach the challenges in contact points. (Tuulaniemi 2011, 78.)

According to Tuulaniemi (2011, 78-79), a service path is a description about the service entity. Each step of the service that customer goes thru is described so that the steps can be analysed and developed further. When designing the service path it is essential to decide which step of the service path is designed. The step that is going to be designed have to be sufficient part of the entire service path. Service path can also be divided into different steps based on the customer value creation. Tuulaniemi (2011, 79) named three steps from the value point of view as follows: pre-service, core service and aftercare service (Figure 4). Core service is the service step where the customer experiences the actual value of the service. Pre-service step is the preparation for receiving the actual value. (Tuulaniemi 2011, 78-79.) In car maintenance services this can mean the booking of the maintenance service by phone or by e-mail. By aftercare service is meant the customer contact to the service provider after the actual service experience. Customer feedback is an example of aftercare service.

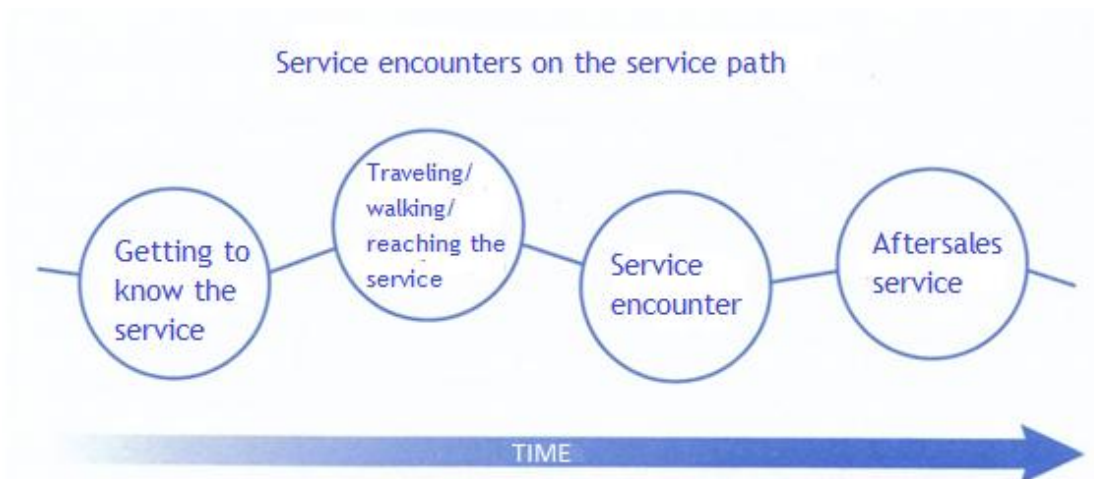


Figure 4: Service steps on the service path (Tuulaniemi 2011, 79)

Service encounters and the service contact points

Each service encounter consists of various contact points (Figure 5). Through contact points the customers experience the services with all of their senses. Tuulaniemi (2011, 80) stated that contact points are the people, environment, objects and the procedures. The challenge and the opportunity for the services are the various contact points between the human and the brand. As contact points are the things that should wake the customers' interest, are those also the points that can ruin the service. This means that a certain contact point may be the "weak linkage" of the service. (Tuulaniemi 2011, 79-81.)

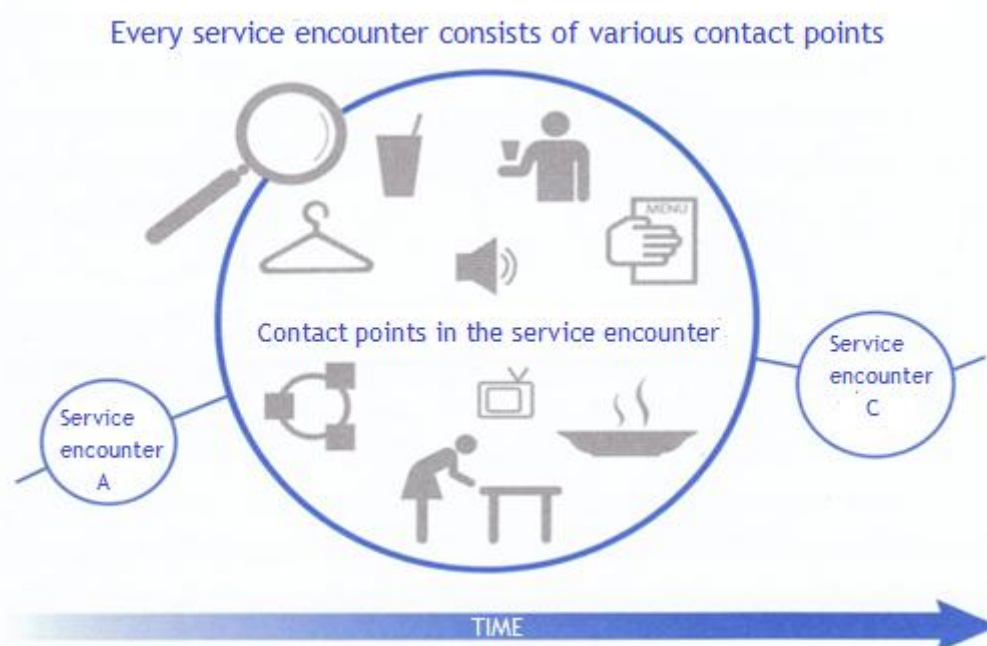


Figure 5: Each service encounter consists of various contact points (Tuulaniemi 2011, 80)

The people in the contact points are both the service providers and the customers consuming the service. The human contact points in the service path are the customer producing the value to him/herself and the person providing the service. The role of the service provider is to control and to predict the customers' movement in the service and to design the service path so that the customer experiences a good service and gets the desired value. Services are produced in different kind of facilities; some of them are concrete and some virtual or even digital. The physical environment where the customer experiences the service has a significant influence to the success or the failure of the service. In virtual services the user interface has the same impact as the physical environment in more traditional services. Usually there is also various amount objects related to the service production. Those products usually enable the service production and the consumption and due to that have influence to the customer experience and to the success of the service experience. Procedures are the things that tie the environment, people and the objects together and the functionality of the procedures has also a significant role in the ease of the service experience. (Tuulaniemi 2011, 80-82.)

Customer journey canvas and maps

As service path can be considered as a rather new theory and loose from its definition there is not that much literature available from it. However, there are other theories meaning rather same things. One of them is the customer journey canvas and the map (Figure 6). Stickdorn and Schneider (2010, 158) defined customer journey map on the following way:

“A Customer journey map provides a vivid but structured visualisation of a service user's experience. The touch points where users interact with the service are often used in order to construct a “journey” - an engaging story based upon their experience. This story details their service interactions and accompanying emotions in an highly accessible manner”.

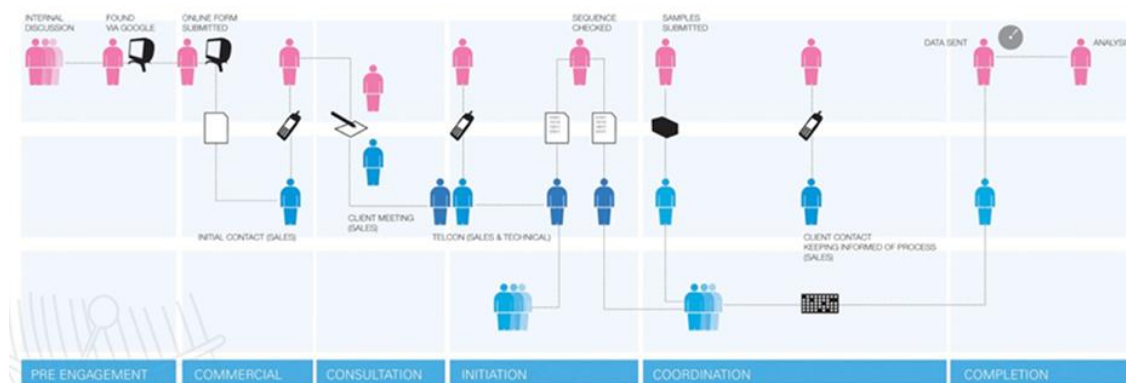


Figure 6: Customer journey map (Amplify Interactive 2012)

4.2 Service concept

Service concept defines the main benefits that the service company provides to the customer as a bundle of goods and services. “A service concept is a description of the service and how it satisfies customer needs.” (Bettencourt 2010, 190.)

4.2.1 7 P's the service marketing mix

According to Fitzsimmons and Fitzsimmons (2000, 72), Zeithaml and Bitner (1996) defined the nature of services in constituent parts. Zeithaml and Bitner (1996) used the “seven P's” that encompass the elements of service package. Fitzsimmons and Fitzsimmons (2000) stated that dividing the services into many small pieces belie to the complexity of the services. (Fitzsimmons & Fitzsimmons 2000, 72.)

According to Wilson, Zeithaml, Bitner and Gremler (2008, 20-21), the services marketing mix or the 7 P's are Product, Place, Promotion, Price, People, Physical Evidence and Process. Product, Price, Place and Promotion are the components of the traditional marketing mix and People, Physical evidence and Process are the additional parts for the expanded marketing mix for services. Wilson et al. (2008) claimed that since services are often consumed and produced at the same time, customers are usually present when the service is produced and the employees of the company are a part of the service production process. As services are intangible, customers also look for some physical evidence to help them understand the nature of the service experience process. (Wilson et al. 2008, 20-21.) Grönroos (2000, 323) also pointed out that lately researchers of marketing have noticed that the four basic elements of marketing mix are too narrow. In addition to People, Physical evidence and Process, Grönroos (2000) pointed out PR (Public Relations) and Politics. According to Grönroos (2000, 323), defining marketing based on marketing mix is an incomplete solution and adding parts to it does not make it sufficiently better. The deficiencies of the marketing mix and 4 P's come even clearer when there is service competition and when the markets are filling up and the competition is tightening. (Grönroos 2000, 323.)

People in the seven P's of service marketing mix refers to all human actors that play part in the service delivery and influence the customer perceptions stated Wilson et al. (2008, 21). Wilson et al. (2008) pointed out that the way people are dressed, how they act and behave all influences to the customer's perception of the service. In some services the service provider is the service itself, for example counselling, consulting and teaching. In some other services, the service provider may act a lot smaller role, for example, in laundry service, electricity installer or car rental. (Wilson et al. 2008, 21.)

Physical Evidence (Wilson et al. 2008) refers to the environment where the service is delivered or where the service provider and the customer interact. All other tangible elements that influence the performance of the service or communication about the service belong to this group as well. Examples of this kind of elements are business cards, report formats, brochures and working clothes. As people's influence to the service varies so does the physical evidenced role. In some cases the physical evidence is really crucial, for example, in restaurants and in some cases rather irrelevant, and for example, in telecommunication services. (Wilson et al. 2008, 21.)

Process is the actual procedures, mechanisms, and flow of activities by which the service is delivered - the service delivery and operating systems (Wilson et al. 2008, 21). The service delivery steps and the flow of the service process give customer opinions that help him/her to form the picture and evaluation of the whole service. The service process may be very complicated or rather simple depending on the service. However, the complexity of the service doesn't define the quality of the service and company may succeed whether it has complex or simple service delivery process. (Wilson et al. 2008, 21.)

The three elements that make the service marketing mix together with the traditional 4P's are all individual elements that are in control of the service provider company. All the elements together and separately may influence to the customer's decision to buy or not to buy the service and to the customer satisfaction after the purchase. (Wilson et al. 2008, 21.)

4.2.2 Service concept worksheet template

According to Bettencourt (2010, 190), service concept should specify what the service provides to customers to satisfy their needs and how the service delivery system is designed to provide customer and company value. Bettencourt (2010) created a structure that can be used for developing a service concept.

Concept Name: A descriptive and memorable name	
Concept Description: A high-level description of what the service is in terms of what it does for the customer and what makes it unique and valuable; possibly a description of the target customer	
Concept Features: Key features or offerings that deliver value to the customer	Feature Justifications: Justification based on specific outcomes, related jobs, or emotional jobs of customers
Key design dimensions that make the service unique and valuable	Justification based on specific outcomes, related jobs, or emotional jobs of customers
Key service system characteristics, such as the role of people, technology, and procedures	Justification based on specific outcomes, related jobs, or emotional jobs of customers
Concept Visual: A concept rendering or preliminary service blueprint, including identification of key supporting processes and systems	

Figure 7: Service concept worksheet template (Bettencourt 2010, 191)

Bettencourt (2010) divided the different parts of the worksheet into five different segments (Figure 7). In the worksheet there are central elements of the service communicated simply and clearly. The first of the five parts is the concept name, which should be memorable and descriptive. Second is the concept description which describes what the service offers for the customer compared to competitors. Third is the concept feature which includes offering that delivers the value to the customer, design dimensions that make the service unique and valuable for the customer and finally service system characteristics (role of the people, technology and procedures). For the concept features there needs to be also the feature justifications that are based on specific outcomes, related jobs or emotional jobs for the customers.

4.2.3 The service package: core and peripherals

Normann (2002, 75-76) divided the service into core service and into secondary/peripheral services. He claimed that since services cannot be as easily specified as products and services cannot be demonstrated before purchase it is easier to list all the areas and points of contact with the client. After all the contact points are listed it is easier to develop service process to desired direction and focus on critical contact points. The collected contact points are called as a “service package” together. On the service package there can be one clearly dominant item. This dominant item is called the core service. Other services in the service package are peripheral or secondary services. (Normann 2002, 76.)

According to Normann (2002, 76), it is not always clear which service is the core service and which are the peripheral services. In cases where competing companies have very similar core service the customer might make the decision to buy based on peripheral services. These kinds of situations are common in insurance, consulting and aviation business. This situation usually leads to competition with peripherals. (Normann 2002, 76.)

Customers evaluate the total service experience based on two factors (Normann 2002, 76.):

- “whether the service package includes all the elements (core and peripherals) that he/she expects, and
- the extent to which each of these elements meets the various standards and quality criteria that he/she expects.”

4.2.4 Conceptualizing the service product

According to Hutt and Speh (2004, 339), conceptualization of service products proceeds in four different levels as presented in Figure 8. The levels in order are: Customer-Benefit concept, Service Concept, Service offer and Service-Delivery system. Hutt and Speh (2004, 339) also refer to product dimensions in their concept as does Normann (2002, 76) regarding to his service concept worksheet.

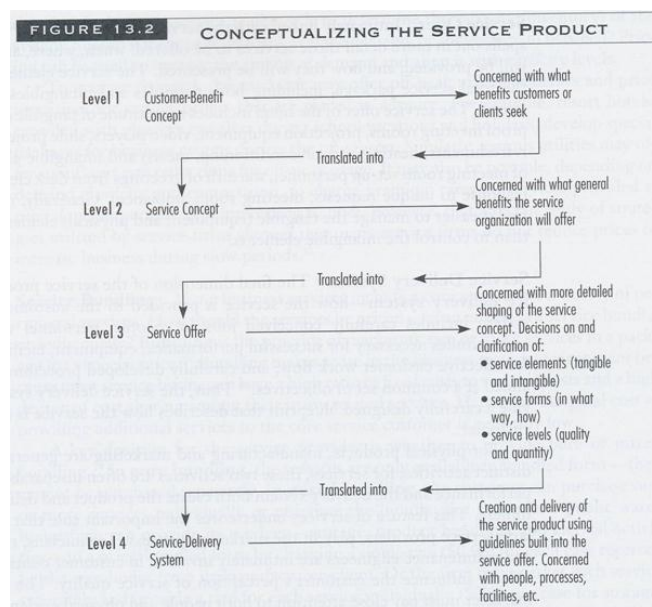


Figure 8: Conceptualizing the service product (Hutt & Speh 2004, 339)

Hutt and Speh's (2004, 339) service conceptualization begins with Customer-Benefit Concept. They claimed that services are purchased because of the benefits that they offer. To start with the customer benefit concept you need to define the core benefit that the customer gets from the service. Since the core benefit is defined the service provider needs to define all the other benefits that customers and clients are looking from the service. When the customer benefits are defined those need to be translated into service concept. (Hutt & Speh 2004, 338-339.)

The next step in service conceptualizing by Hutt and Speh (2004) is to articulate the Service Concept that defines the main benefits that service provider offers in service bundles and as services sold to the customers. When the service providing company is aware of the general service benefits that they will provide they should translate it to service offer. (Hutt & Speh 2004, 339.)

In Service Offer it is explained more detailed services that will be offered to the customers. Service offer also answers questions when, where and to whom the services will be provided and how it will be presented. At this point all the service elements must be determined including both tangible and intangible elements. Commonly the management of the tangible elements of the service is easier than managing of the intangible elements. Finally the service offer will be translated into service-delivery system. (Hutt & Speh 2004, 340.)

The fourth step in service conceptualization by Hutt and Speh (2004) is Service Delivery System in other words, how the service is provided to the customers. Service delivery system includes the right people for the right places in the service production, equipment's, facilities and carefully designed procedures and processes. Precisely designed Service Blueprint is also important part of service delivery system. Hutt and Speh (2004) also highlighted the importance of right personnel in service production. The influence of personnel is prior in services where the products are intangible than in the product business where the items are tangible. (Hutt & Speh 2004, 340.)

4.2.5 The six dynamic service innovation capabilities

In their paper "Capabilities for managing service innovation: towards a conceptual framework" Den Hertog, Van der Aa and De Jong (2009, 490-514) presented a six dimensional model of service innovation and dynamic capabilities for realising new service experiences and solutions. The six dimensions are:

- Signalling used needs & technological options
- Conceptualising

- (Un-) Bundling
- (Co-) Producing & orchestrating
- Scaling & Stretching
- Learning & Adapting

Den Hertog et al. (2009, 490) claimed that successful service innovators outperform their competitors in at least some of the mentioned capabilities.

Signalling user needs & technological options

Den Hertog et al. (2009, 499-500) stated that most service innovations are answers to the unmet needs of potential or actual customers or technological options translated into service proposition. By signalling user needs Den Hertog et al. (2009) meant the capability to empathically understand and sense the customer needs by intensively interacting with customers. Tools for this kind of action are dialogues with lead users, user panels, prototyping and joint experimentation, client profiling etc. In larger companies signalling user needs is on the responsibility of marketing, new business department or innovation management. (Den Hertog et al. 2009, 499.)

By signalling new technological options Den Hertog et al. (2009, 499-500) meant opportunities to adapt and innovate new services and new ways of interacting with clients, on demand production and opportunities for customized service. Service innovators needs to be aware of all technical possibilities that may affect to the service design process. Signalling new technical options should be managed by new business development unit or by ICT department. (Den Hertog et al. 2009, 499-500.)

Conceptualising

As services cannot be researched, tested and prototyped similarly as physical goods due to their intangible nature there are other ways of testing new services. Den Hertog et al. (2009) claimed that testing services before those are in production is basically impossible. Due to that the service design process needs to be highly interactive and shared process together with the future customers. Usually this conceptualising/designing/prototyping is done with well-known loyal customers that do not hesitate to bring out their opinions. With one sentence conceptualising is transforming a rough idea of a new service into a service offering. Next step from conceptualising is as mentioned service offering or service concept. (Den Hertog et al. 2009, 500-501.)

(Un-) Bundling

Un-bundling is basically the opposite for the trend to bundle all services into one. Good example of bundling is the way travel agency's bundle the flights, hotels, foods and even the activities on the vacation together. There are two basic varieties from un-bundling. First one is not really un-bundling but rather leaving some options open in otherwise bundled entirety. This the possibilities to customize the service offer. Second form of un-bundling is the actual un-bundling where the service is stripped down to bare essentials and the customer is able to create highly specialized service to be used. Often this un-bundling leads anyway to rather standardized services.

As an example there are law firms that are highly specialized (divorces, acquisitions etc.). The bundle of law services is stripped down and sold as a highly standardized service. (Den Hertog et al. 2009, 501-502.)

(Co-) Producing & orchestrating

By (Co-) producing and orchestrating Den Hertog et al. (2009) meant in simplest the ability and willingness to gather service producers and customers to different kinds of development groups and by that way innovate new services and further develop the existing ones. It is also claimed that service innovation capability is actually the capability to organize and act in open service innovation systems. The aim is to orchestrate temporarily alliances and partnerships to assist the service development and creation process. (Den Hertog et al. 2009, 502-503.)

Scaling & Stretching

By stretching Den Hertog et al. (2009) meant the ability to stretch out the service to wider producer or customer range once the service has been tested or used in smaller whole. When spreading the service to wider producer base there can be things that influence the service or the way that customer feels or receives the service. Neither is the profitability of the service foregone conclusion as changes in the service will also reflect to the profitability of the service. (Den Hertog et al. 2009, 503.)

By scaling Den Hertog et al. (2009) meant simply replication or copying. Scaling is one of the key elements when starting up and learning new business models. The key is to know when to stop scaling and when to start to stretch your own procedures. Also the amount of scaling is important and it should decrease as the business goes further and own innovations should rise that the new beginners would scale. (Den Hertog et al. 2009, 503-504.)

Learning & Adapting

By learning and adapting is meant the way that service producers process the information gathered from things that they have already done and learned. According to Den Hertog et al. (2009), the questions that the service producers should ask from themselves are: What have we learned from our latest service experiments? Can we use bundling and unbundling strategies for deriving new services? Are we creating enough new cues for new service innovations? Are we experimenting enough with new models?

Also keeping track of failed and succeeded service innovations helps learning and leads to right direction when creating new innovations. It is also important to keep the balance between highly commanded and controlled way and free “let all flowers grow” ideology. (Den Hertog et al. 2009, 504.)

4.3 Service blueprint

According to Stickdorn and Schneider (2010, 204), service blueprints are a way to detail and specify each individual aspect of a service. Making a service blueprint usually includes making of a visual schematic that includes perspectives of a customer, service provider and other relevant parties that take part to the production of the service. Service blueprint describes every customer contact point and also the behind scene processes. (Stickdorn & Schneider 2010, 204.)

Gustafsson and Johnson (2003, 64) underlined the importance of understanding service delivery systems in detail. They recount that there is a variety of different service mapping tools that varies in their focus and complexity. Service mapping also helps to put the different stages of a service procedure to chronological order. (Gustafsson & Johnson 2003, 64.)

Ylikoski (1999, 240) claimed that a service blueprint is a good way of finding a problem point in a service production and a way to find the point where costs can be saved. Ylikoski (1999) also claimed that a blueprint should be done separately for each customer segment and it can be done from current service or from new planned service. Service blueprint should cover also exceptional situations so that problems that lead to those could be avoided or resolved faster. Putting the blueprint in timeline helps to estimate the time used for each step of the service production and to standardize times of each step of the service. Poor designing of service process leads to quality problems. Service process should always be designed from the customer’s point of view. (Ylikoski 1999, 240.)

According to Ylikoski (1999, 240-241), the following questions should be asked based on the service blueprint:

- Is the order of service process steps consistent?
- Are the different functions of service process flexible enough?
- Can different functions be combined? Would parallel functions be possible?
- Can all the service steps be produced with existing resources?
- How fast should the customer be served when entering the service? Can the waiting times be reduced?
- Is there enough attention addressed to interaction situations?
- In which point of the process can feedback be received from the customer?
- How the success of the service process is controlled?

As service creation usually involves many people from the producing organization. Stickdorn and Schneider (2010, 204) claimed that collaborative workshops are a functional way of creating a service blueprint. They also claimed that a service blueprint is a “living” document that should be periodically revised. Periodical update of the blueprint helps the service provider to focus on the possible changes in service as well as in customer behaviour. Continuous update process keeps the service provider agile and on the edge of evolving environment. (Stickdorn & Schneider 2010, 204.)

According to Stickdorn and Schneider (2010), service blueprint helps the service provider to focus on the crucial service points and to notice if there are parts that are not needed or are needlessly duplicated. Service blueprint shows the point where customer satisfaction or dissatisfaction is created and helps to focus on those. Service blueprint is also a way of getting service providers in different levels of the company to reveal their views and maybe discover something that otherwise would remain unrevealed. (Stickdorn & Schneider 2010, 205.)

4.4 Value creation: Goods dominant and service dominant logic

According to Vargo, Maglio and Akaka (2008, 146), the nature of value has been debated since the times of Aristotle. Two general meanings are the central elements of value and value creation. Those elements are “value-in-exchange” and “value-in-use”. Traditional view of value creation is based on value-in-exchange and it is called “Goods Dominant Logic”. The alternative and newer view of value creation is based on value-in-use and it is called “Service Dominant Logic”. (Vargo, Maglio & Akaka 2008, 146.)

“The Goods-Dominant Logic suggests that companies develop and offer products or services that have value, while Service-Dominant Logic focuses on how value is co-created with and by customers” (Gallouj & Djellal 2010, 307).

Goods Dominant Logic

Vargo et al. (2008, 147) referred to many economic scholars especially on Adam Smith (2000) when they discussed about the foundations of goods dominant logic. The major ideology of goods dominant logic is that value comes in exchange. Value is created by the firm often with input from firms in the supply chain. Firm embeds value in goods and in services and the purpose for the value is to increase the wealth of the firm. The value is measured by the price received in exchange. Customer’s role is to “use up” or “destroy” value created by the company. (Vargo et al. 2008, 147-148.)

Service Dominant Logic

Vargo and Lusch (2008, 7) presented the ten modified foundational premises of service dominant logic. Original ones Vargo and Lusch presented already in 2004 but discussion and studying of the theme have made them to change the original ones a bit. The ten modified foundational premises are:

- FP1: Service is the fundamental basis of exchange
- FP2: Indirect exchange masks the fundamental basis of exchange
- FP3: Goods are a distribution mechanism for service provision
- FP4: Operant resources are the fundamental source of competitive advantage
- FP5: All economies are service economies
- FP6: The customer is always a co-creator of the value
- FP7: The enterprise cannot deliver value, but only offer value propositions
- FP8: A service-centered view is inherently customer oriented and relational
- FP9: All social and economic actors are resource integrators
- FP10: Value is always uniquely and phenomenologically determined by the beneficiary

Prahalad and Ramaswamy (2004, 213-216) also paid attention to the changes in producer/consumer relationship. They described the role of a consumer from the 1970’s to beyond 2000 and how the roles in a company-consumer interaction have changed. The elements in 21st century are similar with S-D Logic but they do not use the term yet in 2004. Prahalad and Ramaswamy (2004) claimed that from the 1970’s all the way to end of the 1990’s consumers have been “outside the firm” and they are seen as passive buyers with predetermined role of consumption.

The aim has been already from the early 1990's towards customer centricity and customers are seen as partners, but things do not change that fast. In 21st century consumers are seen as a part of competence network where they co-create the value to the services. The flow of communication has changed from one-way communication to an active dialogue with consumers and the communication has spread to network communication. (Prahalad & Ramaswamy 2004, 213-216.)

Gallouj and Djellal (2010, 306) described the customers' role in value creation through service-dominant logic. They pointed out that communication is the key element in service-dominant logic as well as in other trends of customer relationship management. The communication must take place before, during and after the transaction. Customers need to be heard to be able to know their present and especially future needs. Customer is in the centre of service value creation process and as an active player and resource customer has a huge influence in the value created. According to Gallouj and Djellal (2010), service-dominant logic suggests that service innovation is about developing value propositions and prerequisites to customers so that they can co-create value for themselves by providing resources with their skills and knowledge, which leads to attractive customer value and positive customer experiences. (Gallouj & Djellal 2010, 307.)

Vargo and Lusch (2006, 285) pointed out the same that Prahalad and Ramaswamy (2004, 215) and many others (eg. Achrol and Kotler 2006; Grönroos 2006; and Gummesson 2006) before, that interaction and networks have changed the way of value creation and that networks now play central role in value creation. (Vargo & Lusch 2006, 285.)

We can only imagine the influence of social networks for the value creation process since the fore mentioned statements and observations are already about five years old. The influence of Facebook and Twitter for the value creation or destruction can be crucial in some cases.

4.5 Service design, customer value and customer profitability

Society is changing and so is the definition of service. Nowadays by service it is meant creation of intangible value and significance. Since the industrial product production has been transferred to countries where salaries are significantly lower, service business has become more significant for a large part of employees in the old industrial countries. The society where we live today is a service society and most of the employees and the work that is done are related to services. In today's business life the service innovations and developing new services is a process where customer needs are linked to service providers' resources. In service design, the aim is to develop further the existing services or develop totally new services. (Hämäläinen, Nyman, Björk & Lammi 2009, 6-20.)

Service design is more than just shaping of services. Service design is a process oriented working method for developing services in a customer centric scope. Service design combines the customer and the service producer value creation process. By understanding customer value creation the service provider gets a strong start for service development. Defining the existing service path challenges the service providing company to understand the service situations and quality of those situations. Service design gives tools to studying the service situations and the ways to improve the entity so that all the service situations will be covered. Service design helps to find the critical points where the service organization keeps failing. Service designer needs to take the role of an end-user to be able to understand the values, feelings and attitudes the customer experiences while consuming the service. (Hämäläinen et al. 2009, 65-67.)

Customer value is not created when the customer is using the service; the value is created based on the advantages, consequences and influences of using the service. The value is created when the service provider and the customer act together. This is value co-creation and value in use. Value is not created separately or delivered; it is a result of a common process. For service providing companies this means that both customer and the service producer takes part in value creation and evaluates the created value. Understanding customer actions helps the service provider to understand the value creation process in practice. Customer has also its own role in value creation. For the service provider to be able to fulfil its mission it is crucial that customer takes care of their part whether it is about providing necessary information or holding on to timelines. (Arantola & Simonen 2009, 2-3.)

Customer needs are a common subject in companies and how filling those needs the company is customer centric. Arantola and Simonen (2009, 3) claimed that this need based on thinking leads to reactive actions. If customers talk about their needs they have already identified those and they are able to identify those needs to the possible service provider. Since the customer knows what they want they are able to define the desired solution and make the service providers to compete against each others. When the service type is chosen there is left only the competition about service quality and price. The older the service is the more it is about service quality and prices and the profitability for the service provider is relatively low. To be able to provide profitable services company must be the first one to provide the service or has to have some other competitive advantage. (Arantola & Simonen 2009, 3.)

Arantola and Simonen (2009, 5) claimed that in a present situation the customer data is spread all over the company and it is hard to make the data useful. Neither the entire picture nor the conclusions of the gathered data is hardly ever forwarded to the service designers. Customer feedback would be essential material for service designers to be able to develop the services further.

Customer feedback would tell about which things the customers are grateful, about what the negative feedback comes from and what causes complaints and costs. The most advanced service companies build holistic customer understanding processes that gather the customer knowledge from where ever it is created and process it for the use of management. (Arantola & Simonen 2009, 5.)

The amount that customer buys company's services do not necessarily tell the truth about customer profitability. Arantola and Simonen (2009, 8) stated that amongst the biggest clients will be found the most profitable ones as well as the most unprofitable ones measured on absolute figures. It is useful for the companies to investigate how the services for the unprofitable customers are build. What elements of the service are critical for the customer and from what is the customer actually paying for. When doing the mentioned things it usually has influence on service pricing as well as on the service entities. Services should be pointed to customers, whose profitability tolerates higher service standards, in other words by directing the services the company profitability can be improved. (Arantola & Simonen 2009, 8.)

According to Arantola and Simonen (2009, 10-11), all customers does not have the same attitude towards the same services and service providers should find the right balance for each customer company between personal services and other functional service properties. Arantola and Simonen (2009, 11) discovered also that personally delivered services may create stronger commitments than monetary commitments. Social contacts have also positive influence on customer's perceived value. Some customers even felt that they get more value from social and personal contacts than from the monetary benefits. It is a common statement that 20 % of customers produce 80 % of company's revenue. Arantola and Simonen (2009) claimed that the truth might be even more dramatic and that it is not even unusual that 20 % of the customers provide 180 % out of the revenue. Customers should be categorized into a customer pyramid (Figure 9) based on their profitability to the customer company. (Arantola & Simonen 2009, 12.)

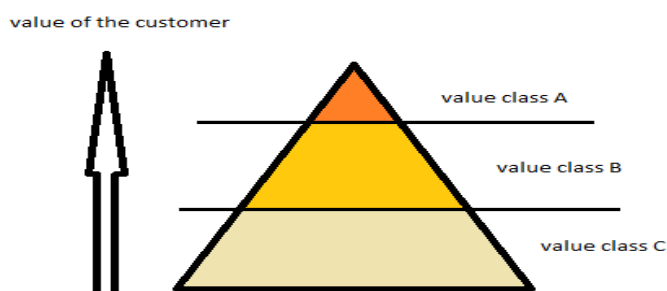


Figure 9: Customer base classified based on profitability (Arantola & Simonen 2009, 12)

The customers should also be categorized based on what creates value to them. In Figure 10 the customers are segmented to X, Y and Z based on the value perception (Arantola & Simonen 2009, 18).

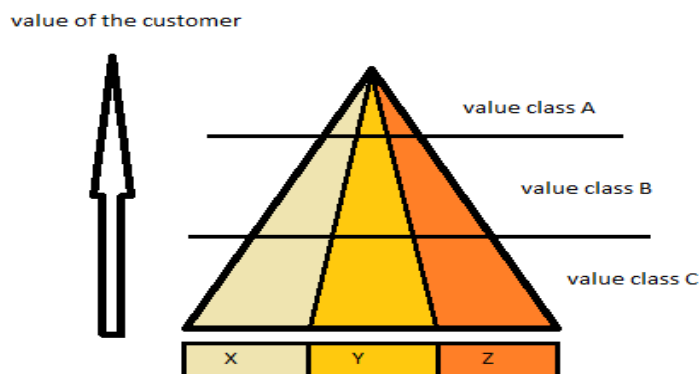


Figure 10: Customer base categorized based on what produces value to the customers - segments X, Y and Z (Arantola & Simonen 2009, 18)

There are various ways to gather knowledge about customers, with both quantitative and qualitative methods. Arantola and Simonen (2009, 22), however, claimed that customer satisfaction does not necessarily lead to customer loyalty.

5 Collection and analysis of empirical data

In this chapter there is a description about the sentence completion method which is utilised as the data collection method. There is also a description about building a sentence completion form as well as the analysis of empirical data.

Gillham (2005) stated that questionnaires send thru post can be in many cases more suitable than direct interviews. Gillham (2005, 114) listed a few reasons for this:

- Though the majority of the people have phones and e-mail, everybody apart from the homeless is accessible by post.
- When written response is required it can also wait for the suitable moment for the respondent
- The answers can be more thorough as additions and alternations can be made
- It may suite some people's style, who do not lie telephone interviews or e-mails requesting for immediate response.

5.1 Developing the sentence completion form and testing it

According to Ojasalo, Moilanen and Ritalahti (2009), there are a number of ways to perform a survey and guidelines how to do it. The first step should be the familiarization to the previous studies and to the scientific material used for those. Designing of the survey form should be based on the goals that the survey is trying to achieve and those should be clear for the scholar before developing the survey form. In the form there should be all the relevant issues needed to achieve the goals set for the research. There should not be anything outside the task just the relevant issues. Rushing with the survey form leads to right answers to wrong questions and right questions unasked. This leads to severe problems in the later phases of the research. (Ojasalo, Moilanen & Ritalahti 2009, 115-116.)

The length of the survey form and the clarity of it are essential things for the respondent and on the later phase for the scholar. If the form is too long, the interest of the respondents to answer to the survey decreases. The average answering time should be maximally 15 - 20 minutes. Researchers should bear in to mind that in most of the cases the respondent does not know the survey subject as well as the researcher and due to that the questions should be carefully thought. The language used should be simple, functional and exact. The simplicity should concern also the questions; good question has always reasonable length. Questions should be unambiguous so that every respondent understands the questions similarly. The more open the questions are, the bigger the risk that researcher does not get suitable data. (Ojasalo et al. 2009, 116-117.)

Ojasalo et al. (2009) stated that testing the survey form some way is mandatory before actual data collection. Before the data collection, the survey form should be read thru by the supervisor or by other persons who know the nature of the branch. The researcher should also try to answer to the survey by him/herself and let few others to answer to it also and after that the final adjustments can be made before the final data collection. Adding a cover letter to the survey is highly important for the success of the survey. Based on the cover letter, the respondent will understand what the survey concerns about and can decide whether he/she wants to participate to it or not. A cover letter has a straight correlation to the answering percentage, so developing it should be done thoroughly. The cover letter should post trust and raise the willingness to answer to the survey. In addition, it should include the following ingredients: description what the survey is about, authors of the research and possible subscriber together with the target group, argumentation for the necessity of the research, description about the handling of the research data and statement of intimacy, statement that everybody's answers are needed for the success of the research, date for the latest return, thanking for the answers and co-operation and finally contact information for the authors and signings. (Ojasalo et al. 2009, 117-119.)

Developing of the sentence completion form started with dividing the research subject in to five sections based on the areas of repair and maintenance service that were wished to be developed. Before every section the author wrote a description about the discussed research topic. The sections followed rather precisely the service path of a car maintenance service. The five different sections were booking the maintenance service, leaving a car to the maintenance service, communication with the customer during the maintenance service, picking up the car from the service and communication with the customer between the maintenance services and other maintenance service issues.

The sentence completion form was read through by the customer service manager, by service manager, by account manager and by a sales director of business customers before sending it to the customers. The author wanted to be sure that it was possible to collect the information from the chosen areas included the form and that every reader would understand the descriptions and sentences to be completed. The author made five different development versions from the sentence completion form before it was clear and comprehensive enough to be sent out to the customers. (Appendix 1)

Any actual pilot research was not done because there was enough previous research based on the sentence completion forms and the areas that the information from the customers was needed were clear.

The important thing was to write the right sentence beginnings so that the customers could answer to the areas of service that the author and Veho Autotalot, Pitäjänmäki Oy wanted to learn more about. The focus was all the time that what customers want and need from the maintenance service and how do they want Veho Autotalot Oy Pitäjänmäki to produce the services in future.

5.2 Collection of empirical data

The empirical data was collected by sending first a request by e-mail, on October 11, 2011 about the research to 26 decision makers of the business customer companies. Based on the responses from the decision makers, sentence completion forms were sent to 15 decision makers together with self-addressed envelope on between 10 and 13 October, 2011. After this first contact three decision makers refused to answer to the sentence completion form based to their weak knowledge about Veho Autotalot Oy Pitäjänmäki maintenance services and eight decision makers did not answer to the request e-mail at all. From the decision makers who had promised on the first phase to answer, the author received 11 completed sentence completion forms. Second round of requests to answer to the sentence completion form was sent on November 1, 2011 to 12 different decision makers. Out of those 12, seven agreed to answer to the form and six out of those returned the sentence completion form within the given timeframe. All together, the author received 17 completed sentence completion forms out of 38 possible.

In the first phase, a sentence completion form was sent to 16 decision makers and in the second phase 7 which makes 23 altogether. Out of these 23 the author received 17 back which would mean a response rate of almost 74 %. This obviously is not the whole truth as e-mails requesting for the answering to the sentence completion for were sent 38 altogether. The actual response rate based on that would be about 45 % which still can be considered rather good.

5.3 Analysis of empirical data

According to Hirsjärvi, Remes and Sajavaara (2009), conclusions in empirical research can be made after the pre-works. First phase in pre-works is the checking of the collected data. For example, in postal questionnaires the decision if some forms have to be rejected has to be made. Leaving some question unanswered is not the reason to reject the whole form. Second phase is the filling of the missing information. In this point the information can be completed by additional interviews or by collecting more answered questionnaire forms. Third phase is the organizing of the collected data for the saving and analysing.

Organizing of the data depends on the used research method. Usually in the qualitative research the data is grouped and coded by some classification system. (Hirsjärvi, Remes & Sajavaara 2009, 221-222.)

As all the sentence completion forms were read through immediately after receiving and found proper for the analysis, the author wrote down the answers to the Excel sheet. When the data of all the 17 sentence completion forms were collected to Excel sheet the author themed the similar answers together and grouped the answers. At this point all the answers were translated from Finnish into English since the sentence completion form was in Finnish. For the analysis of the data the answers were also classified into five groups based on the original steps of the maintenance service process and the groups in the sentence completion form. All the questions were also separated to make the evaluation of the answers easier and to be able to see the commonalities or differences between the answers. Though all the received sentence completion forms were fit for analysis not all the question were answered in all the forms, due to that there are different amount of answers in different questions.

The received answers were collected to the Excel sheet in exactly the same form as they were written in the original sentence completion forms. When translating the answers into English, the author tried to sustain the original meaning and the style of the answers. This lead to rather slang oriented language, but so was the language in the original Finnish answers as well. As mentioned, the received results are analyzed in five different groups which are the same that in sentence completion form: booking the maintenance service, leaving a car to the maintenance service, communication with the customer during the maintenance service, picking up the car from the service and communication with the customer between the maintenance services and other maintenance service issues.

6 Empirical results

In this chapter the empirical results are presented based on the results from the sentence completion forms. There is also the improved service path of the maintenance services, the service concept worksheet template for Veho Autotalot Oy Pitäjänmäki maintenance services and the maintenance service concept with the modularity models.

6.1 Car maintenance services as a service path

In Figure 11 a description about the basic maintenance service in the form of a service path in Veho Autotalot Oy Pitäjänmäki is illustrated. The maintenance service path is also described in a text form to clarify the differences between basic maintenance service and the four other maintenance services. There is a comparative service path of all the five maintenance services in Figure 12.

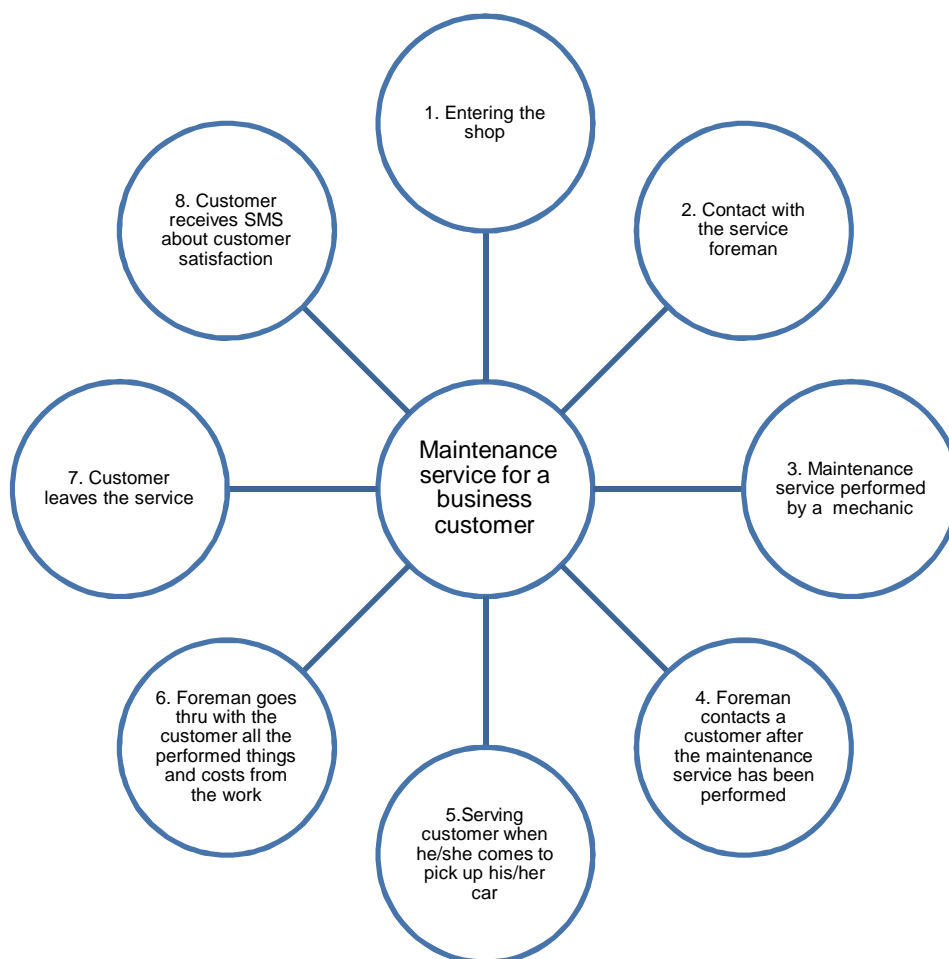


Figure 11: Service path of basic maintenance services

The service path of basic maintenance services (Figure 11) is a combination of the service description in VTT-Vehon Tapa Toimia (2010) and the author's experience of maintenance services. The service path has been confirmed to be accurate by the service manager (Lindström, 2011) and the customer service manager (Hacklin, 2011) of Veho Autotalot Oy Pitäjänmäki. Steps are based on the mentioned material and the interviews together with actual experience from maintenance services.

The eight steps of the service path are following:

Step 1: Entering the shop

On the first step, the customer enters the retail and repair shop and gets the first experience about the premises and about the personnel. The maintenance process goes usually so that the customer makes the reservation to the maintenance service, usually two weeks before the maintenance service.

Step 2: Contact with the service foreman

On the second step, the customer gets into contact with the service foreman and experiences the service foreman's customer service and professionalism. When the customer has arrived to the shop (step 1) for the maintenance service the foreman goes thru with the customer the service required (step 2). Usually there are two types of services, small and large ones. Small ones usually contain the basic procedures like oil and filter change and the large ones in addition to mentioned possibly engine chain and water pump change. The foreman also asks permission for additional works like windscreen wiper and light bulb change. The different maintenance services and their modularity are presented in Appendices 2-7 and in section 6.3. After offering the customer a rental car for the time of the maintenance service the foreman hands out the keys of the car to the mechanic.

Step 3: Maintenance service performed by a mechanic

On the third step, the mechanic performs the maintenance service to the customer's car. Though the customer is unable to see this phase of the service the customer is able to see the consequences if this service step fails. Car maintenance service is the most basic product for repair service of motor vehicles. The maintenance service is done depending on the car and the oils used in every 12 months/15 000 km or 24 months/30 000kms. The mechanic drives the car to the service hall and into the car lift. On the car lift the mechanic performs all the actions that the foreman has agreed with the customer (step 3). After doing the maintenance service the mechanic goes thru a check list and checks if there are thing that need to be fixed in the near future. Finally, the mechanic drives the car back to the yard and returns the keys to the foreman with the check list.

Step 4: Foreman contacts customer after the maintenance service has been performed

Service foreman contacts the customer to inform that the car is ready from the maintenance service and that the customer may come and pick up his/her car.

Step 5: Serving customer when he/she comes to pick up his/her car

On the fifth step, the customer comes to pick up his/her car and the service foreman serves the customer again. When the customer arrives, the foreman goes thru with the customer all the actions performed to the car and the expenses caused from those.

Step 6: Foreman goes thru with the customer all the performed things and costs from the work

Step six is a continuum for the fifth step as the service foreman goes thru with the customer all the performed actions and costs that the maintenance service caused. Service foreman also goes thru the different payment methods and guides the customer to the checkout/cash desk.

Step 7: Customer leaves the service

When the customer has paid for the maintenance service the cash desk secretary thanks the customer and wishes good day. The customer leaves the service with his/her served car.

Step 8: Customer receives a SMS about customer satisfaction

After a couple of days from the maintenance service the customer receives a SMS message about his/her satisfaction about the maintenance services. The customer is able to answer to the SMS by just one number. The scale is 1 (poor) to 6 (excellent). The results from the SMS answers go straight to Veho Autotalot Oy's web pages so that all the customers can see how the customer service works in different Veho Autotalot Oy shops.

		1. Step	2. Step	3. Step	4. Step
Maintenance service (basic)		Customer books the maintenance	Customer enters the shop and gives the car keys to the service foreman	Maintenance service concept performed to the car by a mechanic	Foreman contacts the customer after the maintenance service has been performed
Airport service		Customer books the maintenance	Customer leaves the car and the keys to the airport. Somebody from Veho picks up the car to the shop	Maintenance service concept performed to the car by a mechanic	Somebody from Veho delivers the car back to Airport
Evening service		Customer books the maintenance	Customer enters the shop and gives the car keys to the service foreman	Maintenance service concept performed to the car by a mechanic	Foreman contacts the customer after the maintenance service has been performed
Pickup service		Customer books the maintenance	Somebody from Veho goes and picks up the car from the customer	Maintenance service concept performed to the car by a mechanic	Somebody from Veho delivers the car back to the place where it was picked up earlier
Invitation service		Service foreman calls or e-mails to the customer and invites him/her to the service	Customer enters the shop and gives the car keys to the service foreman	Maintenance service concept performed to the car by a mechanic	Foreman contacts the customer after the maintenance service has been performed
		5. Step	6. Step	7. Step	8. Step
Maintenance service (basic)		Customer receives his/her car keys back	Foreman goes thru with the customer all the performed procedures and costs from the parts and work	Customer leaves the service if invoice customer or pays the bill to the service desk	Customer receives a SMS about customer satisfaction
Airport service		Customer receives the keys from the same place where he/she left those		Customer receives an invoice about the performed work and parts by post	Customer receives a SMS about customer satisfaction
Evening service		Customer receives his/her car keys back	Foreman goes thru with the customer all the performed procedures and costs from the parts and work	Customer leaves the service if invoice customer or pays the bill to the service desk	Customer receives a SMS about customer satisfaction
Pickup service		Foreman leaves the keys to the same place where he picked those up	Foreman contact the customer and informs that the car is served and returned	Customer receives an invoice about the performed work and parts by post	Customer receives a SMS about customer satisfaction
Invitation service		Customer receives his/her car keys back	Foreman goes thru with the customer all the performed procedures and costs from the parts and work	Customer leaves the service if invoice customer or pays the bill to the service desk	Customer receives a SMS about customer satisfaction

Figure 12: Service paths of all the produced maintenance services

In the Figure 12 there are presented all the different service paths of maintenance services that Veho Autotalot Oy Pitäjänmäki offers to its business customers. The service path composes of eight steps as in the basic maintenance service. Some steps are similar with basic maintenance service and those steps are marked with green colour. The steps that differ from the basic maintenance service are marked with pale sand colour, and as it can be seen from the Figure 12. In some services there are not all the eight steps due to the nature of the service.

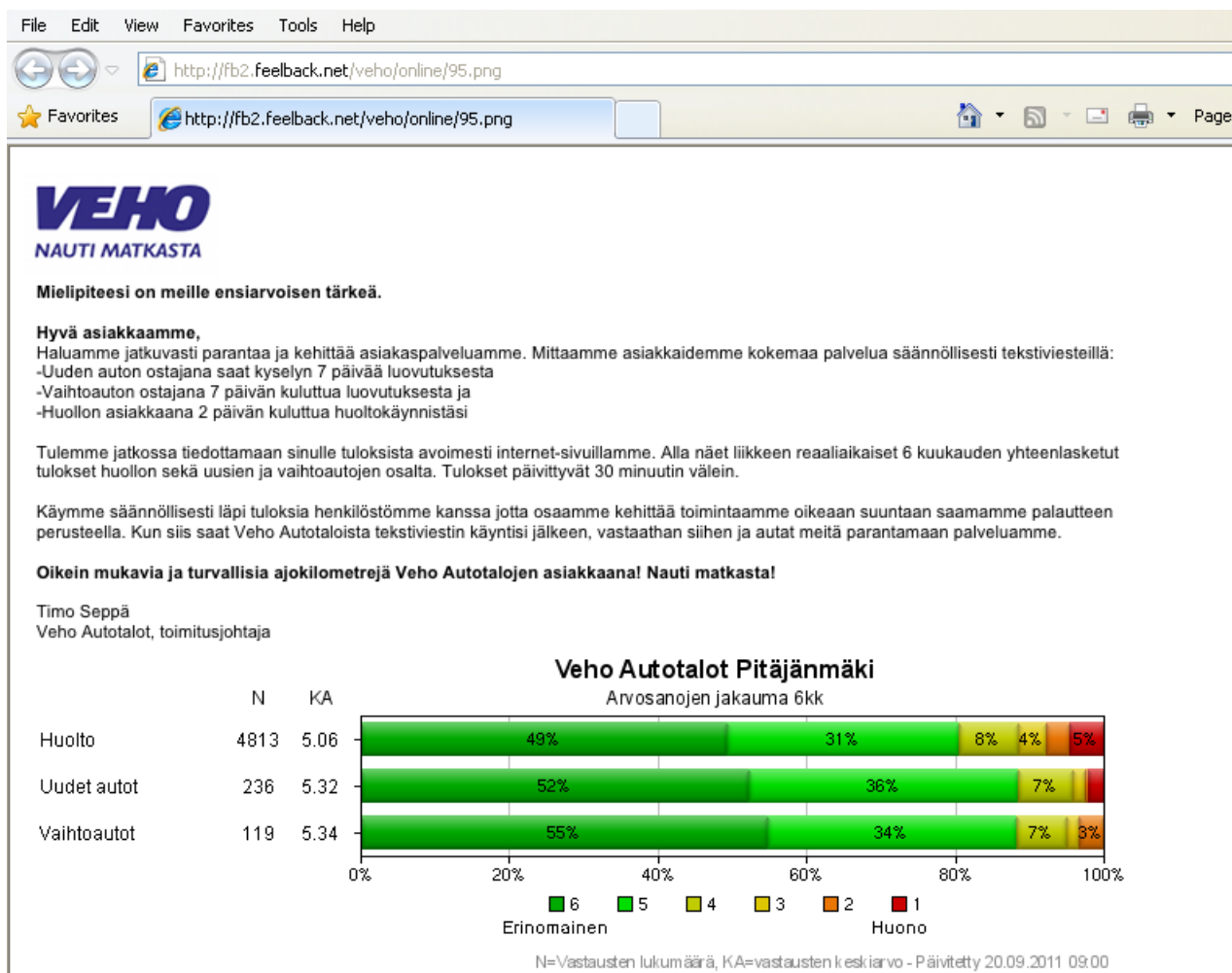


Figure 13: Customer satisfaction levels in Veho Autotalot Oy Pitäjänmäki

In the Figure 13 there are the results from the last six months' SMS responses collected from the customers. The answering scale is from 1 to 6, where 6 stands for excellent and 1 for poor. The results are updated in every 30 minutes and they are visible for everybody on the Veho Autotalot Oy web pages.

As mentioned earlier, there are four other maintenance services in addition to the basic maintenance service. The additional maintenance services are airport service, evening service, pickup service and invitation service. This study focuses on basic maintenance service as all the development made for maintenance services starts from basic maintenance service. In Figure 12 the differences between different maintenance services can be seen. Next the results based on sentence completion form data are presented in section 6.1.1 - 6.1.6.

6.1.1 Booking the maintenance service

In this section the answers related to booking the maintenance service are presented collected by the sentence completion form. To help the decision makers to answer to the sentence completion form the definitions for each of the five service steps were first introduced. In the upper part of each table there is the sentence beginning that was requested to be completed and under that the answers are grouped in themes. When more than one respondent has given the same answer it is marked with number in parentheses.

Definition for booking the maintenance service:

Booking a maintenance service from Veho Autotalot Oy Pitäjänmäki can be done by phone, e-mail, thru Internet booking or by visiting the shop. When the booking is made there is a date and a time when a customer leaves the car for the maintenance service agreed. When the maintenance service is booked the service personnel goes thru with the car owner all the procedures that should be done to the car during the maintenance service.

Sentence beginning: Booking maintenance service time from Veho Autotalot Oy Pitäjänmäki is...
<ul style="list-style-type: none"> -easy (9) -rather easy (5) -no experience -mainly trouble-free -mandatory

Table 8: Booking maintenance service time, answers

It can be seen that those who completed “*Booking maintenance service time from Veho Autotalot Oy Pitäjänmäki is...*” sentence (Table 8) almost all of them thought that the booking is easy or rather easy as 14 out of 17 chose one of those answers. One respondent did not have experience and one experienced it to be mainly trouble-free. One respondent answered it to be “mandatory” which it is if you want to take your car for the maintenance service.

Sentence beginning: Booking maintenance time from Veho Autotalot Oy Pitäjänmäki would be easiest by...
<ul style="list-style-type: none"> -Internet (7) -phone (5) -Internet or by phone (2) -e-mail -visiting the shop -with the existing methods

Table 9: Booking maintenance would be easiest, answers

When asked for the easiest contact method in “*Booking maintenance service from Veho Autotalot Oy Pitäjänmäki would be easiest by...*” sentence (Table 9) the majority answered “Internet” and almost as many “phone”. When considered that Internet and phone covered 14 out of 17 answers and one answered “with existing methods” that makes 15 out of 17 decision makers that are happy with Internet and phone. Two other answers were e-mail and visiting the shop which both are possible ways for booking the maintenance already at the moment.

Sentence beginning: Organization that I represent would like to book the maintenance times by...
-Internet (9)
-phone (5)
-invitational maintenance service (2)
-e-mail

Table 10: Organization that I represent would like to book, answers

In “*Organization that I represent would like to book the maintenance times by...*” sentence (Table 10) can be seen same attitudes as in the previous sentence (Table 9). Majority of the respondents have chosen Internet and phone for the booking. There are two decision makers who have chosen “invitational maintenance service” those assumedly represent the companies to whom that kind of service is offered. One respondent would like to use the e-mail for the booking of maintenance service.

Sentence beginning: I find the contact information to Veho Autotalot Oy Pitäjänmäki maintenance services from...
-the web (11)
-maintenance instructions (2)
-easily (2)
-my phone (2)

Table 11: I find the contact information, answers

The majority of respondents continued the “*I find contact information to Veho Autotalot Oy Pitäjänmäki maintenance service from...*” sentence with the “Internet” (Table 11). Other answers were maintenance instructions, easily and my phone which all had two similar answers each. As noticed in the two previous questions (Table 9 and 10) the role of Internet is crucial nowadays in the customer contact.

Sentence beginning: If somebody would call our car users from Veho Autotalot Oy Pitäjänmäki maintenance services when the maintenance of the car would be close it would be...
-good thing/good service (12) -difficult or unnecessary (2) -everybody does not necessarily like it (3)

Table 12: If somebody would call our car users, answers

When asked “*If somebody would call our car users from Veho Autotalot Oy Pitäjänmäki maintenance services when the maintenance of the car would be close it would be...*” good thing or good service answered the majority (12 out of 17) of the decision makers (Table 12). Three respondents thought that all car users might not like it and two felt that it would be difficult or unnecessary.

Sentence beginning: Following factors make the maintenance booking a successful service experience...
Time related answers:
-service company contacts when maintenance is topical -fast answer -contact speed and suitable maintenance time -fast response, short queue to the maintenance service -no queues, going thru the service order, making timetables and holding them -capability to get the maintenance time in 1-2 weeks, maintenance history accessibility, information given is correct -fast response and reactions -fast response, clear representation of alternatives -no queuing when booking and available time in short time
Functionality related answers:
-easy, professional, good service -no queues and friendly customer service -easy, suitable and various ways of booking the maintenance time -free pick up service -clear reservation system and fast system -easiness and certainty that everything is OK -web is working -flexibility, accessibility, easiness

Table 13: Following factors make... answers

The answers in “*Following factors make the maintenance booking a successful service experience...*” sentence spreads widely to different subjects. The answers, however, can be themed into two main categories (Table 13). There are answers that are related to time and both to the general functionality of the service. Some answers could be categorized to both of the groups. Answers related in time there are views about fast service and short queue times as well as about holding the agreed timelines. Some answers refer to the efficiency which can be categorized to both time related and functionality related categories. Fast, effective and functional could be the three terms describing customer wishes in this subject. Answers related functionally the decision makers point out aspects like friendly and professional service, various and clear ways of booking the maintenance service and generally carefree service.

Sentence beginning: Reminder about the maintenance service day before with a SMS would be...
-good service/good idea (15)
-good but difficult
-phone call would be better

Table 14: Reminder about the maintenance service day before, answers

When asked the opinion to a SMS reminder a day before the maintenance service basically all answered that it would be good service or good idea (Table 14). Only one thought that phone call would be better and one respondent thought that it would be difficult.

6.1.2 Leaving the car to the maintenance service

Definition for leaving the car to the maintenance service:

When leaving the car to the maintenance service the car keys are handed over to the service foreman who writes down all the things that will be done to the car. The service foreman also asks for permission to do possible extra works (windshield wipers, cooler fluid, bulbs etc.). The service foreman gives a price estimate about the maintenance service and an estimate when the car should be ready from the maintenance service. The service foreman also asks how the customer wants the information that the car is ready (e-mail, phone call or by SMS).

In this section there are the sentence beginnings and answers related to leaving the car for the maintenance service to Veho Autotalot Oy Pitäjänmäki.

Sentence beginning: When I bring my car to the maintenance service to Veho Autotalot Oy Pitäjänmäki, I find the parking space...
-hardly ever (5) -after a while (3) -quite easily (3) -easily (3) -usually quite difficult (2) -no experience

Table 15: When I bring my car to the maintenance, answers

When asked about the parking lots in Veho Autotalot Oy Pitäjänmäki (Table 15) the answers distributed a bit. It can be said that finding a parking space from Veho Autotalot Oy Pitäjänmäki is rather difficult when five decision makers find the place “hardly ever”, two “usually quite difficult” and three “after a while”. Only three respondents find the space for their car “easily” and other three “quite easily”. One respondent did not have experience as he/she might be the user of the pickup service.

Sentence beginning: First impression when I bring my car for the maintenance service to Veho Autotalot Oy Pitäjänmäki is...
Answers related to tidiness and general appearance:
-clear -tidy general appearance -just good -way too many cars in the yard -mainly OK -good -messy yard, cars everywhere, lack of free parking space -basic car shop- eyes look for the maintenance service point -messy -a bit messy impression
Answers related to customer service and professionalism:
-not exactly on a Audi-maintenance service level -good. Capable and professional personnel -professional -correct -positive
Other answers:
-no experience

Table 16: First impression when I bring my car, answers

When asked to continue “*First impression when I bring my car for the maintenance service to Veho Autotalot Oy Pitäjänmäki is...*” sentence the answers (Table 16) of decision makers can be roughly themed into two groups. In the first group there are answers related to tidiness and general appearance of the premises. Negative feedback comes from the messy yard and about too many cars in the parking lot. Otherwise the answers are rather neutral, some a bit negative (“messy”, “a bit messy”) and some a bit positive (“tidy general appearance”, “mainly OK”). In the second group there are answers related to customer service and the professionalism of the employees. In the second group the feedback is rather positive. There are answers like “professional”, “positive”, “good” and “capable and professional personnel”. To sum up all the answers in one sentence it would be “the yard is messy but the service is professional”.

Sentence beginning: Leaving car for the maintenance service to Veho Autotalot Oy Pitäjänmäki goes...
Time related answers:
-fast and well -OK, sometimes there is queue -slowly -after little waiting OK
Customer service related answers:
-easily (4) -without any drama. Once you get to the counter the service is smooth -fluently -7,5 (scale 4-10) -usually quite well -mainly OK -just OK -poorly, because of messy yard, cars everywhere, lack of free parking space -as expected

Table 17: Leaving car for the maintenance, answers

In “*Leaving car for the maintenance service to Veho Autotalot Oy Pitäjänmäki goes...*” sentence the answers (Table 17) can be themed into time related and customer service related answers. The majority of the answers are customer service related. In time related answers there are answers like “fast and well”, “slowly” and “after little waiting OK”. In customer service related answers there were four answers “easily” and then six answers that all were in “OK”-level. One answer was “as expected” which can mean anything depending on customer expectations. One answer claimed that the car leaving for the maintenance service fails due to the messy yard and the lack of parking space.

Sentence beginning: Work order is gone thru with the client...
<ul style="list-style-type: none"> -well (2) -in detail (2) -thoroughly -properly and well enough -OK (2) -properly -fast, but well enough -often quite well -almost always -almost always -mainly -really badly -no experience

Table 18: Work order is gone thru with the client, answers

When the decision makers were asked to continue “*Work order is gone thru with the client...*” sentence the majority answered positively (Table 18). With answers like “OK”, “well”, “in detail”, “thoroughly” etc. Only one answered that the work order is gone thru “really badly”. There was one respondent who did not have the experience from this procedure which assumedly is a consequence from pickup service.

Sentence beginning: When leaving the car for the maintenance service the price estimate should...
<ul style="list-style-type: none"> -stick (2) -should be more precise -hold with 10 % accuracy. When leaving leasing-car no price estimate required -be quite accurate without extra works -be reliable -be quite accurate -be the final billing price -be accurate and if any extra work comes up the car user should be contacted always -be enough detailed and precise -be the actual costs. The price estimate should take into consideration the extra costs, that way the actual costs would remain smaller then estimated -be as accurate as possible -be accurate, supposing that the works has remained in ordered/agreed -be always given and always accurate -be accurate if private customer. In this situation it does not matter

Table 19: When leaving the car the price estimate, answers

When asked to complete the “*When leaving the car for the maintenance service the price estimate should...*” sentence all the respondents point out the accuracy (Table 19). There are not so many exactly same answers but all the answers are directly related to accuracy. Some claim that the price estimate should be the final price and some that it should be as accurate as possible. One respondent suggests max.10 % elasticity for the estimate. Some respondents also state that the price estimate should always be given. For one decision maker the price estimate does not matter in business life but as a private customer it should be accurate.

Sentence beginning: The opening hours of Veho Autotalot Oy Pitäjänmäki in my opinion are...
-sufficient (8)
-OK/good (6)
-normal
-rather good, but could be longer (both in the morning and on the evening)

Table 20: The opening hours, answers

When asked about the opening hours of Veho Autotalot Oy Pitäjänmäki only one respondent suggested that those should be longer (Table 20). One respondent answered that the opening hours are “normal”, six respondents answered that those are good or OK and eight respondents claimed those to be sufficient. To make it simple the customers are happy with the existing opening hours.

6.1.3 Communication with the customer during the maintenance service

Definition about the communication with the customer during the maintenance service:

Contact to the customer during the maintenance service might be necessary because of the following reasons: something unexpected in the car comes up, there are no required parts for the repairing, the foreman or the mechanic needs additional information about the car.

In this section there are the sentence beginnings and answers related to communication with the customer during the maintenance service.

Sentence beginning: Maintenance personnel should contact our company/ car user when...
Answers related to extra work:
<ul style="list-style-type: none"> -something surprising will be found (3) -needed -when necessary -there is something unusual -something unexpected comes up (or the car is ready) -there comes up something that requires booking of new time -some relevant extra work appears -something outside from the maintenance program appears -something comes up. If anything bigger the car user should be contacted -some relevant extra work appears
Answers related to timeline and delays:
<ul style="list-style-type: none"> -when there is a fault that delays the delivery -required: more information from customer or notification when the expected maintenance time exceeds -when the completion delays
Answers related to extra work and timeline:
<ul style="list-style-type: none"> -needed, rather unnecessarily than no contact at all -some of the three reasons in the definition applies

Table 21: Maintenance personnel should contact our company, answers

The answers to “*Maintenance personnel should contact our company/car user when...*” sentence is divided into three groups (Table 21). In the first group there are answers related to extra work, in the second group to timeline and delays and in the third group to both extra work and timelines and delays. In the first group all the answers relate to unexpected or surprising extra work that should be done to the car. First group covers 12 answers out of the total 17. In the second group there are answers related to timelines and delays. It has to be noted that in most of the cases problems with timelines and delays are consequences from discovered extra work. In the third group there are answers that can be linked to both extra work and timelines. Anyway the message is clear why the customers want that they are contacted during the maintenance service process.

<p>Sentence beginning: In the following situations we want that service personnel contacts our company/user of the car...</p>
<ul style="list-style-type: none"> -see previous answer (3) -when the time reserved for the maintenance exceeds or there comes up unexpected things (2) -if the price estimate changes or the delivery is delayed (2) -if something comes up outside from the service order (2) -when there comes exceptions to the delivery time -when price estimate exceeds significantly -always when there is something abnormal -when something found that was not agreed -If the delivery delays and rent car is needed. Cars are leasing cars, so there is no problem with the payments -In all situation mentioned in the definition. Contact should be done immediately and not after few days -When the delivery is delayed. Leasing companies have their own policies about repairing and permit for those. Hope you are aware of those

Table 22: In the following situations we want that service personnel contacts, answers

The answers to “*In the following situations we want that service personnel contacts our company/user of the car...*” sentence (Table 22) are basically the same as to previous sentence (Table 21). The main message of the answers is that customers want that they are contacted:

1. If the time reserved for the maintenance service exceeds.
2. If there are something unpredicted faults found.
3. If the costs are higher than expected.

6.1.4 Picking up the car from the maintenance service

Definition about picking up the car from the maintenance service:

When customer comes to pick up the car from the maintenance service the foreman goes thru with the customer the procedures that have been done to the car and the expenses caused from those. If repairing of some certain thing is postponed to some other time the foreman will book the time for it. Finally, the foreman guides the customer to his/her car.

In this section there are the sentence beginnings and answers related to picking up the car from the maintenance service.

Sentence beginning: When I pick up the car from the maintenance service I want that the following subjects are gone thru with me...
<ul style="list-style-type: none"> -the car is returned to my working place -actions and costs -if there is something special -works that are done and possible works that should be done -works that are done and the costs from those, possible future repairs -if something special noticed -works that are done, other observations -works that are done, parts that are changed and the specified invoice -all things that are done, especially the extra works and reason for those -works that are done, observations and suggestions based on those -works that are done and faults that have been discovered. Counseling based on customers' needs -works that are done -everything that differs from ordinary -everything precisely -what have been done or left undone. Observations about the cars condition -we use the pickup service-->if something unexpected found then phone call -everything beyond normal maintenance procedures. Recommendations about things that should be done before next maintenance service

Table 23: When I pick up the car from the maintenance service, answers

Answers to “*When I pick up the car from the maintenance service I want that following subjects are gone thru with me...*” sentence (Table 23) are all quite similar though there are not two exactly the same answers. The customers want the works that are done, are also gone thru with the customers. Customers also want to know about the works that need to be done or are recommended to be done in the future. Two of the respondents use the pickup service so the process differs a bit from the normal maintenance service, but anyway the other respondents wanted the information of unexpected findings.

Sentence beginning: The most important thing for me when I pick up the car from the maintenance service is...
Answers related to customer service and work quality:
<ul style="list-style-type: none"> -that everything is in order (3) -that all work is done as agreed -all the agreed things are done, costs are as estimated, there are no extra delays. It would be ideal to get everything done with one visit -that all agreed and things that include to the maintenance is done -that it is REALLY ready! -clear and fast customer service = good customer service -that everything is done properly and that car would be washed for free as an extra service -easiness, speed
Answers related to timelines:
<ul style="list-style-type: none"> -keeping the timetable (promises) -that work is done when it is promised to be -easiness, effortless and adequate opening hours -that everything goes fast and without queuing -that the car is ready when agreed -see for previous answer (pick up service user)

Table 24: The most important thing for me when I pick up the car, answers

The answers for the most important thing when picking up the car from the maintenance service are themed into two groups (Table 24). The first group is answers related to customer service and work quality and the second group contain the answers related to time and holding the timelines. In the customer service and work quality group the main focus in the answers is that everything should be done properly and that all agreed things are really done. Some of the answers also relate by some part to the second group about the timelines. In the timeline group the main focus is on holding the timelines and that the service is fast.

Sentence beginning: In Veho Autotalot Oy Pitäjänmäki our cars will be served and fixed on one visit...
Positive feedback answers:
<ul style="list-style-type: none"> -usually (4) -mainly (3) -quite well -almost always (except once) -about 70 % -so far always -without exception
Negative feedback answers:
<ul style="list-style-type: none"> -too rarely, too often some parts are missing and new maintenance time is required which means waste of working time and extra rental car costs -that's not true -sometimes

Table 25: In Veho Autotalot Oy Pitäjänmäki our cars will be served, answers

Answers to “*In Veho Autotalot Oy Pitäjänmäki our cars will be served and fixed on one visit...*” sentence can be divided to positive and negative answers (Table 25). Most of the answers are positive as seven out of 15 considers that the car will be served/fixed usually (4) or mainly (3) on a one visit. Other answers with positive tone were “quite well”, “almost always (except once)”, “so far always” and “without exception”. Answers with negative tone were only three out of 15. Those were “too rarely...”, “that’s not true” and “sometimes”.

Sentence beginning: After the maintenance service the following contact from Veho Autotalot Oy Pitäjänmäki should be...
<ul style="list-style-type: none"> -when next maintenance is closing up (7) -in 1-2 months, evaluation about the maintenance service -if there are technical notifications or close to the next maintenance service -automatically -no phone interviews, thanks! -according to the maintenance schedule -checkup that maintenance service has worked as agreed -no need

Table 26: After the maintenance service following contact, answers

“*After the maintenance service the following contact from Veho Autotalot Oy Pitäjänmäki should be...*” sentence was continued “when next maintenance is closing up” by seven decision makers (Table 26). The answer covered over 50 % out of answers to this sentence as there were 13 altogether for this sentence.

Only two answers were against contact after maintenance service. Two of the answers suggested checkup about maintenance services customer service.

Sentence beginning: The service attitude towards me when I visited in Veho Autotalot Oy Pitäjänmäki was...
-service oriented and professional (2)
-good (4)
-appropriate and friendly
-rather good
-appropriate (3)
-OK (2)
-mainly OK
-depends on person, sometimes appropriate, sometimes difficult etc.
-neutral. I cannot recall receiving specially good service
-in some way negative

Table 27: The service attitude towards me, answers

Of all the answers to “*The service attitude towards me when I visited in Veho Autotalot Oy Pitäjänmäki service...*” sentence only three can be considered negative (Table 27). The negative answers were “neutral. I cannot recall receiving especially good service”, “depends on person, sometimes appropriate, sometimes difficult etc.” and “in some way negative”. The other 14 answers were all rather positive like “good” (4), “appropriate” (3) and “service oriented and professional” (2).

6.1.5 Communication with the customer concerning invitational services

Definition of the communication between maintenance services and other maintenance service issues:

Generally, booking the time for the maintenance service and taking the car to the maintenance service belongs on a responsibility of the car user. Veho Autotalot Oy Pitäjänmäki, however, is able to provide “invitational service”, in which service personnel of Veho Autotalot Oy Pitäjänmäki contacts the car user when the maintenance service is topical. Other maintenance services that Veho Autotalot Oy Pitäjänmäki is able to provide are pickup service, airport service, evening service, rental car for the maintenance service customers, maintenance agreement etc.

In this section there are the sentence beginnings and answers related to the communication between the maintenance services and other maintenance service related issues.

Sentence beginning: I would like that Veho Autotalot Oy Pitäjänmäki maintenance services would contact me when...
-maintenance service is closing up (8) -no need for the contact (4) -for now I use the Veho Olari maintenance services -there is some factory recall campaign

Table 28: I would like that maintenance services would contact, answers

For “*I would like that Veho Autotalot Oy Pitäjänmäki maintenance services would contact me when...*” sentence got four different answers (Table 28). The most popular reason for contact was “maintenance service is closing up” with eight respondents giving the exact same answer. Four respondents felt that there is no reason for Veho Autotalot Oy Pitäjänmäki maintenance services to contact the customer between maintenance services. One decision maker thought that “if there is some factory recalls campaign” the customer should be contacted by the maintenance service personnel. One decision maker answered from his/her own behalf that “for now I use Veho Olari maintenance services” though the company in general is using Veho Autotalot Oy Pitäjänmäki maintenance services.

Sentence beginning: I would like that maintenance services of Veho Autotalot Oy Pitäjänmäki would offer services to our company that...
Answers related to making use of a car easier:
-would make the life's of car users easier (4) -we consider necessarily -are simple and easy -save time from our employees
Answers related to functionality of maintenance services:
-makes the service faster -are good and reasonably priced -support the condition of our car fleet, and offer statistics once a year -season tire changes with short notice. Fast light bulb changes. -we have to act according to leasing-company's instructions
Answers that do not have content:
-unable to identify -not needed

Table 29: I would like that maintenance services would offer, answers

The answers to “*I would like that the maintenance services of Veho Autotalot Oy Pitäjänmäki would offer services to our company that...*” sentence are divided in three different groups (Table 29). The largest group with seven answers is “answers that make the use of the car easier”. Other answers in that group are “we consider necessarily”, “are simple and easy” and “save time from our employees”. The second group is the answers that relate to the functionality of the services. There are answers like “makes the service faster”, “are good and reasonably priced” and “season tire changes with short notice. Fast light bulb changes”. The third group is answers that do not have useful content nor help developing of the maintenance services.

Sentence beginning: On my opinion the maintenance services of Veho Autotalot Oy Pitäjänmäki fail...
Answers with positive feedback:
-rarely (2) -haven't noticed -worked so far well
Answers related to customer service:
-if the agreed things won't go as planned and customers get bad customer service -if customer service does not work -in urgent maintenance service matters -if our service agreement (3+7) does not work and the cars won't be repaired in agreed times -in urgent matters--> 1 day's queue to express service??
Answers related to spare parts:
-often in spare part deliveries and in rent car availability -in some spare part deliveries
Answers related to premises and general feedback:
-surely every now and then -no direct experiences -sometimes -in parking spaces

Table 30: On my opinion the maintenance services, answers

The answers to “*On my opinion the maintenance services of Veho Autotalot Oy Pitäjänmäki fail...*” sentence are divided quite widely and, based on the answers, they are themed into four different groups (Table 30). In the first group are the answers that contain positive feedback like “worked so far well”. In the second group are the answers related to customer service. There are service failures like “In urgent maintenance service matters” and connected to previous “1 day's queue to express service??”

Third group is the answers related to spare parts and the delivery problems with those. In the fourth group is general feedback and opinion related to parking spaces.

Sentence beginning: The maintenance service of Veho Autotalot Oy Pitäjänmäki has succeeded...
Answers with general positive feedback:
-usually well (6) -mainly (2) -rather well -mainly to keep the users satisfied -always
Answers with specified positive feedback:
-well in invitation service -in customer service -to do well the maintenance services -in pre-ordered maintenance service
Other answers:
-when there does not come any feedback -rarely completely

Table 31: The maintenance services has succeeded, answers

Answers to the “*The maintenance service of Veho Autotalot Oy Pitäjänmäki has succeeded...*” sentence are themed into three groups based on the type of feedback the answers contain (Table 31). First group is the answers with general positive feedback like “usually well” (6), “mainly” (2) and “rather well”. Second group consists of the answers with specified positive feedback. Things that got specified positive feedback were invitation service, customer service and maintenance services. In the third group were answers that did not belong to neither of the previous groups. Those answers were “when there does not come any feedback” and “rarely completely”.

Sentence beginning: Veho Autotalot Oy Pitäjänmäki maintenance services should work differently in...
-unable to identify (2) -working better -express service. One signed service place where the work for the car would be done immediately -customer experiences the service when taking the car to the service and when picking it up from the service. At that point the service attitude has huge influence -queue for the maintenance service should be shorter -urgent small matters

Table 32: Veho Autotalot Oy Pitäjänmäki maintenance services should, answers

There came only seven answers to “*Veho Autotalot Oy Pitäjänmäki maintenance services should work differently in...*” sentence and two of the answers were “unable to identify” (Table 32). Concrete things that should be done differently were express service, service attitude, queues for the maintenance service and urgent small matters.

Sentence beginning: It would be easier to visit Veho Autotalot Oy Pitäjänmäki maintenance services if...
Answers related to customer service:
-it would be easier to contact the mechanic -there would be service personnel available all the time -business customer would have own contact persons -there would be more service personnel and there would be more service points
Answers related to parking spaces:
-there were more parking spaces and service situations would be nicer -there were parking spaces for maintenance services customers -there would be space for a car in the yard
Answers that were not categorized:
-unable to identify (2) -everything is OK -location of the shop would be better -I haven't had any problems

Table 33: It would be easier to visit maintenance, answers

Answers to “*It would be easier to visit Veho Autotalot Oy Pitäjänmäki maintenance services if...*” sentence was divided to three groups (Table 33). In the first group there are answers related to customer service. The answers were about the reachability of service personnel and the amount of service employees. In the second group are answers related to parking spaces or rather lack of those. The answers complain about the lack of parking spaces and that there are no own parking spaces for maintenance services customers. In the third group there are answers that do not belong to either of the previous groups. There are answers like “everything is OK”, “location of the shop would be better” and “I haven't had any problems”.

Sentence beginning: If car could be taken to the maintenance service to Veho Autotalot Oy Pitäjänmäki between 17-22 pm would that be...
-possibly good idea (6) -useless/ not needed (5) -good idea (5) -mandatory for us

Table 34: If car could be taken to the maintenance service, answers

When asked about the possibility to take the car for maintenance service to Veho Autotalot Oy Pitäjänmäki between 17-22 pm the answers spread quite a lot (Table 34). Five respondents consider it to be “good idea”, (5) six “possibly good idea” (6) and five consider it to be “useless” or “not needed” (5). One respondent claims it to be “mandatory for us”. This one answer is most likely by decision maker of a large service company whose service cars are agreed to be served on the evenings.

Sentence beginning: On my opinion Veho Autotalot Oy Pitäjänmäki should offer in addition to existing services...
<ul style="list-style-type: none"> -inspection services (2) -express service with non/stop-principal -focus on the main thing which is the maintenance service -fluent season change of tires -small damage repairs -unable to identify

Table 35: On my opinion Veho Autotalot Oy Pitäjänmäki should offer, answers

There were only few opinions about services that customers would like Veho Autotalot Oy Pitäjänmäki to offer in addition to existing services (Table 35). Two of the respondents suggested for inspection services. Other suggestions were express service with non/stop principal, fluent season change of tires and small damage repairs. One suggested that Veho Autotalot Oy Pitäjänmäki “should focus to the main thing which is maintenance services”.

Sentence beginning: On my opinion Veho Autotalot Oy Pitäjänmäki could develop their maintenance services by...
<ul style="list-style-type: none"> -look previous question (2) (inspection services) -making them more functional faster response to unexpected/emergency repairs so that the job with the car would be started earlier/faster -Saturday openings -spare part deliveries -wider spare parts category and faster information during maintenance services -more innovative attitude and spontaneously -borrowing bicycles for the maintenance services customers at summertime -no needed experience to be able to comment

Table 36: On my opinion Veho Autotalot Oy could develop their, answers

When asked the ways how to develop the maintenance services of Veho Autotalot Oy Pitäjänmäki (Table 36) there comes various answers. Two most popular answers were “inspections services” and “spare parts” which both got two “votes”. Other opinions were related to faster service response, functionality of the maintenance services, Saturday openings and more spontaneous and innovative attitude. One individual idea was borrowing bicycles for the maintenance service customers.

6.1.6 Improved service path with development ideas

In Figure 14 there is the improved service path with development ideas based on the results of the sentence completion forms. The improved service path is an illustrative version of the analyzed empirical data (sections 6.1.1 - 6.1.5) where the concrete development ideas are added to the service path. When the suggested improvements to the service path are taken into practice and the important development targets are implemented the business customers satisfaction should raise to the next level. Most of the improvements are rather easy to implement if there is enough willingness to pursue the changes.

Some development ideas are related to more than one service steps and because of that the lines link the ideas to the steps. All ideas are not straightly visible to the customer but may have anyway significant influence on the customer satisfaction. Some development ideas and targets are also linked to each other because the target may have influence on the development idea and vice versa.

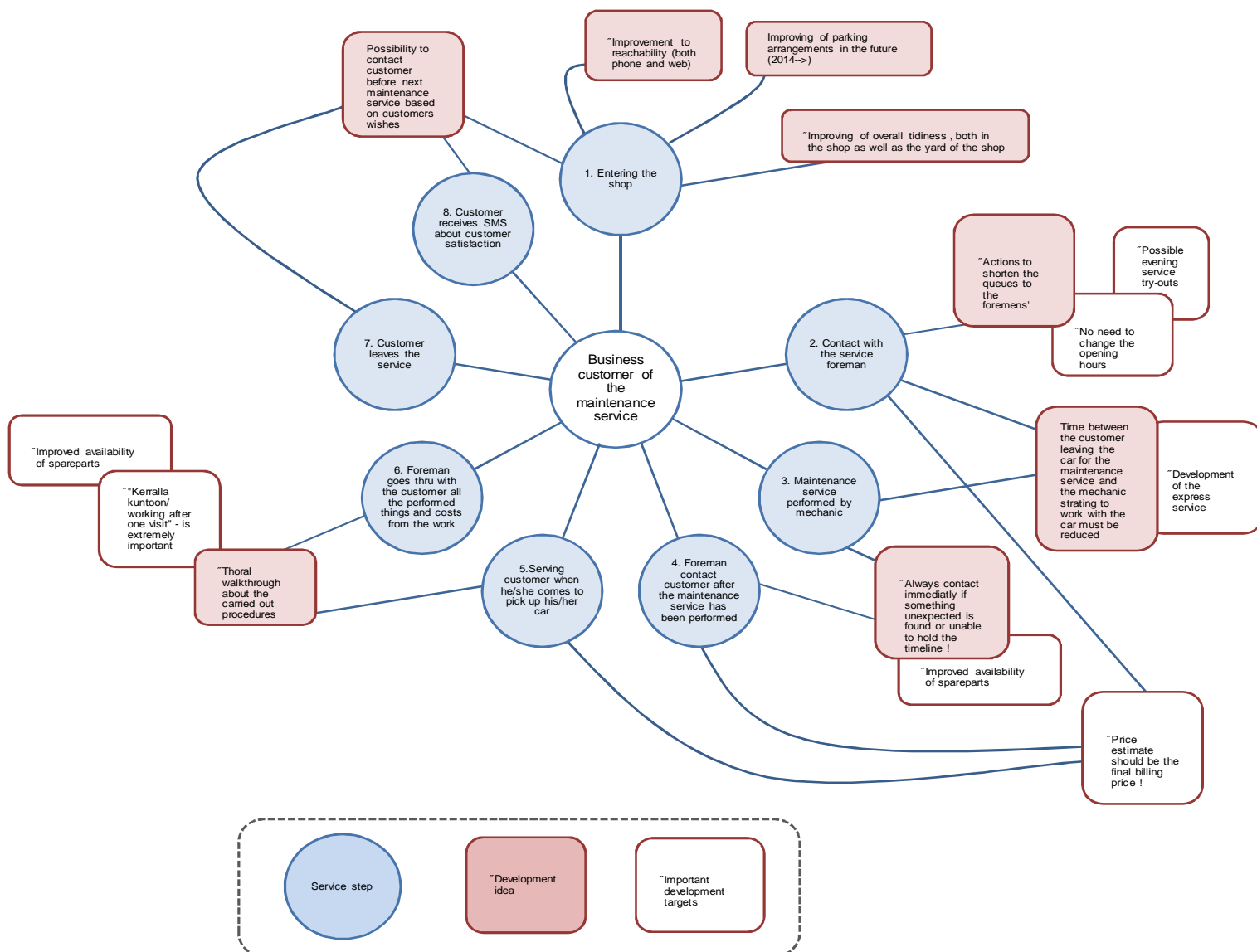


Figure 14: Service path with development ideas and development targets

6.1.7 Service manager's views about the new service path

The author interviewed the service manager of Veho Autotalot Oy Pitäjänmäki (Lindström, 2012) for the second time in January 2012 about the redesigned service path. Author and the service manager went through the new service path together with the improvements. The service manager had mainly the same opinions as the author about the path and there did not come up anything special that would have caused input to change the redesigned service path. As going through the service path and the elements of it that influence on the service process, the service manager pointed out the following improvements that have already been

conducted or launched during the author's research. The improvements together with arguments are following:

- All the contacts through the web are answered during the same business day and the answering rate of service foremen has increased to 75 %. The remaining 25 % are forwarded to general maintenance services' phone service, which takes care of those.
- The working hours of service foremen are divided into two groups to ensure the fluent customer service on the maintenance counters. There have been adjustments so that there are more people working at the traffic hours. Veho Autotalot Oy is also planning an experiment about "work time-bank", which is in common use in many other industries. This means that when there is work the work is done and the hours are saved so that the employee can use them as free time on later phase.
- The parking spaces have been guarded more actively to prevent the un-authorized parking and by that way ensuring the better parking possibilities to the customers.
- The express service that used to work as an individual department is now organized so that the "express" work is distributed through the service foremen of every car brand. This should fasten up the express service process and by that way improve the satisfaction of the busy business customers.
- To customer must be told that the car will not be taken immediately under construction when the customer delivers the car for the maintenance service. At the moment there is an illusion among the customers that the car will be taken under work immediately. This is a problem that the service foremen have not been able to inform the customers and it still causes problems. The system and processes would allow precise times but even a one delay by customer would mess the schedule for the whole day.
- The service manager has given instructions that the price estimate is the final billing price if there is not any extra work needed. This means that the wrestling about the estimated costs and the actual costs should be mainly over.
- The problem with the "kerralla kuntoon- working after one visit" depends on the car manufacturers. For example, a part to Mercedes-Benz that is ordered before 13.00 pm will come from Germany for the next morning before 7.00 am. Then again with Citroen, Honda and Skoda some part deliveries may take 3-4 weeks. What Veho Autotalot Oy maintenance

services can do to this is to check accurately what is wrong with the car and have same accuracy when ordering the spare parts.

As an entity the service manager saw that the service path is clear and it reflects the actual service concept features and justifications that there are in the maintenance service, after the improvements suggested based on this research. The service path clearly distinguishes Veho Autotalot Oy Pitäjänmäki maintenance services from the competitor's services and adds value especially for the business customers. As the service manager stated some of the improvements found on this research have already been implemented and based on this research, there will be even more improvements that have influence on both service concept and to service path. As both service concept and service path develops the consequence is that the maintenance service develops and finally the business customers are able to enjoy from better and faster service.

6.2 Developing a service concept worksheet template

As presented in chapter 4, the service concept can be built in several ways. In this chapter the concept is built based on the Bettencourt's (2010) service concept worksheet template model as presented in section 4.2.2. After defining the re-designed service concept, the author interviewed Veho Autotalot Oy Pitäjänmäki service manager (Lindström, 2012) to get his views about the new service concept. Later in this section there are also presented the actions that the service manager and the maintenance services have already started to conduct in order to improve the services.

6.2.1 Name and description of the concept

According to Bettencourt's (2010) service concept worksheet template as presented on Figure 7 the service concept should have a descriptive and memorable name. Since the name "maintenance service" is commonly used in the industry and the customers are familiar with the name there is no reason to start re-inventing the name. There are some previous attempts in the industry trying to re-invent the name of the maintenance service. For example, Bilja Oy has tried to launch the Service 2.0 which is more or less just an empty promise from something that is already done anyways. Based on the previous attempts and experience in the industry, the author will call the service with its original name "maintenance service".

The second step in the service concept is the concept description. "A high level description of what the service is in terms of what it does for the customer and what makes it unique and valuable; possibly a description about the target customer" (Bettencourt 2010, 191).

Based on the author's renewed service path, the description of the Veho Autotalot Oy Pitäjänmäki maintenance service is following:

Veho Autotalot Oy Pitäjänmäki maintenance service is a highly professional maintenance service concept offered for the business customers. The maintenance service is able to fulfil customers' demanding needs and to offer flexible schedules together with rental services. Maintenance service takes care of the customer's car with its modulated service processes to ensure a stress free driving experience for the customer. Veho Autotalot Oy launched in 2011 a slogan "Nauti matkasta" freely translated "Enjoy the ride" which fits perfectly to the concept of the maintenance services. Veho Autotalot Oy Pitäjänmäki maintenance services take care of your car so that you can enjoy the ride. The value for the customer is that the maintenance service concept and the service path are designed based on the business customer's wishes and needs to meet the high standards of the business customers. The individual service steps can be seen in the section 6.1 and in Figure 14 and those are the things that make this particular maintenance service better than others for the business customers. What makes this particular service concept unique is that there is not a single maintenance service or a car dealer in Finland that would be more focused on serving business customers and that would have even close as much experience from serving business customers.

Description of the target end customer is a male or a female, but more often male who is between the ages of 40 - 60 and has a 1 - 3 years old company owned car. In most of the cases the leasing company owns the car and the car user's employer have just leased the car for the user from the leasing company.

The car is 1 - 3 years old because usually people do not drive that much that the maintenance service would be topical in the first year and then again the leasing cars are usually changed after three years. A typical customer brings the car for the maintenance service in the morning before going to job and picks up the car after work. Some customers take a rental car for the day and some of them even get to loan a demo car from the car sales.

6.2.2 Concept features and justifications for the features

On the service concept worksheet template by Bettencourt (2010, 191), the features are divided into three different groups. The first is the key feature or offering that delivers value to the customer. Second is the key design dimension that makes the service valuable and unique. Third are the characteristics like the role of the people, technology and procedures. For all these three groups there should be justifications based on specific outcomes, related jobs or emotional jobs for customers.

The key features in the Veho Autotalot Oy Pitäjänmäki maintenance service that offer value to the customer are:

- The high professionalism and long experience from maintaining the cars represented
- High focus on business customers and eager to serve them as good as possible
- Great location and wide variety of transportation methods during the maintenance service (rental car, bus 15 meters, taxi 20 meters, train 500 meters)
- Aim to get the cars fixed at once with competitive pricing
- Genuine caring for the business customers and the image of Veho Autotalot Oy

Justifying the key features that offer value to customers is rather easy. There has been a car shop and maintenance service on the exact same spot from 1950's and many of the service personnel have worked on the same maintenance service for decades. Many of the maintenance service personnel are rewarded by car importers of their professional skills and some have even competed internationally with good results. Veho Autotalot Oy Pitäjänmäki has also been marketed for long time as a "business car shop" and due to that over 60 % percent of the new cars sales consists of business cars. The same cars and many others that Veho Autotalot Oy Pitäjänmäki sells are maintenance served in Veho Autotalot Oy Pitäjänmäki. The location of Veho Autotalot Oy Pitäjänmäki is the most central of all the car dealers in Helsinki region. Veho Autotalot Oy Pitäjänmäki is the closest to the centre of Helsinki city and the variation and distance of alternative transportation methods is comprehensive. As it is a common plague for the industry that cars will not get fixed by one visit, Veho Autotalot Oy Pitäjänmäki has had a lot of effort to improve the situation. It can still be seen from the results that there is still a lot of work to be done. Veho Autotalot Oy continuously benchmarks its pricing towards significant competitors and according to these benchmarks the pricing of Veho Autotalot Oy Pitäjänmäki maintenance services is on a competitive level, even if compared to the "no-name" maintenance chains. What becomes to the caring of customers, probably the best indicator from this is the customer satisfaction levels presented on the web-pages of Veho Autotalot Oy. Since there are results of every Veho Autotalot Oy shop divided into new and used cars and to maintenance services and the results are updated at least once in an hour. As the customer satisfaction level is over five (in the scale from 1-6) in every three categories for Veho Autotalot Oy Pitäjänmäki the author thinks that it is justified to say that the customers are taken care rather well.

On the second concept feature group there are the key design dimensions that make the service unique and valuable. For Veho Autotalot Oy Pitäjänmäki the key design dimensions are in the thorough design of the entire maintenance service and in the additional services beside the actual service product. The actual maintenance service is very carefully thought

entity of different service steps and procedures and there has been a large amount of hours used to develop it and all the development is done based on actual experiences and feedback received from the customers. The diversity of additional services (maintenance agreement, tyre change and storage, car wash etc.) that Veho Autotalot Oy offers is best in the industry and most of the services are originally introduced by Veho Autotalot Oy and other operators have copied these to their own service portfolio. For Veho Autotalot Oy it is matter of honour that the customers are proud of being customers of Veho Autotalot Oy

Third concept feature group by Bettencourt (2010, 191) is the service system characteristics such as the role of the people, technology and procedures. As the role of the procedures and people were gone through in the previous sections there is still the technology features that are not that visible for the customer, but are necessary for the success of the service. Veho Autotalot Oy Pitäjänmäki has the newest equipment and technological devices needed for performing the maintenance services as well as all possible special tools required by car manufacturers. The mechanics goes through the courses arranged by the car importers and the professionalism of the employees is kept on a high level which the technology, importers and good customer service demands. The tight procedures and surveillance keeps both the technology and the personnel on the sharpest edge of the business and to remain that feature the processes are developed all the time. As an example of the focus to maintenance service the CEO of Veho Autotalot Oy has his experience from the maintenance service unlike the usual when the CEO has his/her experience from the car sales. Veho Autotalot Oy has even hired a development manager to develop the processes together with the management and the employees of Veho Autotalot Oy

6.2.3 Visualisation of the service concept worksheet template

According to Bettencourt (2010, 191), there should be a concept rendering or a preliminary service blueprint which includes and identifies the key supporting processes and systems. Though the service path and service concept are different things the author believes that the improved service path drives the same mission as would a preliminary service blueprint. Both the improved service path and service blueprint includes the touch points where the customer and the service providing personnel meet and interact. A thorough service blueprint could be made on later phase when the actions presented in the improved service path would be taken into the practice and the influence of the changes can be seen.

Concept name:	
Veho Autotalot Ltd. Pitäjänmäki car maintenance service	
Concept description:	
<ul style="list-style-type: none"> • Highly professional maintenance service concept offered for the business customers • Able to fulfill customers' demanding needs with flexible schedules • Modulated service processes to ensure stress free riding for the customers • "Enjoy the ride" slogan and service atmosphere • Designed especially for the business customers with high standards • Unique focus to business customers needs 	
<i>Target end-customer:</i> male or female, 40 - 60 years of age, 1 - 3 years old company owned car (leasing)	
Concept features:	Feature justifications:
Offerings:	
<ul style="list-style-type: none"> • High professionalism and long experience • High focus on business customers and eager to serve • Great location and wide variety of transportation methods • Aim to get the cars fixed by once and competitive pricing • Genuine caring about the customer and the image of Veho Autotalot Ltd. 	<ul style="list-style-type: none"> • maintenance service on the same place from 1950's, awarded mechanics • over 60 % of sales to business customers = most important customer group • Closest car retail and repair shop to Helsinki city, transportation methods: rental car, bus 15 m, taxi 20 m, train 500 m) • lot of effort, benchmarking towards competitors • customer satisfaction levels, "best car dealer chain 2011" (award by AutoBild)
Key design dimensions:	
<ul style="list-style-type: none"> • Thorough design of the maintenance service process • Additional services (tyre change and storage, car wash etc.) 	<ul style="list-style-type: none"> • carefully thought entity, continuous development • diversity of additional services is exceptional
Key service system characteristics:	
<ul style="list-style-type: none"> • Newest technology and all the required special tools • Continuous education to technology and systems 	<ul style="list-style-type: none"> • tight procedures, ISO 9001 & 14 001 standards • even CEO's experience from the aftersales services
Concept visual:	
<ul style="list-style-type: none"> • New improved service path (Figure 14) 	

Figure 15: Service concept worksheet template for Veho Autotalot Oy Pitäjänmäki

6.2.4 Service managers views about the service concept

The author interviewed the service manager of Veho Autotalot Oy Pitäjänmäki (Lindström, 2012) for the third time in February 2012 about the new service concept. Author went through the service concept worksheet template for Veho Autotalot Oy Pitäjänmäki (Figure 15) together with the service manager. The service manager stated that the service concept worksheet template was really good, clear and describing. However the service manager pointed out that Alppilan Autohuolto is closer to the Helsinki City than Veho Autotalot Oy Pitäjänmäki. Since Alppilan Autohuolto Oy is considered to be no-name car maintenance service though they have official Mercedes-Benz and Volkswagen maintenance services, the author did not see any reason to change the service concept worksheet template.

The service manager found the service concept worksheet template quite demanding for the present situation, but stated that features and justifications are just the ones that the maintenance service should have. There are many critical things in the service concept worksheet template that the maintenance service has to work for every day, but still, those are the things that distinguish great maintenance service from good or average maintenance service.

6.3 Developing the maintenance service modules

As the actual maintenance service that the mechanic performs to the car consists of multiple operation modules there are things that can be improved to ensure fluent maintenance service process. When the author studied different car brands maintenance service work instructions there were significant differences on those. Citroen, Ford, Volkswagen and Mercedes-Benz have clear modules in their maintenance service programs but Honda and Skoda do not have any modules in their maintenance service programs (Appendices 2 - 7).

To be able to make the maintenance service process faster, all the procedures in the maintenance service should be modular. This helps the mechanic to perform the actual maintenance service when the different modules are in their own groups. The best example from modularity based on the author's opinion is the Citroen (Appendix 2), where there is clearly all areas of the maintenance services in own modules. Due to the clear modularity of the maintenance service instruction the form is easy to read and different work modules are easy to find. As the maintenance service instruction forms can also be given to the customers it looks more professional, the clearer the form is. If the Citroen form (Appendix 2) is compared to the Skoda (Appendix 6) or to Honda (Appendix 4) forms the evidence is rather clear. The modularity gives clearer focus for the mechanic about the things that need to be taken care of and it is also easier for the customer to understand what has been done.

As a base for the common maintenance service instruction author would use the Citroen form (Appendix 2). The author would take the describing pictures from the Mercedes-Benz form (Appendix 5) to make clearer for the reader that which part of the car the different modules concern. Author must also wonder how Skoda (Appendix 6) has so much worse form, with no modularity than Volkswagen (Appendix 7). Altogether the VAG concerns (Audi, Volkswagen, Skoda, Seat) modularity is on a truly modest level and it surely is hard for the mechanic to find the right steps from their forms. Honda (Appendix 4) is basically similar with the Skoda (Appendix 6) with no modularity at all. Ford (Appendix 3) has a clear modularity in its maintenance service form. The images, clear modules and the well-defined content of the modules are the issues where the authors' opinion differs from the clear and the unclear maintenance service instruction forms from each other.

The author believes that by building a general form of maintenance service instruction the work of service foremen and mechanics would be easier and the customers would understand better what has been done for the car. The author is aware that there are different procedures with different car brands and different things are done with different kilometres. No factory or manufacturer can deny that the clear working instructions make the work faster. If the Citroen maintenance service instruction (Appendix 2) would be used as a base and from Mercedes-Benz (Appendix 5) and Ford (Appendix 3) would be taken the best parts to conduct a perfectly modulated maintenance instruction, the author believes that the work would be done faster. Also for the foremen it would be easier to switch between different brands when the maintenance service instructions would be based on same modules. Since the modularity is widely in use in car manufacturing as presented in section 2.5 it is odd that it is not brought more widely to the maintenance services. Since one of the basic ideas of modularity is efficiency both economically and in time it would be essential to build further considered modular models to the maintenance services.

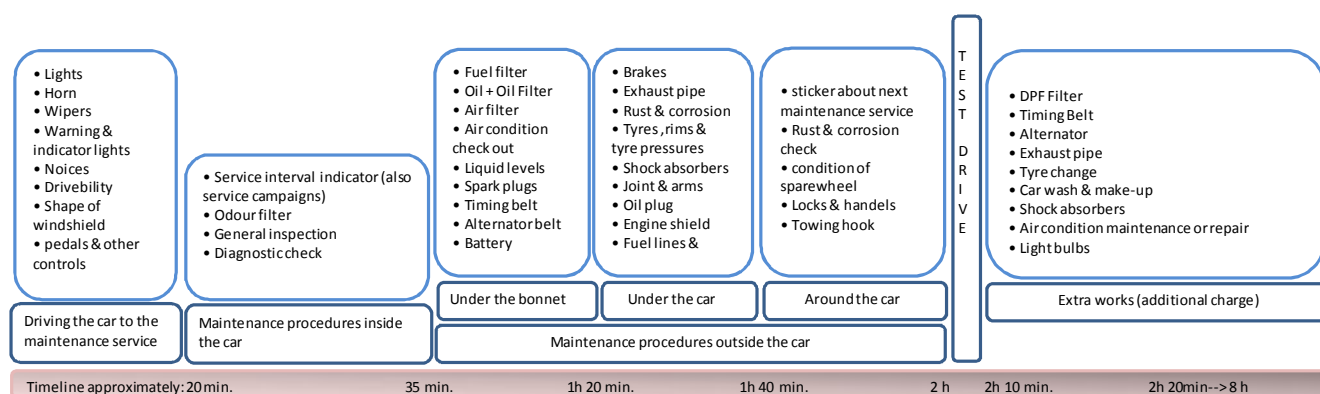


Figure 16: Elements of a car maintenance service concept

In the author's maintenance service concept (Figure 16) the modules are based on the content of the modules in existing maintenance service instructions (Appendices 2 - 7). The modules are structured so that they go in line with performing the maintenance service. In other words the things that are in the first module are those that can be performed when driving the car to the maintenance service hall. Second module includes the things that can be performed when the mechanic is in the car already. After inside maintenance module comes the dirtier outside modules. Since the jobs on the inside of the car have already been performed the risk for the inside of the car getting the dirty is smaller. Depending from the ordered extra works the modularity of the service may change a bit but usually the maintenance service concept modulation can be called "modular regular" as presented in Figure 1. In the following figures (Figure 17 - 23) there is deeper description about each of the maintenance service modules.

“Driving the car to the maintenance service” module



Figure 17: Module of driving the car to the maintenance service

In “driving the car to the maintenance service” module (Figure 17) are all the actions that the mechanic may perform from inside the car and most of them while driving the car. Mechanic should check that all the lights work, the horn works, windshield wipers are in good condition and working properly. There should not be burning any warning or indicator lights. If these lights are burning the reasons can be found and repaired in the following modules. While driving the car to the maintenance service the mechanic should evaluate the drivability of the car and function of the driving controls together with listening for possible inappropriate noises.

“Maintenance procedures inside the car” module

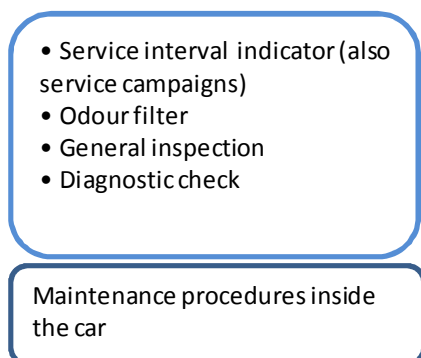


Figure 18: Module of maintenance procedures inside the car

In “maintenance procedures inside the car” module (Figure 18) the mechanic resets the service interval indicator and checks if there are any factory recall campaigns or other technical updates for the car. If the car has an odor filter, it should be changed. Mechanic performs the diagnostic check to find out if there have been some problems with the car between the maintenance service intervals. Also general inspection about the inside parts of the car should be made. There is a possibility for additional sales if the car is dirty from inside.

“Maintenance procedures outside the car” modules

“Maintenance procedures under the bonnet” module (Figure 19) belongs to a larger module entity called “maintenance procedures outside the car” which consists of three individual smaller modules. The three modules are “under the bonnet” (Figure 19), “under the car” (Figure 20) and “around the car” (Figure 21).

Here are the contents of the individual three modules presented in same order as the mechanic performs those.

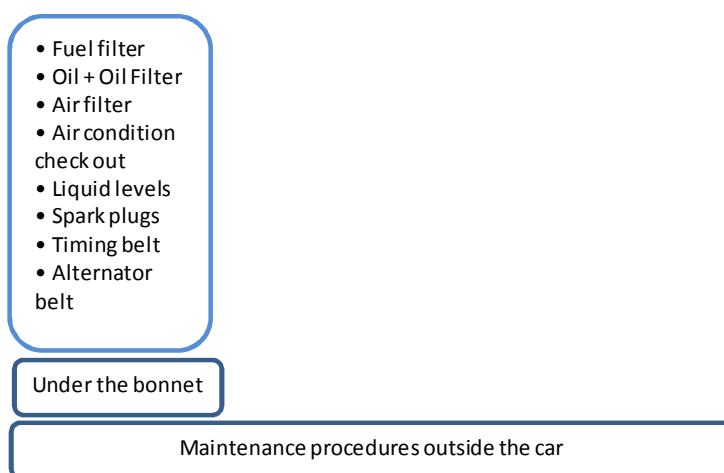


Figure 19: Module of maintenance procedures under the bonnet

“Under the bonnet” module (Figure 19) consists of actions that the mechanic performs under the bonnet/engine hood. In a basic maintenance service most of the actions in this module are just check outs and based on those check outs additional works can be suggested and performed. Changing oil and the oil filter together with the air filter belongs to the basic maintenance service. Also checking of the liquid levels includes to the maintenance service. The liquids that are checked are oil, cooler fluid, brake fluid, steering fluid and the washer fluid. Spark plug changing belongs to some maintenance services but that depends on how much the customer has driven with the car. Things that must be checked but changing or repairing them is an additional work is air condition, timing belt and alternator belt.

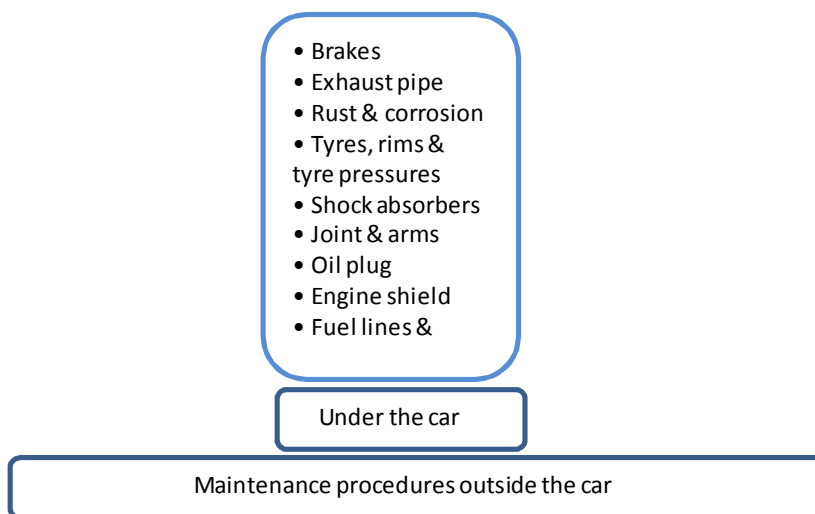


Figure 20: Module of maintenance procedures under the car

“Maintenance procedures under the car” module (Figure 20) is the second module in the “maintenance procedures outside the car” entity. Under the car the mechanic should perform following procedures: checking condition of brakes, exhaust pipe, shock absorbers and springs, all the joints and arms, oil plug, engine shield and all the fuel lines. Also general check for the cars condition from under should be done, to avoid larger rust problems. The condition of the tires and rims should be checked as well as the tire air pressures. If any problems are found by the mechanic during the checks an additional services should be recommended and suggested.

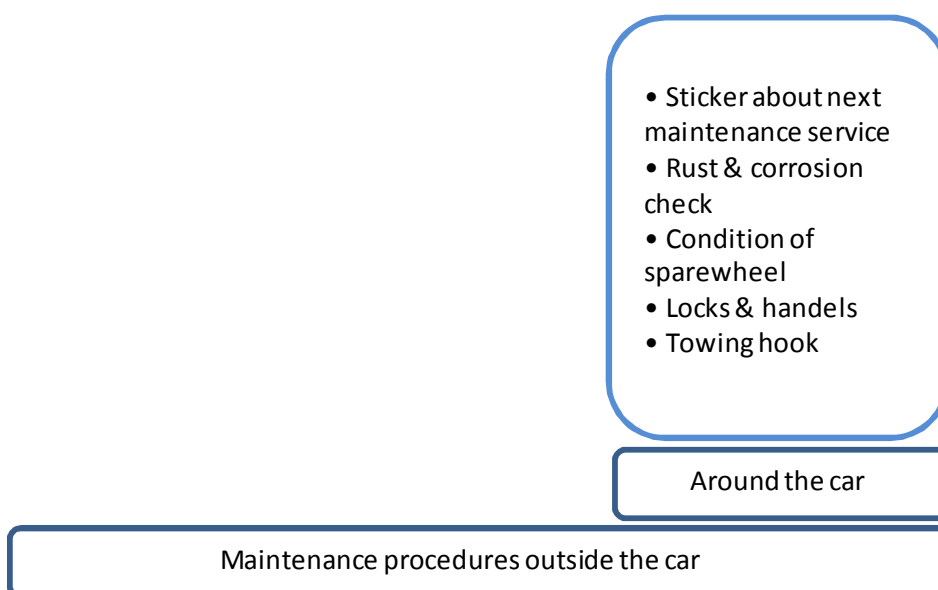


Figure 21: Module of maintenance procedures around the car

The third module of the “maintenance procedures outside the car” entity is the “around the car” module (Figure 21). When the mechanic has otherwise checked the car he/she will put a sticker to the car about the next maintenance service (for example 2 years or 30 000 km, what comes first). Mechanic should also check the car for rust and for other corrosion problems. The operation of locks and handles should be checked and the condition of the spare wheel. Finally, if there is a towing hook in the car the condition and wirings of it should be checked.

“The test drive” module

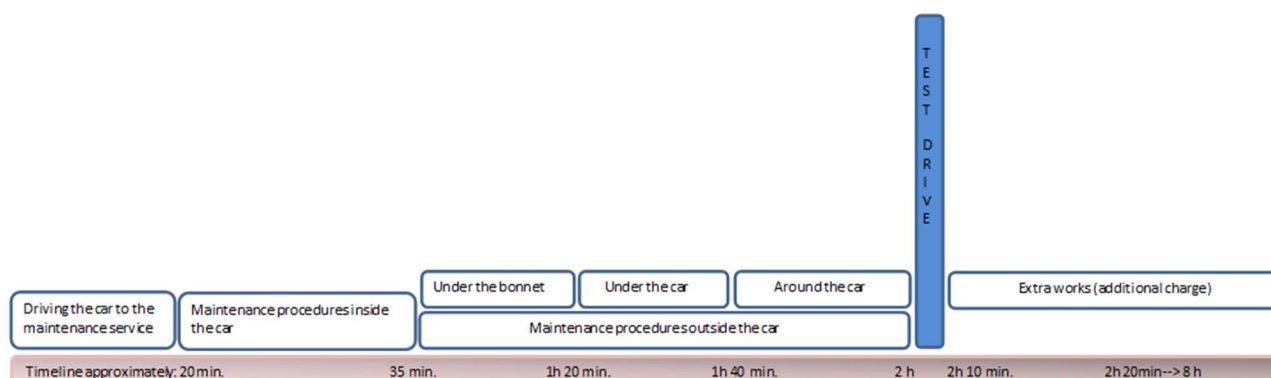


Figure 22: Test drive module

After performing all the previous modules of the maintenance service and if there are now additional services that require test driving it is time for the “test drive” module (Figure 22). In the test drive module the mechanic takes the maintenance served car for a test drive to make sure that everything works properly and that Vevo Autotalot Oy can stand behind their slogan “Enjoy the ride”. After doing the test drive the mechanic hands out the car to the maintenance service foreman or performs the additional extra works.

“Additional extra works” module

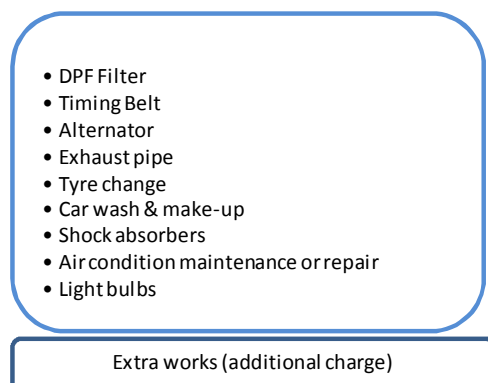


Figure 23: Module of additional extra works

The “additional extra works” module (Figure 23) consists of works that the mechanic has noticed during performing the maintenance service concept. Since the extra works do not belong to the basic maintenance service there is an extra charge for those. The amount of possible extra works is large as are the costs from those. In this module there are listed the most common extra works. All of them except the car washing and make-up are about of changing parts. Many of those part changing requires significant amount of time. For example, changing a timing belt takes several hours and usually the alternator and the alternator belt should and will be replaced on the same time.

The maintenance service concept modules presented in this section helps the mechanic to perform their job faster and more efficiently. The “elements of the car maintenance service concept” (Figure 16) can also be given to the customers to clarify the content of the maintenance service concept. As stated earlier, the modules can even be priced separately to clarify the pricing of the maintenance service to the customer.

Service manager's views about the maintenance service modules

The author interviewed the service manager of Veho Autotalot Oy Pitäjänmäki (Lindström, 2012) for the third time in February 2012 about the maintenance service modules. The service manager considered the maintenance service modules to be accurate description about the procedures that the mechanic performs to the car. The service manager also stated that the timeline follows actual actions and there were no factually incorrect actions. The service manager also suggested that there should be a test drive also after the extra works. The test drive of the car should always be the final thing that the mechanic performs to the car. This is to make sure that everything truly works when the customer receives the car back from the maintenance service.

7 Summary and conclusions

The aim of this thesis was to find out how Veho Autotalot Oy Pitäjänmäki maintenance services for business customers could be developed. The aim was to develop a maintenance service concept for the car maintenance services. Based on the results, the focus turned into developing the existing services instead of developing totally new ones.

The empirical research was conducted by collecting data utilizing a sentence completion form from the decision makers of Veho Autotalot Oy Pitäjänmäki business customers. The respondents were chosen among the biggest customers based on sales. With the help of the business customers' decision makers the author tried to find answers to the sub-problems.

This chapter summarizes the findings and draws conclusions based on the findings. The findings and conclusions are divided into sections based on the five steps of the maintenance services service path.

Booking the maintenance service

Based on the answers to “Booking the maintenance service” the business customers find booking of the maintenance services mostly easy or rather easy. When asked for the easiest way to book the maintenance service, Internet is clearly the most popular way to book the maintenance service. Phone call is also popular way for booking the maintenance service but not just as popular as Internet. When asked how the company that the decision maker represents would like to book the maintenance services the Internet is by far the most popular. Second popular is again phone and third popular is invitational service. Those who chose invitational service are clearly already users of the service.

Most of the customers find contact information from Internet and only a few from the maintenance instructions or from their phones. The suggestion that Veho Autotalot Oy Pitäjänmäki maintenance service personnel would call to the company’s car users when the maintenance service would be nearby gets lot of support.

As most of the respondents support the contact coming from Veho Autotalot Oy few of the decision makers find it difficult or unnecessary. A few decision makers also think that some car users might find it irritating and would not like that kind of approach.

Based on the answers, the author would recommend that the accessibility of Veho Autotalot Oy web based services will be made as easy as possible. Though the web pages are already on a good service level, Veho Autotalot Oy must make sure that they hold together with the development. The influence of web-based services is surely not going to decrease. Since the phone services still play a significant role in the services and in customers attitudes it is important that the customers will get the contact to the maintenance services easily as well. Perhaps Veho Autotalot Oy should make some kind inner service promise about the response times and percentages and when those are achieved it could be promoted to the customers as well.

Since the maintenance instructions and personal mobile phone are also mentioned by more than one decision maker as source for the contact information the author would recommend the business sales of Veho Autotalot Oy to make maintenance instruction to every business customer. On the maintenance instruction there would be all the needed information about the maintenance services and all necessary contact information. The companies that have made “Veho-sopimus” with Veho Autotalot Oy have this information automatically in their

agreement. It could also be on the car sales person's responsibility to save both their own phone number as well as the maintenance service foreman's number to the customer's mobile phone. As most of the customers think that contact from Veho Autotalot Oy would be a good idea when the maintenance service is close, there should be a system for it. Since some of the respondents that would not like it, there should be a clear system so that those who want the contact get the contact, and those who do not want the contact will not get the contact either. This information could be gathered when handing out the new car or when receiving the car for the first time to the maintenance service.

Leaving the car to the maintenance service

In the second section there were questions related to leaving the car for the maintenance service. As the questions proceeded chronologically the first question was about finding the parking lot from the parking space. The general opinion was that finding a parking space is really difficult or rather difficult. Only a few respondents consider it to be easy. Since all the things that can be done for the parking spaces in the present location of the shop have been done there is no reason to further develop that at the moment. When the location of the shop will be reconsidered in the future, there should be some further planning addressed to parking spaces.

The first impression of the Veho Autotalot Oy Pitäjänmäki according to the decision makers is in some sense a bit messy and the crowded yard gets negative feedback. What becomes to the customer service the feedback is mostly positive. When moved to the actual leaving of the car to the maintenance service there comes a few complaints about the waiting times but the feedback of the service is mainly good. Since the service is something that can be improved more easily than the premises the focus should be in making the service as fluent as possible for the customer. Maybe even some parking persons could be used on busy mornings. It would be a great service to take the car from the customer and the customer could just walk in to the shop and the "parking assistant" might drive the car straight away to the service hall. This way the customer would get great service and the car could be taken under work faster.

When asked about the work order and price estimate there is a great consensus among the decision makers. Almost all of the decision makers consider that the work order is gone through well or at least well enough. What becomes to the price estimate they all want the price estimate to stick and there should not be any increases to the given estimate price. Basically the message is that the price estimate should be the final billing price. Without knowing exactly the methods how the price estimates are counted it is impossible to give any exact suggestions but to make it simple could it be possible to "under promise and over

deliver”)? Meaning with this that the price estimate would be a bit higher than the actual estimated costs, and if there comes something unexpected there would be small price tolerance and if nothing special does not come up the customer would be delighted about the lower price. Again to gain better profitability the gap could also be held by Veho Autotalot Oy. This could be considered as a substitute for some price increasing.

Final question was about opening hours and as eight persons considered them to be sufficient and six good and just one suggested longer opening hours the authors suggestion is to do nothing to the opening hours. There is also some common experience on the branch about the longer opening hours and the experiences are not that positive either. For this step of the maintenance service process the most important things from the customer’s point of view are the parking lots and the accuracy of the price estimate. When the two mentioned things have been arranged to order the customer experience in this part of the process is significantly better.

Communication with the customer during the maintenance service

When asked about the communication during the maintenance service and about the reasons why customers should be contacted during the maintenance service the answers were clear and mostly similar. Customers are contacted if something unexpected is found, the timeframe is delayed or the costs will be higher than expected. These are also the reasons why customers want that they are contacted. The decision makers also highlight the speed of the contact. The contact should be made immediately when there is something found or when the mechanic realises that the car will not be ready when promised. Author’s suggestion for the communication during the maintenance service is to maintain the present policy but pay some more attention to that when the connection to the customer is made. As the reasons to contact the customer are also related to the price estimate, when one reason to contact the customer is when the price estimate is exceeded. The accuracy of the price estimate plays a role also in this point and maybe it could be agreed with customer some price tolerance when to call and when just to fix without calling.

Sometimes the works are delayed because the mechanic or the foreman are unable to reach the customer and will not get the promise for the extra works or the costs. Due to this the customer should be reminded when leaving the car for the maintenance that somebody might call from the service. As suggested in the first service step if there is the service foreman’s number loaded to the customers phone the customer will notice when the call comes from the maintenance service and is able to answer even if he/she is in the meeting.

Picking up the car from the maintenance service

All decision makers who had experience from the maintenance service wanted that when they come and pick up the car from the service all the things that are conducted to the car will be gone through with the customers. Also the expenses from each work step as well as future repairs are important information for the customers. Based on this, the author recommends that maintenance service foremen would go really thoroughly the work order through with the customer and explain all the expenses as well as need for the future repairs. By this way the customer would know what they are paying for and they would possibly be more willing to pay when they know what they are paying for.

As the most important things for the customers when picking up the car from service is that everything is “all right” and that the given timeframe has been kept, it is recommended to put a lot more effort for the “kerralla kuntoon”/ “working after first visit”- attitude. Customers are busy and they do not want to visit many times in the maintenance service unless they have to. One core element in the answers of the decision makers were the “easiness” for the car users and when Veho Autotalot Oy Pitäjänmäki maintenance services succeed to make the lives of the car users easier Veho Autotalot Oy Pitäjänmäki will win lot of soles and euros from the business customers. Based on the results, Veho Autotalot Oy Pitäjänmäki maintenance services have succeeded rather well by getting the cars serviced or repaired with one visit but there is still too much negative feedback about it.

When asked about the next contact after the maintenance service the majority of the respondents wanted that the next contact would be when the next maintenance service is closing up. Since there were also some who did not like the idea about the contact coming from the service producer’s direction the author’s suggestion is that the willingness for the contact would be investigated during the hand-out of the new car and based to that there would be a register held about those who want the contact to be done. With this kind of operations the queue peaks could be flattened and when there is not so much job, the customers could be contacted earlier and informed about the possibility to get the maintenance service time in few days.

Final question in this question group was about the service attitude of the maintenance service personnel. Generally, the service attitude is good and there were only few negative responses about the service attitude. As it is impossible to get all the customers satisfied in customer service the results are good. Still the aim should be that every customer is satisfied with the service. If the aim would be lower than 100 % the results would also be lower, so when the aim is 100 % level, the results can be on 98 % customer satisfaction level.

Communication with the customer between the maintenance services, and other maintenance service issues

In the final question group there were questions about contact keeping, failure and success points, things that should be changed, opening hours and ideas for new maintenance services or for improvements for the existing ones. Based on the results, the author would suggest the following things to be changed or kept as they are at the moment.

Customers should be contacted before the maintenance service if they have agreed that that it is an appropriate way for them. As stated earlier that can be easily controlled and the customers who want the service will surely appreciate it. Whether the customers want that they are contacted before the maintenance service or not, the common message from the decision makers is that customers want services that make their lives easier. There are not many mentions about the prices as people are willing to pay when they are served and everything goes fast and fluently. As it can be read, there are not so many new things that customers want from the maintenance services. Due to that Veho Autotalot Oy Pitäjänmäki maintenance services should focus to manager the existing services as well as possible. That would lead to better customer satisfaction and higher profits.

When asked about the failure and success points there comes up a few things that Veho Autotalot Oy Pitäjänmäki maintenance services are already aware about but the message from the decision makers even strengths up the influence of those issues. In the failure points the two things that the maintenance services should focus on, are the speed of the service or more precisely the time between the car is delivered for the maintenance and when it is taken under construction. The other thing which can be related to the time efficiency is spare parts. The decision makers are claiming that there are too often some spare parts missing and due to that the car lays in the yard of the maintenance service or if able to drive the car has to be taken another time for the maintenance. As there are basically just two main points where the service fails it is rather easy to focus on those two and improve the customer experience. Though there were these few failure points the customers feel that Veho Autotalot Oy Pitäjänmäki maintenance services succeed in most of the cases and customers are mainly satisfied. Since the overall satisfaction seems to be on a decent level the author recommends focusing on the weak points and otherwise to keep the procedures as they are.

When the decision makers were asked things that should be done differentially the answers were divided quite widely and there was not even so many answers to the question. Still based on the received answers some more focus could be set for urgent small matters and to express service. Customers are busy and when they need the help or service they want it immediately and not after two weeks. Things that would otherwise help the customers when

visiting to Veho Autotalot Oy Pitäjänmäki maintenance services are better parking premises and faster contact to service foreman or even straight to mechanic. It should be questioned is it rational or possible to have more service foremen and should some of the mechanics have straight contact to the customer. The author is aware that there are some positive experiences from straight contact between the customer and the mechanic in Veho Autotalot Oy Pitäjänmäki. This suggestion, however, does not mean that there should not be a service foreman between the customer and the mechanic in most of the cases.

One strange thing in the results is that when in earlier point there was a question about the opening hours most of the respondents considered those to be sufficient but when asked about the possibility to bring the car for the maintenance service between 17 to 22 pm. One third considered it to be a good idea and one third as a possibly good idea. Based on the fraction of the answers, the author would recommend arranging evening service try-outs to find out if there is required demand for evening services. Based on the results there might be a business opportunity there.

The final two questions were about new services and how to develop the maintenance services. Ideas for new services that the author also keeps worth considering are inspection services and small damage repairs. Otherwise the customers just want the existing services to work as well as possible. In the research, there did not come up any totally new service or even wishes that would directly demand developing new services. In all of the sentence completion forms the message was that make the existing services work and some decision makers even wrote the thing exactly. Borrowing bicycles on the summer time is a good extra for the service but that does not make the difference in competition. When Veho Autotalot Oy Pitäjänmäki takes care of the basic service better than any other competitor the business customers will use their services and price does not solve the game at that point.

8 Further consideration

The empirical data was collected with a sentence completion form from the business customers' decision makers of Veho Autotalot Oy Pitäjänmäki. With the collected data the author was able to analyse the opinions of the customers and make suggestions how to improve and develop Veho Autotalot Oy Pitäjänmäki maintenance services.

Based on this study, there could be done some further research on the maintenance services in Veho Autotalot Oy Pitäjänmäki or in Veho Autotalot Oy generally to get comparative information from other Veho Autotalot Oy shops. For the information provided by this study the issue is how the information is used or is it used at all. In this study Veho Autotalot Oy and their Pitäjänmäki shop's maintenance service got critical views from the most important business customers. The question is what will Veho Autotalot Oy do with the information?

Conducting this thesis has been a long and demanding process though the subject and the aim of the thesis was rather clear already in the beginning the academic writing as well as the theoretical framework has set its own challenges for the process. Since the topic was distantly related to the author's own work it gave a chance to learn new things from the service business and to expand the knowledge from retail trade and repair of motor vehicles. The process has been interesting and it has progressed as the author planned to its final form in the given timeframe. Hopefully, there is use for this thesis when Veho Autotalot Oy Pitäjänmäki or some other Veho Autotalot Oy shop develops its maintenance services and takes their slogan "Nauti Matkasta- Enjoy the ride" to the practice.

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Figures and Tables

Figures

Figure 1: Combining modularity and customization in service offerings (Bask et al. 2011, 310)	18
Figure 2: Modularity and customization in the automotive industry from the service offerings perspective (Bask et al. 2011, 313).....	19
Figure 3: Veho Autotalot Oy Road Map (VTT-Vehon Tapa Toimia 2011)	23
Figure 4: Service steps on the service path (Tuulaniemi 2011, 79).....	33
Figure 5: Each service encounter consists of various contact points (Tuulaniemi 2011, 80).....	33
Figure 6: Customer journey map (Amplify Interactive 2012)	34
Figure 7: Service concept worksheet template (Bettencourt 2010, 191).....	37
Figure 8: Conceptualizing the service product (Hutt & Speh 2004, 339)	38
Figure 9: Customer base classified based on profitability (Arantola & Simonen 2009, 12) .	47
Figure 10: Customer base categorized based on what produces value to the customers - segments X, Y and Z (Arantola & Simonen 2009, 18).....	48
Figure 11: Service path of basic maintenance services	53
Figure 12: Service paths of all the produced maintenance services.....	56
Figure 13: Customer satisfaction levels in Veho Autotalot Oy Pitäjänmäki	57
Figure 14: Service path with development ideas and development targets.....	78
Figure 15: Service concept worksheet template for Veho Autotalot Oy Pitäjänmäki	84
Figure 16: Elements of a car maintenance service concept.....	86
Figure 17: Module of driving the car to the maintenance service.....	87
Figure 18: Module of maintenance procedures inside the car	87
Figure 19: Module of maintenance procedures under the bonnet	88
Figure 20: Module of maintenance procedures under the car	89
Figure 21: Module of maintenance procedures around the car.....	89
Figure 22: Test drive module	90
Figure 23: Module of additional extra works.....	90

Tables

Table 1: Previous studies discussing retail trade and repair of motor vehicles and service concepts.....	10
Table 2: Car maintenance service attributes (Brito & Aquilar 2007, 472).....	15
Table 3: Most important service attributes with independent repair garages and branded dealers (Brito & Aquilar 2007, 474).....	16
Table 4: Services offered by Veho Autotalot Oy Pitäjänmäki.....	26
Table 5: Queue situation on week 36/2011 (Veho Autotalot Oy Pitäjänmäen johtoryhmän pöytäkirja vko 36. 2011).....	28
Table 6: Foremen's answering percentages in Veho Autotalot Oy Pitäjänmäki	29
Table 7: Distribution of foremen's answering rates in Veho Autotalot Oy Pitäjänmäki.....	29
Table 8: Booking maintenance service time, answers.....	58
Table 9: Booking maintenance would be easiest, answers	58
Table 10: Organization that I represent would like to book, answers.....	59
Table 11: I find the contact information, answers.....	59
Table 12: If somebody would call our car users, answers	60
Table 13: Following factors make... answers.....	60
Table 14: Reminder about the maintenance service day before, answers	61
Table 15: When I bring my car to the maintenance, answers	62
Table 16: First impression when I bring my car, answers.....	62
Table 17: Leaving car for the maintenance, answers	63
Table 18: Work order is gone thru with the client, answers	64
Table 19: When leaving the car the price estimate, answers.....	64
Table 20: The opening hours, answers	65
Table 21: Maintenance personnel should contact our company, answers	66
Table 22: In the following situations we want that service personnel contacts, answers ..	67
Table 23: When I pick up the car from the maintenance service, answers	68
Table 24: The most important thing for me when I pick up the car, answers	69
Table 25: In Veho Autotalot Oy Pitäjänmäki our cars will be served, answers	70
Table 26: After the maintenance service following contact, answers	70
Table 27: The service attitude towards me, answers	71
Table 28: I would like that maintenance services would contact, answers	72
Table 29: I would like that maintenance services would offer, answers	72
Table 30: On my opinion the maintenance services, answers	73
Table 31: The maintenance services has succeeded, answers.....	74
Table 32: Veho Autotalot Oy Pitäjänmäki maintenance services should, answers.....	74
Table 33: It would be easier to visit maintenance, answers	75
Table 34: If car could be taken to the maintenance service, answers	75

Table 35: On my opinion Veho Autotalot Oy Pitäjänmäki should offer, answers.....	76
Table 36: On my opinion Veho Autotalot Oy could develop their, answers	76

Appendices

Appendix 1: Sentence completion form.....	107
Appendix 2: Citroen maintenance service instruction.....	112
Appendix 3: Ford maintenance service instruction	113
Appendix 4: Honda maintenance service instruction.....	114
Appendix 5: Mercedes-Benz: maintenance service instruction	115
Appendix 6: Skoda maintenance service instruction	116
Appendix 7: Volkswagen maintenance service instruction	117

Appendix 1: Sentence completion form

13.10.2011

Arvoisa autopäättäjä!

Opiskelen työni ohessa Laurea-ammattikorkeakoulussa englanninkielisessä Service Innovation and Design-koulutusohjelmassa Master's Degree in Service Innovation and Design-tutkintoa. Tutkin opinnäytetyössäni Veho Autotalojen Pitäjänmäen toimipisteen yrityksille suunnattuja huoltopalveluita. Oheisessa lauseentäydennyslomakkeessa on kuvattu huoltokokemuksen eri osa alueet ja muut huollon palvelutuotteet. Lauseentäydennyslomakkeella kerättävän tiedon avulla on tarkoitus kehittää uusi palvelutuote tai vaihtoehtoisesti jalostaa jotakin nykyistä palvelutuotetta paremmaksi, jotta se vastaisi paremmin Veho Autotalojen Pitäjänmäen toimipisteen yritysasiakkaiden tarpeisiin.

Täydentäkää lauseet haluamallanne tavalla. Kirjoittakaa asia, joka tulee mieleenne ensimmäisenä. Ei ole olemassa oikeita tai vääriä vastauksia, on vain Teidän ja edustamanne yrityksen näkemys. Tarvittaessa voitte jatkaa kirjoittamista paperin kääntöpuolelle. Vastaukset käsitellään täysin luottamuksellisesti ja nimettöminä.

Olkaa hyvä ja palauttakaa lauseentäydennyslomake oheisessa palautuskuoressa postin välityksellä viimeistään perjantaina 29.10.2011. Mikäli lauseentäydennyslomakkeesta tai tutkimuksesta yleisesti herää kysyttävää, minut tavoittaa numerosta 040 - 5025 911 ja sähköpostilla juha.rusama@veho.fi

Kiitos jo etukäteen antamistanne vastauksista!

Ystävällisin terveisin

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1. HUOLLON VARAAMINEN

Määritelmä: Huollon ajanvaraus Veho Autotaloista onnistuu nykyisellään puhelimitse, sähköpostilla, Internet-varauksen kautta tai käymällä paikan päällä liikkeessä.

Ajanvarausta tehtäessä sovitaan päivä ja kelloaika, jolloin auto jätetään huoltoon.

Ajanvarauksen yhteydessä käydään läpi asiat, jotka autolle tulisi tehdä huollon yhteydessä.

1. Huollon varaaminen Veho Autotalot Pitäjänmäen toimipisteestä on

.....

2. Huollon ajanvaraus Veho Autotalot Pitäjänmäeltä sujui mielestäni helpoiten

.....

3. Edustamani organisaatio varaisi mieluiten huollot

.....

4. Löydän yhteystiedot Veho Autotalojen Pitäjänmäen toimipisteen huoltoon

.....

5. Jos Veho Autotalojen Pitäjänmäen toimipisteestä soitettaisiin auton käyttäjillemme, kun auton huolto on ajankohtainen, olisi se mielestämme

.....

6. Seuraavat tekijät tekevät huollon varaamisesta onnistuneen palvelukokemuksen

.....

7. Tekstiviestillä tapahtuva muistutus auton huollosta, huoltoa edeltävänä päivänä on mielestäni

.....

2. AUTON HUOLTOON JÄTTÄMINEN

Määritelmä: Autoa huoltoon jätettäessä luovutetaan auton avaimet työnjohtajalle, joka kirjaa ylös autolle tehtävät toimenpiteet ja suostumukset mahdollisille lisätöille, joiden tarve saattaa ilmetä huollon aikana (mm. pyyhkijän sulat, jäähytysneste, palaneet polttimot ym.). Työnjohtaja antaa arvion huollon kustannuksista ja

valmistumisajankohdasta, sekä selvittää, kuinka valmistuneesta autosta ilmoitetaan asiakkaalle (sähköposti, puhelu tai tekstiviesti).

8. Tuodessani auton huoltoon Veho Autotaloihin Pitäjänmäelle löydän parkkipaikan

.....

9. Ensivaikutelma tuodessani autoa huoltoon Veho Autotalojen Pitäjänmäen toimipisteeseen on

.....

10. Auton jättäminen huoltoon Veho Autotalojen Pitäjänmäen toimipisteeseen sujuu

.....

11. Työmääräys käydään asiakkaan kanssa läpi mielestämme

.....

12. Autoa huoltoon jätettäessä annetun kustannusarvion pitäisi

.....

13. Veho Autotalojen Pitäjänmäen liikkeen aukioloajat ovat mielestäni

.....

3. YHTEYDENPITO ASIAKKAASEEN HUOLLON AIKANA

Määritelmä: Yhteydenpito asiakkaaseen huollon aikana saattaa olla tarpeellista mm. seuraavista syistä: autosta löytyy jokin piilevä vika, korjaamiseen tarvittavia osia ei löydy välittömästi hyllystä, asentaja tai työnjohtaja tarvitsee asiakkaalta autoon tai mahdolliseen vikaan liittyviä lisätietoja.

14. Huollosta ollaan yrityksemme/auton käyttäjään yhteydessä, kun

.....

15. Seuraavissa tapauksissa haluamme, että yrityksemme/ auton käyttäjään otetaan yhteyttä huollon aikana.....

4. AUTON NOUTAMINEN HUOLLOSTA

Määritelmä: Autoa huollosta noudettaessa työnjohtaja käy asiakkaan kanssa läpi autolle tehdyt toimenpiteet ja niistä aiheutuneet kustannukset. Mikäli jonkin asian korjaaminen jää myöhempään ajankohtaan, varataan toimenpiteelle uusi aika. Lopuksi työnjohtaja opastaa asiakkaalle, mistä hän löytää autonsa.

16. Autoa huollosta noutaessani haluan, että seuraavat asiat käydään kanssani läpi

17. Tärkeintä minulle autoa huollosta noutaessani on

18. Veho Autotalojen Pitäjänmäen toimipisteessä autoni/automme tulevat kerralla kuntoon

19. Seuraava yhteydenotto Veho Autotalojen Pitäjänmäen toimipisteen toimesta, kun autoni on ollut siellä huollossa, tulisi olla

20. Henkilökunnan palveluasenne minua kohtaan asioidessani Veho Autotalojen Pitäjänmäen toimipisteessä oli

5. YHTEYDENPITO HUOLTOJEN VÄLILLÄ JA MUUT HUOLTOPALVELUT

Määritelmä: Yleisesti huollon ajanvaraaminen ja auton huoltoon vieminen on auton käyttäjän vastuulla. Veho Autotaloilla on kuitenkin mahdollisuus ”kutsuhuoltoon”, jolloin Veho Autotaloista ollaan yhteydessä asiakkaaseen huollon ollessa ajankohtainen. Muita huoltopalveluita, joita Veho Autotalot voivat tarjota, ovat mm. noutuhuolto, ”lentokenttähuolto”, iltahuolto, sijaisauto huollon ajaksi, huolenpitosopimus jne.

21. Haluaisin, että Veho Autotalojen Pitäjänmäen toimipisteen huollosta oltaisiin minuun yhteydessä, kun

.....
.....
.....

22. Haluaisin, että Veho Autotalojen Pitäjänmäen toimipisteen huoltotoiminnot tarjoaisivat yrityksellemme palveluita, jotka

.....
.....

23. Mielestäni Veho Autotalojen Pitäjänmäen toimipisteen huoltopalvelut epäonnistuvat

.....
.....
.....

24. Veho Autotalojen Pitäjänmäen toimipisteen huolto on onnistunut

.....
.....
.....

25. Veho Autotalojen Pitäjänmäen toimipisteen huoltopalveluiden tulisi toimia toisin

.....
.....
.....

26. Veho Autotalojen Pitäjänmäen toimipisteen huollossa olisi helpompi asioida, jos

.....
.....
.....

27. Jos auton voisi käyttää huollossa Veho Autotalojen Pitäjänmäen toimipisteessä aikavälillä klo 17-22

.....
.....

28. Mielestäni Veho Autotalojen Pitäjänmäen toimipisteen tulisi tarjota nykyisten palveluiden lisäksi.....

.....
.....

29. Mielestäni Veho Autotalojen Pitäjänmäen toimipiste voisi kehittää huoltopalveluitaan.....

.....
.....
.....

Kiitos vastauksistasi!

Appendix 2: Citroen maintenance service instruction

CITROËN

C4 - C4 Picasso - C5 X7 - C6 - Kaikki Mallit

vm 2008 vm 2009

Huollon tyyppi : km

Työ määräi-
men nro:

HUOLTO TEHTÄVÄ 20 000 KM VÄLEIN TAI KERRAN VUODESSA.

PERUS-TOIMENPITEET

Tehtävä aine
5W30 5W40 10W40

- ÖLJYVAIHTO: Moottoriöljy
- VAIHTO: Öljynsuodatin
- VEDEN POISTO: Dieselpolttonesteensuodatin
- NESTETASOJEN TARKASTUS, jos ei vaihtoa:
 - Jarruneste
 - Jäähdytysneste
 - Ohjaukseenohjain öljy ja LDS-neste
 - Lasinpesuneste
 - Akkuneste, sisältää puhdistuksen, sekä akuru ja kaapeloiden kiinnityksen tarkastuksen

YLEISET-TOIMENPITEET

60 000 km välein

TARKASTUKSET:

- Pyörännapojen, väliarsien, pallonivellin ja muiden nivellien väljykset
- Iskunvaimentimien tiivys
- Jarrusatulat, jarrulevyt ja jarrupätket
- Apulaitteiden kireys ja kiertämien toiminta

VAIHTO:

- Ilmansuodatin (EP Moottorit: 40 000km välein)
- Syytystilulpat (paitsi V6 ja EP moottorit)
- Dieselpolttonesteen suodatin 1.6 HDI

TOIMENPITEET IAN MUKAAN

ILMASTOINTIJÄRJESTELMÄ

- Järjestelmän kumitarkastus 2 vuoden välein

VAIHTO: Jarruneste : 2 vuoden välein

KORRE: Puhkustumattomuustakuun edellyttämät tarkastukset

ERITYISET TOIMENPITEET

PARTIKKELISUODATTIMEN VAIHTO JA EOLYS-NESTEEN LISÄYS

C4:

- 1.6 ja 2.0 HDI: EOLYS nesteen lisäys 120 000 Km välein
- 1.6 ja 2.0 HDI: FAP suodattimen vaihto 180 000 Km välein

C4 Picasso:

- 1.6 ja 2.0 HDI: EOLYS nesteen lisäys 120 000 Km välein
- 1.6 HDI: FAP suodattimen vaihto 160 000 Km välein
- 2.0 HDI: FAP suodattimen vaihto 180 000 Km välein

C5 X7:

- 1.6 HDI - 2.0 HDI ja 2.2 HDI: EOLYS nesteen lisäys 120 000 Km välein
- 1.6 HDI: FAP suodattimen vaihto 160 000 Km välein
- 2.0 HDI: FAP suodattimen vaihto 180 000 Km välein

C6:

- EOLYS nesteen lisäys 120 000 Km välein
- FAP suodattimen vaihto 180 000 Km välein

SYYTYSTILULPAT VAIHTO

- V6 24Vmoottorit 120 000 km ja EP moottorit 40 000km välein

KAISTAVAHTI (AFIL) Antureiden puhdistus

JAKOPYÖRÄSTÖN HAMMASHIHNA

VAIHTO:

- Jakopyörästäön hammashihna (Ei EP moottoreissa)

Bensiniinmoottorit:

- 120 000 Km tai 10 vuoden välein. (paitsi V6)
- V6 Bensini 180 000 Km tai 10 vuoden välein

Dieselmoottorit

- 1.6 HDI 16V - 2.0 HDI 16V - 2.2 HDI 16V: 180 000 Km tai 10 vuoden välein.
- C6 V6 HDI: 180 000 Km tai 10 vuoden välein

Citroën mekaanikko vahvistaa että Citroën malliin:

rekisterinumero: _____ on tehty huolto autonvalmistajan ohjeiden mukaan.

Allekirjoitus: _____

Päivämäärä: _____

- Huolto-ohjelma sisältää Citroën lasduntaustuksen

- Citroën suosittelee pyroteknisten turvavälineiden vaihtamista 15 v. välein.

Korjaamon kappale

Appendix 3: Ford maintenance service instruction



Huolto-ohjelma

Malli	Mondeo 2007	Työmääräyksen nro:
Malliversio	2.0L DURATORQ TDCI/MPS6 (03/2010 -)	Rek.nro
Huoltoväli	1 Vuodet (20000 km)	Rek.päivä
		Radiokoodi
		Ajomäärä
		km
Avoimet huoltokampanjat. Varmista, että ne on tehty loppuun.		
Huoltokampanjatiedotteita ei löytynyt		
Auton ajo korjaamoon		
Mittarit, varoitus-/merkkivalot ja äänimerkki	Tarkista toiminta	
Pesimet, pyyhkiimet	Tarkista toiminta / säädä, jos säädettävä	
Auton sisällä		
Ulkovalot ja niiden merkkivalot, mittariston valot	Tarkista toiminta / kunto	
Huoltoväli-ilmaisoin	Nollaa	
Hajusuodatin	Vaihda	
Konepellin alla		
Polttoainesuodatin	Tyhjennä vesi, jos ei vaihdeta - Dieselmallit (tyhjennysventtiilillä)	
Auton alla		
Moottorin alasuojus	Irrota ja asenna moottorin alasuojus, jos asennettu. (työohje 21 130 4)	
Moottori	Tyhjennä moottoriöljy ja vaihda öljynsuodatin	
Renkaat	Tarkista kuluneisuus ja kunto, erityisesti renkaiden sivut, mittaa urasyvyys, OE __mm, VE __mm, VT __mm, OT __mm	
Jarrujärjestelmä +	Tarkista jarrupalojen ja -levyjen kuluneisuus pyörät paikallaan. Tarkista jarruhihnojen kuluneisuus. (Useammin raskaassa käytössä)	
Auton ulkopuolella		
Moottori	Täytä moottoriöljy. Nollaa öljynvaihtovälin merkkivalo, jos on.	
Renkaat	Säädä rengaspaine	
Varapyörä	Säädä rengaspaine, tarkasta kuluneisuus ja kunto (mittaa urasyvyys) __mm	
Sivuoven salvat	Tarkista toiminta / voitele	
Huoltovälitarra	Kiinnitä B-pilariin kuljettajan puolella	
Huollon lisätyöt (veloitetaan erikseen)		
Jarrujärjestelmä	2 vuoden välein - Vaihda - jarruneste	
Ilmastointilaitte	3 vuoden välein: Tarkista lämpötila höyrystimen ulostuloputkesta. Tarkista ilmastointilaitteen putkien vauriot ja vuodot (työohje 34 619 1) (TSB 67/2002)	
Jäähdytysjärjestelmä	10 vuoden välein - Tyhjennä, huuhtele ja täytä nesteellä Super Plus (työohje 24 122 4)	
Nokka-akselin jakohihna, kiristin ja välipyörät	200 000 km:n - välein - Vaihda (tai viimeistään 10 vuoden jälkeen) (työohje 21 304 9, 21 306 5)	
Apulaitehinnat	200 000 km:n - välein - Vaihda (tai viimeistään 10 vuoden jälkeen) (työohje 21 567 5)	
Silmämääräinen korin ja maallipinnan tarkistus	Suorita vuosittain yllä merkittyjen (+) toimenpiteiden yhteydessä - katso yksityiskohtainen tarkistuslista, jos on (työohje 54 555 1 +)	
Ylimääräiset palvelut ja lisätarjoukset * (valinnainen - asiakaspyynnöstä / erillisveloitus)		
Ilmastointilaitteen ylläpitopaketti	Ilmastointijärjestelmän tarkistus. Ilmastointilaitteen puhdistusaineen suihkutus ilmanjakojärjestelmään. (työohje 54 552 4)	
Hajusuodatin Odour Plus	vaihda hajusuodatin Odour Plus -suodattimeen.	
Wear & Tear		
Front Brake Pads/Discs / Rear Brake Pads/Discs / Rear Brake Shoes	Vaihda	
Wiper Blades (Front and / or Rear)	Vaihda	
Renkaat	Vaihda	
Mufflers / Exhaust System	Vaihda	
Shock Absorbers & Suspension Parts	Vaihda	

Appendix 4: Honda maintenance service instruction



MÄÄRÄAIKAISHUOLTO 20 000 KM VÄLEIN MALLIT

FR-V '07-
JAZZ '02-
CR-V '07-


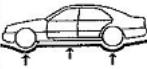
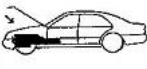
CRV Diesel '07-

REK. NRO: _____

PVM: _____

Huolto-ajan tai km-lukeman mukaan, kumpi saavutetaan ensin	x 1000 km x kuukausia	20	40	60	80	100	120	140	160	180	200	TEH-
		12	24	36	48	60	72	84	96	108	120	TY
Suoritettava huolto												
Moottoriöljy vaihto		V	V	V	V	V	V	V	V	V	V	
Öljynsuodatin vaihto		V	V	V	V	V	V	V	V	V	V	
Etu- ja takajarrut puhdistus		T	T	T	T	T	T	T	T	T	T	
Seisontajarrun säätö		T	T		T		T		T		T	
Ajovalojen suuntaus		T	T	T	T	T	T	T	T	T	T	
Pyyhkimen sulat		S	S	S	S	S	S	S	S	S	S	
Ilmansuodatin vaihto			V		V		V		V		V	
Sytytystulpat (Normaalityyppi, Jazz)			V		V		V		V		V	
Sytytystulpat (Iridium-tyyppi)							V					
Käyttöhihnat			T		T		T		T		T	
Venttiilivälykset säätö						V					V	
Polttoainesuodatin vaihto (Bensiini)							V					
Polttoainesuodatin vedenpoisto (Diesel)		T		T		T		T		T		
Polttoainesuodatin vaihto (Diesel)			V		V		V		V		V	
Korin korroosiotarkastus		T	T	T	T	T	T	T	T	T	T	
Joutokäyntinopeus							S					
Jäähdytysnesteen vaihto (Bensiini)												V
Jäähdytysnesteen vaihto (Diesel)						V						V
Vaihteistoöljyn vaihto	MT						V					V
	AT						V					V
	CVT				V			V				V
Takavetopyörästä-öljyn vaihto (CR-V)		V		V		V		V		V		
Jarrunesteen vaihto (mukaanlukien ABS)				V			V			V		
Renkaiden ilmanpaine (myös vararengas)		V	V	V	V	V	V	V	V	V	V	
Raitisilmasuodatin vaihto aina, kun puhallusteho on heikentynyt tai vähintään 40 000 km välein.												
Raidetankojen päät, ohjausvaihdet ja suojakumit		S	S	S	S	S	S	S	S	S	S	S
Jousituksen osat		S	S	S	S	S	S	S	S	S	S	S
Vetonivelten suojakumit		S	S	S	S	S	S	S	S	S	S	S
Jarruletkut ja -putket (mukaanlukien ABS)		S	S	S	S	S	S	S	S	S	S	S
Kaikki nestetasot ja kunto (pakkask., vesipit.)		T	T	T	T	T	T	T	T	T	T	T
Pakoputkisto		S	S	S	S	S	S	S	S	S	S	S
Polttoainelinjat ja -liitokset		S	S	S	S	S	S	S	S	S	S	S
Renkaiden kunto		S	S	S	S	S	S	S	S	S	S	S
Koeajo (Äänet, ajettavuus, kojelaudan säätimet)		S	S	S	S	S	S	S	S	S	S	S
V = Vaihto tai säätö.												
S = Tarkastus. Osien vaihto, säätö tai kunnostus laskutetaan erikseen.												
T = Irrotus, puhdistus, tarkastus, nesteen lisäys, säätö jne. (riippuu tarkastuskohteesta).												

Appendix 5: Mercedes-Benz: maintenance service instruction

Pyörät ja jarrut			
	<input type="checkbox"/> <ul style="list-style-type: none"> <input type="radio"/> Jarrupalojen vahvuuden tarkastus, etu- ja takapyörät <input type="radio"/> Renkaiden vaurioiden ja murtumien tarkastus <input type="radio"/> Kulutuspintojen mittaaminen, arvot millimetreinä kirjataan tähän: VL VR HL HR 	<input type="checkbox"/> Vain jos huoltokeskusteltua ei ole käyty. <ul style="list-style-type: none"> <input type="checkbox"/> P42.10-P-4253P <input type="checkbox"/> AP40.10-P-4051Z <input type="checkbox"/> AP40.10-P-4051Z 	
	ulkoreuna keskellä sisäreuna		
<input type="checkbox"/>	<input type="radio"/> Rengaspaineiden tarkastus, korjaus oikeaksi ja kirjaaminen yksikkönä bar tai psi: Etuakseli Taka-akseli	<input type="checkbox"/>	
	bar/psi		
Auton alusta			
	<input type="radio"/> Kaikkien näkyvien osien tiiviiden ja kunnon tarkastus	<input type="checkbox"/> Jos nestemäärä vähentynyt, syyn toteaminen ja korjaaminen erikseen laskuttaen.	<input type="checkbox"/> AP00.20-P-0053BA
	<input type="radio"/> Etuakselin nivelten välyksen tarkastus, kumisuojusten tarkastus		<input type="checkbox"/> AP33.20-P-3353BP
	<input type="radio"/> Raidetankojen ja yhdystangon nivelten välyksen tarkastus, kumisuojusten tarkastus		<input type="checkbox"/> AP46.00-P-4653F
Mootoritilasta			
	<input type="radio"/> Kaikkien näkyvien osien tiiviiden ja kunnon tarkastus	<input type="checkbox"/> Jos nestemäärä vähentynyt, syyn toteaminen ja korjaaminen erikseen laskuttaen.	<input type="checkbox"/> AP00.20-P-0053BA
<input type="checkbox"/>	<input type="radio"/> Moottoriöljyn ja suodattimen vaihto	Moottori 111 Moottori 112 Moottori 113 Moottori 271 Moottori 272 Moottori 611 Moottori 612 Moottori 642 Moottori 646	<input type="checkbox"/> AP18.00-P-0101AP <input type="checkbox"/> AP18.00-P-0101AP <input type="checkbox"/> AP18.00-P-0101AP <input type="checkbox"/> AP18.00-P-0101AP <input type="checkbox"/> AP18.00-P-0101PIT <input type="checkbox"/> AP18.00-P-0101AP <input type="checkbox"/> AP18.00-P-0101AP <input type="checkbox"/> AP18.00-P-0101P <input type="checkbox"/> AP18.00-P-0101P
<input type="checkbox"/>	<input type="radio"/> Moottorin jäähdytysjärjestelmä, Pakkassuojaus: Nestemäärän tarkastus, korjaus oikeaksi °C	<input type="checkbox"/> Jos nestemäärä vähentynyt, syyn toteaminen ja korjaaminen erikseen laskuttaen.	<input type="checkbox"/>
		Moottori 111, 112, 113, 271, 611, 612 Moottori 272 Moottori 642, 646	<input type="checkbox"/> AP20.00-P-2010Z <input type="checkbox"/> AP20.00-P-2010PIT <input type="checkbox"/> AP20.00-P-2010P
	<input type="radio"/> Tasonsäätö, ADS: nestemäärän tarkastus, korjaus	<input type="checkbox"/> Jos nestemäärä vähentynyt, syyn toteaminen ja korjaaminen erikseen laskuttaen.	<input type="checkbox"/>
		Tyyppi 203.2 kun koodi (480) Taka-akselin tasonsäätö	<input type="checkbox"/> AP32.30-P-3211BA
<input type="checkbox"/>	<input type="radio"/> Jarrujärjestelmä: nestemäärän tarkastus, korjaus	<input type="checkbox"/> Jos nestemäärä vähentynyt, syyn toteaminen ja korjaaminen erikseen laskuttaen.	<input type="checkbox"/> AP42.10-P-4210Z
	<input type="radio"/> Ohjaustehostin: nestemäärän tarkastus, korjaus	<input type="checkbox"/> Jos nestemäärä vähentynyt, syyn toteaminen ja korjaaminen erikseen laskuttaen.	<input type="checkbox"/> AP46.00-P-4611P

Appendix 6: Skoda maintenance service instruction

Huoltoluettelo



Työmääräyksen nro	Myyntimalli	Tunnus	Rekisteröity
Alusta-nro	Moott.tunn.	Km-määrä	Huoltoneuvoja
Mallimerkintä	Vaiht.tunn.	Vuositalli	Pvm
Oct.Wag.CR Elegia 77/1.6 7i	1Z532D CAYC MLE	30000 2011	2011-01-04 2012-1-9

Jaksuhuolto joustavan huoltovälinäytön mukaan (QG1)

	OK/ suoritettu	ei OK korja	
Järjestelmätestin suorittaminen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Huoltovälinäyttö: Nollaus järjestelmätesterillä	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lukkosylinterin toiminnan tarkastus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Moottoriöljy: Tyhjennys valuttamalla tai imemällä; öljynsuodattimen uusinta	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Moottoriöljy: Täyttö (lisäys tarvittaessa max-merkkiin saakka), normi VW 507 00 Täyttömäärä 4,3 Litraa	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Akku: tarkastus akkutesterillä VAS 6161 tai VAS 5097A (noudata ehdottomasti korjausohjeita)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
☉ Tuulilasi: Kunnan tarkastus katsomalla	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vesikaukalo: Likaisuuden tarkastus, tarv. puhdistus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
☉ Vararengas: Kunnan ja profiilisyvyyden tarkastus; profiilisyvyyden merkitseminen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
☉ Alustansuojaus ja korin maalipinta: Kunnan tarkastus katsomalla	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
☉ Oikea takarengas: Kunnan ja profiilisyvyyden tarkastus; profiilisyvyyden merkitseminen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
☉ Oikea eturengas: Kunnan ja profiilisyvyyden tarkastus; profiilisyvyyden merkitseminen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
☉ Vasen eturengas: Kunnan ja profiilisyvyyden tarkastus; profiilisyvyyden merkitseminen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
☉ Vasen takarengas: Kunnan ja profiilisyvyyden tarkastus; profiilisyvyyden merkitseminen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kaikkien 4 pyörän ja vararengaan renaspaineet: Tarkastus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Perävaunun vetokoukun tarkastus (irrotettavalla kuulapäällä - valmistaja Profsvär)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Jarrunestemäärä (jarrupalojen kulumisesta riippuen): Tarkastus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
☉ Jarrujärjestelmä: Tiiviyden ja kunnan tarkastus katsomalla	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Etu- ja takapyörien jarrupalat: Paksuuden tarkastus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
☉ Renkaanpaikkaussarja: Kunnan ja määrän tarkastus; renkaanpaikka-aineen viimeisen käyttöpäivän tarkastus ja merkitseminen:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
☉ Raitisilmasuodatin: Kotelon puhdistus ja suodatinpanoksen uusinta	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tarran Seuraava huolto täyttäminen ja sen kiinnitys kojelaudan reunaan kuljettajan puolelle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Peililipukkeen täyttäminen ja ripustaminen sisäpeiliin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

☉ = Lisätyöt lisähintaan

☉ = Silmämääräinen tarkastus

OK/ suoritettu = OK ei OK = Ei OK, huomaa korjausohjeet. korjattu = Virhe korjattu

Huoltohuomautus

Pvm/allekirjoitus (suorittaja)

Pvm/allekirjoitus (lopputarkastus)

Appendix 7: Volkswagen maintenance service instruction

Huoltoluettelo



Työmääräyksen nro	Myyntimalli	Tunnus	Rekisteröity
	AJ53G5		2010-01-12
Alusta-nro	Moott.tunn.	km-määrä	Huoltoneuvoja
WVWZZZ1KZAM623353	CAXA	30000	
Mallimerkintä	Vaiht.tunn.	Vuosimalli	Pvm
Wagon TSI COMFO 90 D7F	LWZ	2010	2012-1-9

Jaksuhuolto (QG1)

Sähkölaitteet	OK/ suoritettu	ei OK	korja
Akku: tarkastus akkustesterillä VAS 6161 tai VAS 5097A (noudata ehdottomasti korjausohjeita)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Renkaat	OK/ suoritettu	ei OK	korja
<input type="checkbox"/> Kesärenkaat [1], talvirenkaat [2], kitkarenkaat [3]: Rengastyypin merkitseminen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Kaikkien 4 pyörän ja vararengaan rengaspaineet: Tarkastus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Vararengas: Kunnan ja profiilisyvyyden tarkastus; profiilisyvyyden merkitseminen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Oikea takarengas: Kunnan ja profiilisyvyyden tarkastus; profiilisyvyyden merkitseminen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Vasen takarengas: Kunnan ja profiilisyvyyden tarkastus; profiilisyvyyden merkitseminen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Vasen eturengas: Kunnan ja profiilisyvyyden tarkastus; profiilisyvyyden merkitseminen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Oikea eturengas: Kunnan ja profiilisyvyyden tarkastus; profiilisyvyyden merkitseminen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Renkaiden iän tarkastus: Yli 6 vuotta vanhoja kesä- tai talvirenkaita ei enää suositella käytettäväksi.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Auton alapuoli	OK/ suoritettu	ei OK	korja
<input type="checkbox"/> Moottoriöljy: Tyhjennys valuttamalla tai imemällä, öljynsuodattimen uusinta	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Jarrujärjestelmä: Tiiviyden ja kunnan tarkastus katsomalla	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Etu- ja takapyörien jarrupalojen paksuus ja jarrulevyjen kunto: Tarkastus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Moottoritila	OK/ suoritettu	ei OK	korja
<input type="checkbox"/> Moottoriöljy: Täyttö (lisäys tarvittaessa max-merkkiin saakka), normi VW 504 00 Täyttömäärä 3,6 Litraa	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Raitisilmasuodatin aktiivihiehillä: Kotelon puhdistus ja suodatinpanoksen uusinta ●	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Jarrunestemäärä (jarrupalojen kulumisesta riippuen): Tarkastus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Viimeistelytyöt	OK/ suoritettu	ei OK	korja
<input type="checkbox"/> Huoltovälinäyttö: Nollaus järjestelmätesterillä	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Tarra "Seuraava huolto": Seuraavan huollon merkitseminen ja tarran kiinnitys kuljettajan ovipaarteeseen (B-pilariin)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

● = Lisätyöt lisähintaan

☉ = Silmämääräinen tarkastus

OK/suoritettu = OK ei OK = Ei OK, huomaa korjausohjeet. korjattu = Virhe korjattu